

# Memorandum

To: CHAIR AND COMMISSIONERS  
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: June 22-23, 2011

Reference No.: 4.14  
Information Item

From: NORMA ORTEGA  
Chief Financial Officer

Prepared by: Glenn A. Yee  
Chief  
Division of Business,  
Facilities and Security

Subject: **2012 FACILITIES INFRASTRUCTURE PLAN (FIVE YEAR CAPITAL PLAN)**

## **SUMMARY:**

Chapter 606, Statutes of 1999 (Assembly Bill 1473/Hertzberg), requires the Governor to annually submit a Five-Year Capital Outlay Infrastructure Plan in conjunction with the Governor's Budget. The California Department of Transportation's (Department) Draft 2012 Facilities Infrastructure Plan (Facilities Infrastructure Plan) will be transmitted to the California Transportation Commission prior to their June 22-23, 2011 meeting.

## **BACKGROUND:**

The California Department of Finance issues an annual Budget Letter that specifies requirements and instructions to State departments for submittal of their plans. Only the Department's office facilities are required as part of the Budget Letter process.

In addition to office facilities, the workforce for the Department conducts business in a wide array of other buildings and structures (facilities). These transportation-related facilities include equipment shops, maintenance stations, materials laboratories, and transportation management centers.

The Facilities Infrastructure Plan includes the reporting requirements for the Five-Year Capital Outlay Infrastructure Plan. The Facilities Infrastructure Plan also provides information pertaining to the Department's transportation-related facilities.

**DRAFT** (Rev. 5-30-2011)



Fiscal Years  
2012-13 through  
2016-17

*Office Buildings, Equipment Shops, Maintenance Facilities,  
Materials Laboratories, & Transportation Management Centers*

## 2012 Facilities Infrastructure Plan



District 8 Inland Empire Traffic Management Center (IETMC) at the Interchange of Interstate 15 and State Route 210 in the city of Fontana, California

*Prepared by:  
Division of Business, Facilities and Security  
Facilities Long Range Planning  
1120 "N" Street, Suite 6803  
Sacramento, California  
June 2011*





# TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
Executive Summary	3
1: Department Overview	9
2: Office Facilities	17
3: Transportation-Related Facilities	23
4: Resource Conservation	47
Appendix	53
<u>Exhibit</u>	
1: SHOPP Priorities	55
2: Reconciliation to Previous Plan	59
3: Infrastructure Inadequacies	61
4: Estimated "Net Need" for Office Space	63
5: Major Project Categories	67
6: "Drivers of Need"	69
7: Alternatives to Utilizing the Capital Outlay Process	71
8: Budget Letter	73
9: Facility Space Planning Guidelines/Standards	77
10: Facility Location Maps	93

This page is intentionally left blank.

# EXECUTIVE SUMMARY

This page is intentionally left blank.

### EXECUTIVE SUMMARY

#### Introduction

Chapter 606, Statutes of 1999 (Assembly Bill 1473/Hertzberg), requires the Governor to annually submit a Five-Year Capital Outlay Infrastructure Plan in conjunction with the Governor's Budget. The California Department of Finance (DOF) issues an annual Budget Letter that specifies requirements and instructions to State departments for submittal of their Plans. The California Department of Transportation (Department) is required to provide information for office facilities to the DOF.

In addition to office facilities, the workforce for the Department conducts business in a wide array of other buildings and structures (facilities). These transportation-related facilities include equipment shops, maintenance facilities, materials laboratories, and transportation management centers.

The Department's 2012 Facilities Infrastructure Plan (Facilities Infrastructure Plan or FIP) includes the office facilities reporting requirements for the Five-Year Capital Outlay Infrastructure Plan. The Facilities Infrastructure Plan also provides information pertaining to the Department's transportation-related facilities.

#### Facilities Infrastructure Planning and Reporting

In conjunction with the annual DOF reporting requirement, the Department is required to present plans and needs for rehabilitation and improvement of office and transportation-related facilities via the State Highway Operations and Protection Program process.

##### State Highway Operation and Protection Program

Government Code Section 14526.5 requires the Department to prepare a four-year "state highway operation and protection program for the expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the state highway system". The Department's State Highway Operation and Protection Program (SHOPP) fulfills this requirement. Office facilities projects and transportation-related facilities projects are included in the SHOPP<sup>1</sup>.

---

<sup>1</sup> For a listing of the SHOPP priorities, see Appendix, Exhibit 1.

The Department is required to submit the SHOPP to the California Transportation Commission (Commission) each even-numbered year. The Commission’s review of the SHOPP includes an assessment of the impacts on the State Transportation Improvement Program. The 2010 SHOPP is the most recent four-year program submitted to the Commission. The SHOPP must be transmitted to the Legislature and the Governor.

### State Highway Operation and Protection Plan

Streets and Highways Code Section 164.6 requires the Department to prepare a “10-year plan for the rehabilitation and reconstruction ... of all state highways and bridges owned by the state”. The Department fulfills this requirement through development of the Ten-Year State Highway Operation and Protection Plan. Office facilities projects and transportation-related facilities projects are included in this 10-year plan.

The Department is required to submit this plan to the Commission each odd-numbered year. The most recent submittal was the 2011 Ten-Year SHOPP. Both the SHOPP and the Ten-Year SHOPP must be transmitted to the Legislature and the Governor.

### Comparison of Facilities Infrastructure Plan and SHOPP

The chart below shows the chronology and fiscal year relationships of one complete cycle for the SHOPP and the Facilities Infrastructure Plan.

#### Chronology and Fiscal Year Relationships: Facilities Infrastructure Plan and SHOPP

		<i>Fiscal Years</i>												
		<i>Approximate</i>	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-	2020-	2021-
		<i>Due Date</i>	11	12	13	14	15	16	17	18	19	20	21	22
2010 Four-Year SHOPP	Jan 2010	4-Year Program												
2011 Facilities Infrastructure Plan	Jul 2010		5-Year Plan											
2011 Ten-Year SHOPP	Jan 2011			10-Year Plan										
2012 Facilities Infrastructure Plan	Jul 2011			5-Year Plan										

## Facilities Infrastructure Plan Summary

The Facilities Infrastructure Plan is comprised of four chapters. The first two chapters meet the DOF requirements for the State's Five-Year Capital Outlay Infrastructure Plan. The Department presents additional information in Chapters 3 and 4 that are not part of the DOF reporting requirements. Chapter 3 of the Facilities Infrastructure Plan focuses on transportation-related facilities that the California Transportation Commission approves through the SHOPP. Chapter 4 provides an overview of the Department's facility resource conservation efforts.

The Facilities Infrastructure Plan includes \$126.7 million in construction costs during the five-year plan period. The required land acquisition is estimated at a cost of \$3.9 million. Associated capital outlay support costs (e.g., engineering and right of way acquisition staff) for these projects are \$46.8 million. The total estimated cost for the projects included in the Facilities Infrastructure Plan is \$177.4 million. A summary of these costs is presented in the chart below.

**Projected Facilities Infrastructure Needs**  
**Construction, Land, Capital, and Support**  
*Fiscal Years 2012-13 through 2016-17*

PROGRAMMED IN 2010 SHOPP	2010 SHOPP		2012 FACILITIES INFRASTRUCTURE PLAN					2012 FP Total
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
Office Buildings	\$700,000	\$8,716,000	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Shops	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance Facilities	\$0	\$9,158,000	\$0	\$24,251,000	\$0	\$0	\$0	\$24,251,000
Materials Laboratories	\$5,798,000	\$0	\$3,248,000	\$0	\$0	\$0	\$0	\$3,248,000
TMC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Construction Totals</b>	<b>\$6,498,000</b>	<b>\$17,874,000</b>	<b>\$3,248,000</b>	<b>\$24,251,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$27,499,000</b>
Land	\$0	\$2,693,000	\$0	\$3,929,000	\$0	\$0	\$0	\$3,929,000
Sub-total (Capital)	\$6,498,000	\$20,567,000	\$3,248,000	\$28,180,000	\$0	\$0	\$0	\$31,428,000
Support	\$3,285,000	\$4,718,000	\$1,727,000	\$13,388,000	\$0	\$0	\$0	\$15,115,000
<b>Grand Total</b>	<b>\$9,783,000</b>	<b>\$25,285,000</b>	<b>\$4,975,000</b>	<b>\$41,568,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$46,543,000</b>

UNPROGRAMMED NEEDS	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2012 FP Total
Office Buildings			\$0	\$0	\$0	\$0	\$0	\$0
Equipment Shops			\$0	\$0	\$23,400,000	\$27,263,000	\$2,500,000	\$53,163,000
Maintenance Facilities			\$0	\$0	\$29,000,000	\$3,400,000	\$3,600,000	\$36,000,000
Materials Laboratories			\$10,000,000	\$0	\$0	\$0	\$0	\$10,000,000
TMC			\$0	\$0	\$0	\$0	\$0	\$0
<b>Construction</b>			<b>\$10,000,000</b>	<b>\$0</b>	<b>\$52,400,000</b>	<b>\$30,663,000</b>	<b>\$6,100,000</b>	<b>\$99,163,000</b>
Land			\$0	\$0	\$0	\$0	\$0	\$0
Sub-total (Capital)			\$10,000,000	\$0	\$52,400,000	\$30,663,000	\$6,100,000	\$99,163,000
Support			\$3,200,000	\$0	\$16,768,000	\$9,812,160	\$1,952,000	\$31,732,160
<b>Grand Total</b>			<b>\$13,200,000</b>	<b>\$0</b>	<b>\$69,168,000</b>	<b>\$40,475,160</b>	<b>\$8,052,000</b>	<b>\$130,895,160</b>

**Notes:**  
 Support is estimated at 32% of capital costs for projects not programmed in the 2010 SHOPP.  
 The Facilities Infrastructure Plan reflects two of the four years of the 2010 SHOPP. Fiscal Years 2010-11 and 2011-12 are depicted in the table above for illustrative purposes.

The first two years of the 2012 Facilities Infrastructure Plan coincide with the last two years of the 2010 Four-Year SHOPP (refer to the chart on page 6). The 2010 Four-Year SHOPP includes an annual average of \$ 13.1 million (construction costs) and the 2012 Facilities Infrastructure Plan includes an annual average of \$25.3 million (construction costs). The chart below presents a comparison by facility type of the average annual construction costs for the 2010 Four-Year SHOPP and 2012 Facilities Infrastructure Plan. Transportation Management Centers are not included in the Facilities Improvement Program of the SHOPP; those projects are included with the Mobility Program.

---

Average Annual Construction Cost Comparison  
2012 Facilities Infrastructure Plan and  
2010 SHOPP  
(*\$ in millions*)

<i>Facility Type</i>	<i>2010 SHOPP</i>	<i>2012 FIP</i>
Office Facilities	2.4	0
Equipment Facilities	0	10.6
Maintenance Facilities	8.4	12.1
Materials Laboratories	2.3	2.6
<b>Totals:</b>	<b>13.1</b>	<b>25.3</b>

Notes:

- 1) The "Annual Averages" do not include land acquisition or support cost.
- 2) The "Totals" do not include Transportation Management Centers.



# CHAPTER 1

## DEPARTMENT OVERVIEW

This page is intentionally left blank.

## INTRODUCTION

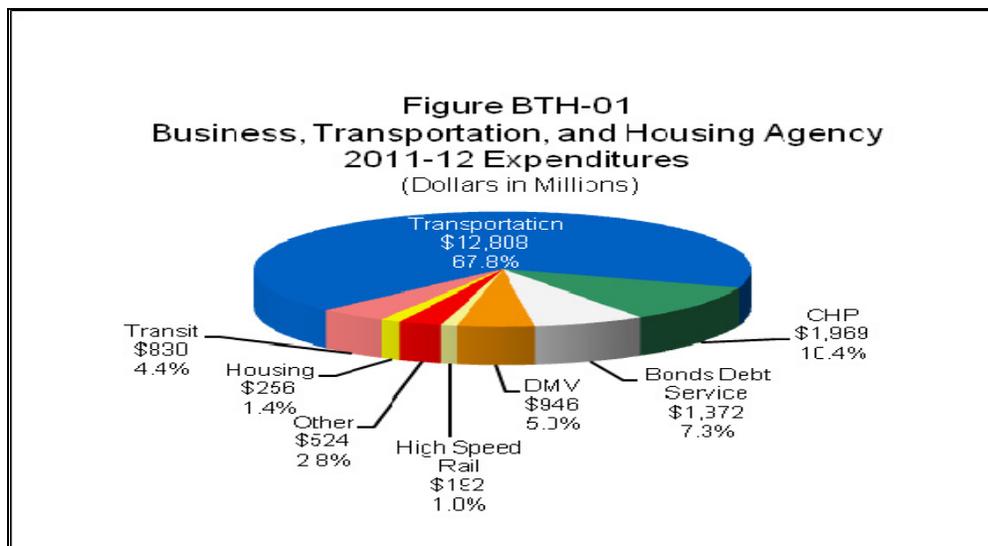
This chapter provides a summary of the California Department of Transportation (Department). It illustrates the Department's structure, including its hierarchy within the State government, and its district organization. It provides general budget and program information as well as the facilities of the Department's workforce.

### Structure

#### Business, Transportation and Housing Agency

The Business, Transportation and Housing Agency oversees and coordinates the activities of various departments, offices and economic development programs with responsibility for maintaining the strength and efficiency of California's infrastructure and financial markets. These programs provide financial and programmatic regulation important to an efficient marketplace and community development, assistance in ensuring patients' rights, and transportation infrastructure for the safe and efficient flow of people and commerce.

The Fiscal Year 2011-12 Governor's Budget allocates approximately 68% of the Business, Transportation, and Housing Agency budget to the Department, as shown in the figure below.



## California Department of Transportation

The Department constructs, operates, and maintains a comprehensive transportation system with more than 50,000 miles of highway and freeway lanes. It provides intercity rail passenger services under contract with Amtrak and helps local governments deliver transportation projects.

### Program Descriptions<sup>1</sup>

The Governor’s Budget identifies six programs that relate to Department staff. The programs are: Aeronautics, Highway Transportation, Mass Transportation, Transportation Planning, Administration, and Equipment. The table below identifies the programs, their respective code, and number of personnel years<sup>2</sup> for Fiscal Year 2011-12. The following is a description of each of the programs listed numerically, by their program code:

Code	Program	Personnel Years
10	Aeronautics	25
20	Highway Transportation	17,205
30	Mass Transportation	171
40	Transportation Planning	635
50	Administration	1,636
60	Equipment	704
	<b>Total Personnel Years</b>	<b>20,376</b>

<sup>1</sup> Source: Citation taken from the Governor’s Budget

<sup>2</sup> Source: California Department of Finance.

## 10 AERONAUTICS

The Aeronautics Program's objective is to support California's aviation activities by promoting safe and effective use of existing airports and heliports. This program also alleviates problems such as incompatible land uses, potential safety hazards, aircraft noise, and airport congestion by: (1) ensuring that airports and heliports comply with safety regulations, (2) providing engineering and financial assistance for safety and infrastructure improvements, (3) preparing for changes in the aviation network by maintaining the California Aviation System Plan, (4) providing guidance for land use compatibility in areas around airports, (5) administering airport noise standards regulations, (6) enhancing goods movement to and from airports through improved ground access, and (7) promoting and maintaining aviation safety.

## 20 HIGHWAY TRANSPORTATION

The Highway Transportation Program's objective is to operate, maintain, and continue development of our state highways. Development and delivery of capital projects make up the largest portion of these efforts. The program also meets its objectives through: (1) coordination and control required by federal and state law for implementing transportation projects, (2) furnishing assistance to city and county transportation programs, and (3) management of traffic through a system of monitoring, analysis, and control. In addition, this program strives to improve highway travel, safety, and the environment through the use of testing, research, and technology development.

## 30 MASS TRANSPORTATION

The objective of the Mass Transportation Program is to support the state's transportation system by providing leadership in the implementation of safe, effective public transportation, improved air quality, and environmental protection. The program achieves its objective through: (1) the administration of intercity rail service in California, including capital projects and rolling stock management, (2) grant administration of state and federal capital and operations programs, and (3) planning, support, and coordination for mass transportation services. Additionally, the Mass Transportation Program: (1) facilitates the transportation needs of all persons, including the elderly, the disabled, and the economically-disadvantaged, (2) improves intercity passenger service through enhanced services and facilities, (3) improves urban/commuter rail services, and (4) enhances mobility in congested corridors.

### 40 TRANSPORTATION PLANNING

The Transportation Planning Program's objective is to implement statewide transportation policy through coordination at the local and regional levels and to develop transportation plans and projects. The Department prepares the long-range state transportation plan required by state and federal law and provides long-range transportation system planning and transportation planning studies as input to the regional transportation plans, the State Transportation Improvement Program (STIP), and departmental policies and programs. The Department also prepares the Interregional Transportation Strategic Plan, which guides investment of the Interregional Improvement Program funds in the STIP.

### 50 ADMINISTRATION

The Administration Program provides the functions required to support the programmatic responsibilities of the Department. Major activities include accounting, budgeting, auditing, office facility operations and management, information technology, and a wide range of administrative services including human resources, procurement and contracting, training, and labor relations.

### 60 EQUIPMENT

The Equipment Program's objective is to provide mobile fleet equipment and services to other Department programs through: (1) purchasing new vehicles, (2) receiving, servicing, and equipping new units, (3) assembling equipment components into completed units, (4) managing the fleet, (5) repairing and maintaining the fleet, including payments for fuel and insurance, and (6) disposing of used vehicles.

## Department Districts

The Department is comprised of 12 districts, each under the leadership of a District Director. The district boundaries and a listing of the counties within each district are shown below. District headquarters offices are located in the cities of Eureka, Redding, Marysville, Oakland, San Luis Obispo, Fresno, Los Angeles, San Bernardino, Bishop, Stockton, Irvine, and San Diego. The Department Headquarters office is located in Sacramento.



## Future Space Needs

Future space needs are driven, in part, by population. Population generates traffic that creates the need for highways and their associated planning, operations, and maintenance, which produces the need to house those performing those management activities. The Department houses employees in a wide array of facilities: maintenance stations, equipment shops, office buildings, material laboratories, and transportation management centers. Determining where the need exists for future facilities depend in part on those areas of the State with the greatest projected population increase. The California counties with the greatest population increases are located within the Department’s Districts of San Bernardino, Fresno, Stockton, and Marysville. This is based on projected statewide population increases by the California Department of Finance. The table below ranks the Department’s districts by the greatest population increases through year 2050. The final ranking is determined by applying equal weight to each category to those districts with the greatest numeric increase and those with the greatest percentage increase.

<b>DISTRICT POPULATION PROJECTIONS: 2010 through 2050</b>				
<u>Districts in Ranked <sup>1</sup> Order</u>	<u>District Population</u>		<u>Rank by Category</u>	
	<u>District Number and Name</u>	<u>Year 2010</u>	<u>Year 2050</u>	<u>Numeric Increase</u>
<b>8 - San Bernardino</b>	4,298,525	7,594,415	1	3
<b>6 - Fresno</b>	2,512,696	4,660,580	3	2
<b>10 - Stockton</b>	1,752,669	3,514,143	5	1
<b>3 - Marysville</b>	2,869,947	5,003,696	4	4
<b>4 - Oakland</b>	7,541,148	10,095,509	2	7
<b>11 - San Diego</b>	3,437,152	4,845,605	6	6
<b>2 - Redding</b>	389,057	550,139	10	5
<b>5 - San Luis Obispo</b>	1,504,818	1,878,617	9	8
<b>12 - Irvine</b>	3,260,162	3,702,641	8	10
<b>7 - Los Angeles</b>	11,321,671	12,495,103	7	12
<b>1 - Eureka</b>	325,821	400,691	11	9
<b>9 - Bishop</b>	33,101	36,561	12	11
<b>California</b>	<b>39,246,767</b>	<b>54,777,700</b>		

<sup>1</sup> Rank computed using equal weight to "numeric" and "percentage" increases.

<sup>2</sup> Data Source: California Department of Finance



# CHAPTER 2

## OFFICE FACILITIES

This page is intentionally left blank.

## INTRODUCTION

Chapter 606, Statutes of 1999 (Assembly Bill 1473/Hertzberg), requires the Governor to annually submit a Five-Year Capital Outlay Infrastructure Plan in conjunction with the Governor's Budget beginning in January 2002. The Statute requires State departments to submit a Five-Year Capital Outlay Infrastructure Plan (Plan), Capital Outlay Budget Change Proposals (COBCPs), and Capital Outlay Concept Papers (COCPs) for major capital outlay projects proposed for inclusion in the Governor's Budget. The Plan must include all COBCPs and COCPs for the five-year planning horizon from Fiscal Years 2012-13 through 2016-17. Only the California Department of Transportation's (Department) office facilities require COBCPs or COCPs and therefore, are required as part of the process.

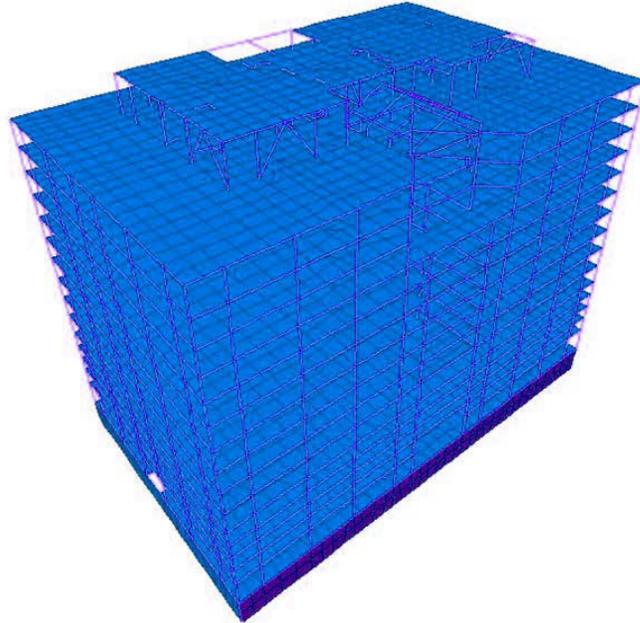
## REQUIREMENTS

The California Department of Finance (DOF) issues an annual Budget Letter requiring the Department to identify existing office facilities infrastructure, including their deficiencies, and the net need for the infrastructure. The general DOF Budget Letter requirements are found in this chapter. Those reporting requirements include a description of the Department's office building infrastructure, the projects needed to correct office building deficiencies, a linkage to the prior year's plan, and a summary of office building projects currently in progress. The Appendix contains the remaining reporting requirements of the DOF Budget Letter.



**INFRASTRUCTURE DESCRIPTION**

The Department occupies 13 office buildings, 12 State-owned and one leased. Five of the Department’s 12 State-owned buildings are less than 20 years of age. Their location and the year of their construction completion are as follows: Oakland, 1992; San Bernardino, 1997; Los Angeles, 2004; San Diego, 2006; and Marysville, 2010.



**State and District Headquarters Office Buildings**

	<i>District</i>	<i>Year Built</i>
1	Eureka	1953
2	Redding	1953
3	Marysville	2010
4	Oakland	1992
5	San Luis Obispo	1955
6	Fresno	1958
7	Los Angeles	2004
8	San Bernardino	1997
9	Bishop	1954
10	Stockton	1955
11	San Diego	2006
12	Irvine*	NA
HQ	Sacramento	1936

Note: The District 12 office building is a leased facility.

There are seven State-owned office facilities that are at least 50 years of age. The Department worked with the California Department of General Services (DGS) to obtain facility and infrastructure studies that evaluated the condition of the existing building(s) and if necessary, the feasibility of replacing the structure(s). A list of facility studies that identifies specific inadequacies of the Department’s office building inventory may be found in the Appendix, Exhibit 3.

In general, the studies found that many of the buildings are functionally obsolete, inefficient, and expensive to maintain. Mechanical systems such as ventilation, elevators, electrical, and plumbing carry relatively high on-going maintenance and up-grade cost. The buildings’ space is inefficient because they contain numerous columns, wide corridors, and offices that may be re-configured as cubical space. The table to the left lists the Department’s office buildings and the respective year of construction.

**Infrastructure Description** – continued

The Department occupies approximately 3.1 million net square feet of office space among its districts and Headquarters (Sacramento). The amount of office space in each district is depicted in the table below. A listing of the Department’s office space inventory is shown in the Appendix, Exhibit 4.

**Leased and Owned Office Space**

## Department Summary by District

<i>District</i>	<i>owned (gross sf)</i>	<i>owned (net sf)</i>	<i>leased</i>	<i>Total (net + leased)</i>
1 Eureka	91,456	60,866	0	60,866
2 Redding	55,581	38,187	47,027	85,214
3 Marysville	211,734	159,940	6,260	166,200
4 Oakland	525,000	459,774	16,850	476,624
5 San Luis Obispo	41,700	29,190	52,683	81,873
6 Fresno	78,000	58,000	180,366	238,366
7 Los Angeles	716,200	453,370	2,500	455,870
8 San Bernardino	235,714	155,000	54,685	209,685
9 Bishop	25,236	17,665	0	17,665
10 Stockton	78,974	54,982	0	54,982
11 San Diego	298,424	221,447	0	221,447
12 Irvine	0	0	151,453	151,453
RO Regional Offices State	0	0	8,950	8,950
HQ Headquarters	496,978	343,256	504,450	847,706
Statewide Total:	2,854,997	2,051,677	1,025,224	3,076,901

**PROJECT**

There are no office building projects proposed for the 2012 Facilities Infrastructure Plan.

**LINKAGE WITH PREVIOUS PLAN**

The 2012 Facilities Infrastructure Plan, when compared to the 2011 Facilities Infrastructure Plan reports one project, the Eureka District Office Building (District 1), has moved from a “proposed” to an “in progress” project.

**SUMMARY OF PROJECTS IN PROGRESS**

The Department has one office facility project currently in progress. The project description, status, estimated completion date, and funding levels are shown below.

---

**Project:**  
Eureka Critical Infrastructure Deficiencies  
**Description:**  
Fire, Life Safety corrections and infrastructure upgrade to an 81,000 gsf office building.  
**Status:**  
Planning phase completed.  
Currently in working drawings phase.  
Construction phase to begin February 2012.  
**Estimated Completion Date:**  
Fiscal Year 2012-13

**Funding:**

<u>Cost</u>	<u>Phase</u>
\$ 695,000	Preliminary Planning
\$ 687,000	Working Drawings
\$ 8,716,000	Construction
\$10,098,000	Total



*District 1 Headquarters  
1656 Union Street, Eureka*

## **CHAPTER 3**

### **TRANSPORTATION-RELATED FACILITIES**

- **Equipment Shops**
- **Maintenance Facilities**
- **Materials Laboratories**
- **Transportation Management Centers**

This page is intentionally left blank.

## INTRODUCTION

This chapter provides transportation-related facility information for the 2012 Facilities Infrastructure Plan. These projects are approved by the California Transportation Commission as part of the State Highway Operations and Protection Program (SHOPP) and funded through enactment of the annual State budget.

The SHOPP is a four-year program of projects that have a purpose of collision reduction, bridge preservation, roadway preservation, roadside preservation, mobility enhancement, and preservation of other transportation facilities related to the State Highway System. All facility-related infrastructure projects are programmed in the SHOPP with the exception of the construction phase of major office facility projects that are typically financed with bonds and not programmed in the SHOPP.

The 2010 SHOPP spans Fiscal Years 2010-11 through 2013-14. The facility projects included in the final two years of the 2010 SHOPP (i.e., 2012-13 and 2013-14) are also included in the 2012 Facilities Infrastructure Plan. The table below illustrates the chronology and fiscal year relationships of one complete cycle for the Facilities Infrastructure Plan and the SHOPP.

### Chronology and Fiscal Year Relationships: Facilities Infrastructure Plan and SHOPP

	Approximate Due Date	Fiscal Years											
		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
2010 Four-Year SHOPP	Jan 2010	4-Year Program											
2011 Facilities Infrastructure Plan	Jul 2010		5-Year Plan										
2011 Ten-Year SHOPP	Jan 2011			10-Year Plan									
2012 Facilities Infrastructure Plan	Jul 2011			5-Year Plan									

### Infrastructure Description

The California Department of Transportation’s (Department) transportation-related facilities include approximately 465 sites consisting of approximately 3,900,000 square feet of equipment shops, maintenance facilities, materials laboratories, and transportation management centers, as displayed below.

<b>Summary</b>		
<b>Transportation - Related Facilities</b>		
<i>Facility Type</i>	<i>Square Feet</i>	<i>Number of Sites</i>
Equipment Shops	666,561	26
Maintenance Facilities	2,819,000	413
Materials Laboratories	237,188	13
Transportation Management Centers	207,165	13
	<b>3,929,914</b>	<b>465</b>

## Projects

The 2012 Facilities Infrastructure Plan identifies \$27,499,000 in construction costs for transportation-related facility projects programmed in the 2010 SHOPP and \$99,163,000 in “unprogrammed” needs, which represent candidate projects for future SHOPP funding. Specific project funding for transportation-related facilities are presented on the following pages.

Transportation-Related Facilities

**PROGRAMMED IN  
2010 SHOPP**

Location/Descriptions	2010 SHOPP		2012 FACILITIES INFRASTRUCTURE PLAN					2012 FIP Total
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
Equipment Shops	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance Facilities	\$0	\$9,158,000	\$0	\$24,251,000	\$0	\$0	\$0	\$24,251,000
Materials Laboratories	\$5,798,000	\$0	\$3,248,000	\$0	\$0	\$0	\$0	\$3,248,000
TMC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Construction Totals</b>	<b>\$5,798,000</b>	<b>\$9,158,000</b>	<b>\$3,248,000</b>	<b>\$24,251,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$27,499,000</b>
Land	\$0	\$2,693,000	\$0	\$3,929,000	\$0	\$0	\$0	\$3,929,000
Sub-total (Capital)	\$5,798,000	\$11,851,000	\$3,248,000	\$28,180,000	\$0	\$0	\$0	\$31,428,000
Support	\$3,285,000	\$4,718,000	\$1,727,000	\$13,388,000	\$0	\$0	\$0	\$15,115,000
<b>Grand Total</b>	<b>\$9,083,000</b>	<b>\$16,569,000</b>	<b>\$4,975,000</b>	<b>\$41,568,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$46,543,000</b>

**UNPROGRAMMED NEEDS**

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2012 FIP Total
Equipment Shops			\$0	\$0	\$23,400,000	\$27,263,000	\$2,500,000	\$53,163,000
Maintenance Facilities			\$0	\$0	\$30,800,000	\$1,600,000	\$3,600,000	\$36,000,000
Materials Laboratories			\$10,000,000	\$0	\$0	\$0	\$0	\$10,000,000
TMC			\$0	\$0	\$0	\$0	\$0	\$0
<b>Construction</b>			<b>\$10,000,000</b>	<b>\$0</b>	<b>\$54,200,000</b>	<b>\$28,863,000</b>	<b>\$6,100,000</b>	<b>\$99,163,000</b>
Land			\$0	\$0	\$373,000	\$0	\$0	\$373,000
Sub-total (Capital)			\$10,000,000	\$0	\$54,573,000	\$28,863,000	\$6,100,000	\$99,536,000
Support			\$3,200,000	\$0	\$17,463,360	\$9,236,160	\$1,952,000	\$31,851,520
<b>Grand Total</b>			<b>\$13,200,000</b>	<b>\$0</b>	<b>\$72,036,360</b>	<b>\$38,099,160</b>	<b>\$8,052,000</b>	<b>\$131,387,520</b>

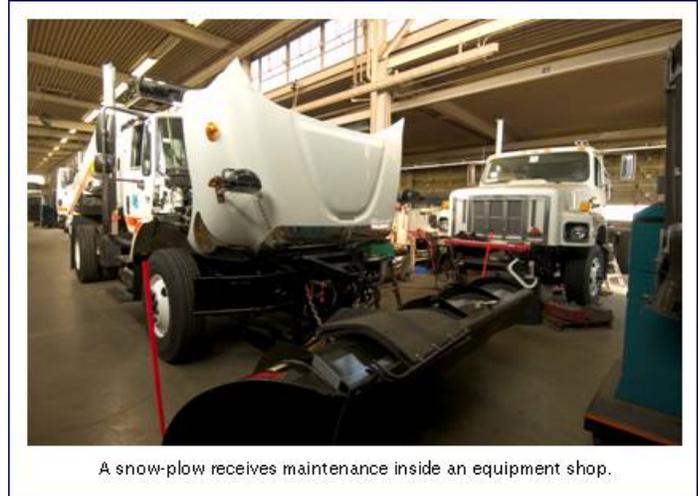
**Notes:**

Support is estimated at 32% of capital costs for projects not programmed in the 2010 SHOPP. The Facilities Infrastructure Plan reflects two of the four years of the 2010 SHOPP, Fiscal Years 2010-11 and 2011-12 are depicted in the table above for illustrative purposes.

## EQUIPMENT SHOPS

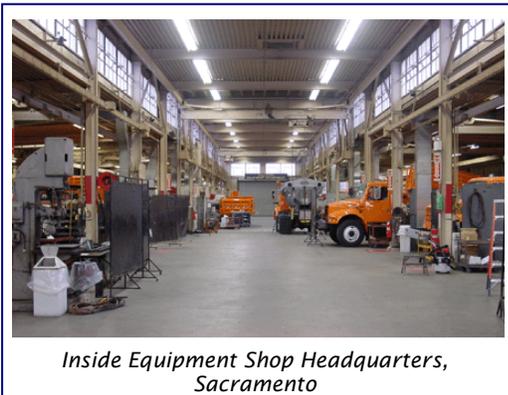
### Introduction

The Division of Equipment is responsible for the Department's fleet of light vehicles and heavy construction equipment consisting of approximately 13,000 vehicles. Light vehicles include automobiles, pickup trucks, and utility vehicles. Heavy construction equipment consists of road graders, loaders, dump trucks, snow blowers, drilling equipment, and other construction-related machineries. Both light vehicles and heavy construction equipment are serviced and repaired by approximately 400 professional equipment mechanics of the Division.



A snow-plow receives maintenance inside an equipment shop.

The Division replaces approximately 900 obsolete vehicles annually. As new vehicles are brought into the Department's fleet, they are customized for Department use and must be received, serviced, and equipped (RS&E). Typical fleet RS&E include the installation of Department delineation, warning lights, toolboxes, and other special equipment. Additionally, the Department provides mobile equipment and services to local public-funded agencies through Interagency Agreements.



Inside Equipment Shop Headquarters, Sacramento

Equipment shops provide space to store tools and materials for mechanics to repair and sustain the Department's fleet of vehicles that are used to operate and maintain the State Highway System. An equipment shop complex may include structures such as office, shop, warehouse, storage, and other improvements.

## Infrastructure Description

The Department maintains 26 equipment shops totaling 666,561 square feet statewide as displayed in the table below.

FACILITIES INVENTORY - EQUIPMENT SHOPS			
District	Address	City and Shop Number	Square Feet
1	1650 Albee Street	Eureka (2101)	30,982
1	3290 North State Street	Ukiah (2102)	28,560
2	1430 George Drive	Redding (2201)	35,532
2	471-800 Diane Drive	Susanville (2202)	5,091
3	981 North Beale Road	Marysville (2301)	49,043
3	10152 Keiser Avenue	Truckee (2302)	9,089
3	2243 Carnelian Drive	Meyers (2303)	6,460
4	1993 Mariana Boulevard	San Leandro (2401)	48,040
4	Bay Bridge Toll Plaza	Oakland (2402)	17,360
4	120 Rickard Street	San Francisco (2403)	3,568
4	6010 Monterey, Building "B"	San Jose (2404)	30,745
4	2019 West Texas	Fairfield (2405)	5,394
5	66 Madonna Road	San Luis Obispo (2501)	25,433
6	1385 North West Avenue	Fresno (2601)	33,352
6	1200 Olive Avenue	Bakersfield (2602)	15,700
6	11 Jay Street	Bishop (2603)	23,829
7	13204 Golden State Road	Sylmar (2701)	70,681
7	7301 East Slauson Avenue	Commerce (2702)	14,600
7	100 South Main Street	Los Angeles (2703)	18,865
8	320 South Sierra Way	San Bernardino (2801)	34,912
8	1800 Dill Road	Barstow (2802)	8,400
10	1603 South "B" Street	Stockton (3001)	24,396
11	7179 Opportunity Road	San Diego (3101)	31,800
11	1607 Adams Avenue	El Centro (3102)	4,202
12	691 South Tustin Street	Orange (2704)	5,500
HQ	34th Street & Stockton Boulevard	Sacramento (3201)	85,027
<b>Total:</b>			<b>666,561</b>



Shop 7, located in Sylmar

## Projects

The 2012 Facilities Infrastructure Plan identifies no Equipment Shop projects that are programmed in the 2010 SHOPP<sup>1</sup> and two projects, identified as unprogrammed needs, which are candidate projects for future SHOPP funding. Project descriptions are provided on the following page.

Equipment Shops	2010 SHOPP Fiscal Years		2012 Facilities Infrastructure Plan Fiscal Years					2012 FIP Total
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
<b>PROGRAMMED IN 2010 SHOPP</b>								
Location/Description								
Construction Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land	\$0	\$0						\$0
Sub-total (Capital)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Support	\$0	\$0						\$0
Grand Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>UNPROGRAMMED NEEDS</b>								
Location/Description								
D1 Ukiah Sub-Shop Retrofit			\$0	\$0	\$0	\$0	\$2,500,000	\$2,500,000
D1 Clearlake Oaks Resident Mechanic Facility			\$0	\$0	\$0	\$1,800,000	\$0	\$1,800,000
D1 Garberville Resident Mechanic Facility			\$0	\$0	\$1,900,000	\$0	\$0	\$1,900,000
D6 New Equipment Shop			\$0	\$0	\$0	\$25,463,000	\$0	\$25,463,000
D12 New Equipment Shop			\$0	\$0	\$21,500,000	\$0	\$0	\$21,500,000
Construction Totals	\$0	\$0	\$0	\$0	\$23,400,000	\$27,263,000	\$2,500,000	\$53,163,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-total (Capital)	\$0	\$0	\$0	\$0	\$23,400,000	\$27,263,000	\$2,500,000	\$53,163,000
Support	\$0	\$0	\$0	\$0	\$7,488,000	\$8,724,160	\$800,000	\$17,012,160
Grand Total	\$0	\$0	\$0	\$0	\$30,888,000	\$35,987,160	\$3,300,000	\$70,175,160

Note:

Support is estimated at 32% of capital costs for projects not programmed in the 2010 SHOPP.

<sup>1</sup> The Facilities Infrastructure Plan reflects two of the four years of the 2010 SHOPP.

### Project Description

#### Unprogrammed Projects

##### **District 1, Ukiah Sub-Shop – Construction Cost: \$2,500,000**

The District proposes to retrofit the entire sub-shop located in Ukiah to comply with all applicable codes and regulations for seismic and other current building codes. The proposed retrofit will include doors that meet the door heights and width standards established for the Division of Equipment and will better accommodate the work being performed at the facility. The retrofit will provide an efficient working environment for its personnel.

The current sub-shop facility was built over 50 years ago. It does not meet the current Americans with Disabilities Act (ADA) codes or new standards established for the Division of Equipment. Furthermore, the design is antiquated, inadequate, and inefficient for the work taking place at the facility. The asphalt on the sub-shop grounds is in poor condition and needs to be repaved.

##### **District 1, Clearlake Oaks Resident Mechanic Facility – Cost: \$1,800,000**

The District proposes to replace the existing one-bay resident mechanic facility with a 2 ½-bay facility. The proposed bay replacement will accommodate an efficient work environment for the shop personnel. The existing one-bay resident mechanic facility is inadequate and antiquated in design. Servicing the customers in the region is difficult and inefficient with the existing facility.

##### **District 1, Garberville Resident Mechanic Facility – Cost: \$1,900,000**

The District proposes to replace the existing facility with an upgraded facility. The proposed facility will have 2 ½ bays to better serve the needs of the customers in the region. The upgraded facility will provide a safe and efficient work environment for its personnel.

The existing facility is inadequate and inefficient making it difficult to service its customer. The facility does not comply with new building codes or new standards established for the Division of Equipment.

##### **District 6, Fresno Equipment Shop - Construction Cost: \$25,463,000**

The District proposes to replace the existing equipment facility located at 1385 North West Avenue in Fresno with a 47,500 square foot equipment and office facility. The proposed structure will have ceiling clearance of 22 feet and 15 feet high roll-up overhead doors. The new design will allow drive through bays to accommodate an efficient repair service system. The design also allows sufficient vertical and horizontal clearance to use mobile

cranes. These larger spaces with larger doors provide a safe and efficient working environment for shop personnel.

The original shop was designed in the late 1950's and built in the early 1960's. It is inadequate in size and antiquated in design. Servicing the Department's fleet is both difficult and inefficient and must take place outside - in violation of environmental regulations. The facility does not meet the current ADA codes or Maintenance/Equipment standards. Lead and asbestos have been found in the construction materials of this facility, the office building has a leaky roof, and the facility has limited space for training events and meetings. There is insufficient space for the crew break room, filing, and use of equipment.

### **District 12, Irvine Equipment Facility - Construction Cost: \$21,500,000**

The District proposes to build an equipment shop in the City of Irvine. The Department purchased an eight-acre parcel from the City of Irvine for the new District 12 Equipment Shop at a cost of approximately \$11,000,000 in June of 2006. The proposed facility will be a full-size equipment shop that will serve as the main Equipment Service Center in District 12. It will sufficiently meet the existing and future District 12 equipment repairs, services, and maintenance needs for the entire District. The new facility will be designed with the new LEED (Leadership in Energy and Environmental Design) concept.

District 12 is the only District that does not have a full-size equipment facility. Equipment services are currently carried out at the Orange Maintenance sub-shop in the City of Orange with equipment staff working double shifts. The facilities at the sub-shop are not adequate to meet the Equipment programmatic needs for District 12. The existing facilities do not meet the current ADA standards for accessibility, Maintenance/Equipment design guidelines; and it is also in violation with CAL-OSHA and environmental regulations.

### MAINTENANCE FACILITIES

#### Introduction

The Division of Maintenance is responsible for maintenance of the State Highway System in a manner consistent with the Department's mission of improving mobility across California. This includes ensuring public and employee safety, preserving the highway infrastructure, and providing services that contribute to mobility and promote a clean and healthy environment. The Division of Maintenance consists of approximately 6,000 employees who work in partnership with other State agencies, local agencies, and private contractors to maintain the State Highway System.



Together, the Division of Maintenance and its partners maintain over 50,000 lane miles of highway, 12,000 bridges, 250,000 roadside acres, 25,000 acres of landscaping, 80 rest areas, as well as commercial vehicle enforcement facilities, and countless other items that make up the State Highway System inventory.

Maintenance facilities are required to house staff, store equipment, and stockpile

materials used in the maintenance and repair of the State Highway System. These facilities have building features such as: crew office space, equipment storage bays, equipment service bays, dormitories, employee housing, wash racks, material storage bins, bulk fuel, and hazmat storage.

### Infrastructure Description

The total Maintenance Facilities operation space is approximately 2,800,000 square feet. Maintenance Facilities are of various types and are categorized as follows:

- Highway Maintenance Crew Stations
- Landscape Maintenance Crew Stations
- Special Crew Stations
- Salt/Sand Storage Sheds
- Satellite Stations

<b>FACILITIES INVENTORY MAINTENANCE FACILITIES</b>	
District	Square Feet
1 Eureka	137,000
2 Redding	317,000
3 Marysville	376,000
4 Oakland	438,000
5 San Luis Obispo	143,000
6 Fresno	227,000
7 Los Angeles	338,000
8 San Bernardino	208,000
9 Bishop	130,000
10 Stockton	214,000
11 San Diego	128,000
12 Irvine	163,000
<b>Total:</b>	<b>2,819,000</b>



*Chilao Maintenance Station  
District 7, Los Angeles*

## Projects

The 2012 Facilities Infrastructure Plan<sup>2</sup> identifies one Maintenance Facility project that is programmed in the 2010 SHOPP and a list of projects identified as unprogrammed needs, which are candidate projects for future SHOPP funding. Project descriptions are provided on the following page.

Maintenance Facilities	2010 SHOPP Fiscal Years		2012 Facilities Infrastructure Plan Fiscal Years					
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2012 FIP Total
<b>PROGRAMMED IN 2010 SHOPP</b>								
Location/Description								
E1 Centro Relocation		\$9,158,000	\$0	\$0	\$0	\$0	\$0	\$0
D4 East Bay Maintenance Complex			\$0	\$24,251,000	\$0	\$0	\$0	\$0
<b>Construction Totals</b>	\$0	\$9,158,000	\$0	\$24,251,000	\$0	\$0	\$0	\$24,251,000
Land	\$0	\$2,693,000	\$0	\$3,929,000	\$0	\$0	\$0	\$3,929,000
Sub-total (Capital)	\$0	\$11,851,000	\$0	\$28,180,000	\$0	\$0	\$0	\$28,180,000
Support	\$0	\$4,718,000	\$0	\$13,388,000	\$0	\$0	\$0	\$13,388,000
<b>Grand Total</b>	<b>\$0</b>	<b>\$16,569,000</b>	<b>\$0</b>	<b>\$41,568,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$41,568,000</b>
<b>UNPROGRAMMED NEEDS</b>								
Location/Description								
D2 Adin Maintenance Facility			\$0	\$0	\$0	\$0	\$3,600,000	\$3,600,000
D3 Auburn Maintenance Facility			\$0	\$0	\$2,000,000	\$0	\$0	\$2,000,000
D3 Roseville Maintenance Facility			\$0	\$0	\$1,500,000	\$0	\$0	\$1,500,000
D4 Petaluma Maintenance Facility			\$0	\$0	\$1,500,000	\$0	\$0	\$1,500,000
D4 Queens Street Maintenance Facility			\$0	\$0	\$0	\$1,800,000	\$0	\$1,800,000
D7 Ojai Maintenance Facility Replacement			\$0	\$0	\$3,300,000	\$0	\$0	\$3,300,000
D7 Florence Maintenance Facility Replacement			\$0	\$0	\$0	\$1,600,000	\$0	\$1,600,000
D8 San Bernardino Maint Fac Replacement			\$0	\$0	\$3,500,000	\$0	\$0	\$3,500,000
D9 Crestview Maintenance Facility Replacement			\$0	\$0	\$3,300,000	\$0	\$0	\$3,300,000
D11 Boulevard Maintenance Facility			\$0	\$0	\$2,700,000	\$0	\$0	\$2,700,000
D11 Lake Henshaw Maintenance Facility			\$0	\$0	\$1,200,000	\$0	\$0	\$1,200,000
D12 Stanton Maint Facility Replacement			\$0	\$0	\$10,000,000	\$0	\$0	\$10,000,000
<b>Construction Totals</b>	\$0	\$0	\$0	\$0	\$29,000,000	\$3,400,000	\$3,600,000	\$36,000,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-total (Capital)	\$0	\$0	\$0	\$0	\$29,000,000	\$3,400,000	\$3,600,000	\$36,000,000
Support	\$0	\$0			\$9,280,000	\$1,088,000	\$1,152,000	\$11,520,000
<b>Grand Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$38,280,000</b>	<b>\$4,488,000</b>	<b>\$4,752,000</b>	<b>\$47,520,000</b>

Note:  
Support is estimated at 32% of capital costs for projects not programmed in the 2010 SHOPP.

<sup>2</sup>The Facilities Infrastructure Plan reflects two of the four years of the 2010 SHOPP, and fiscal years 2012-13 and 2013-14 are depicted.

### Project Description

#### Programmed Projects

##### **District 4, East Bay Maintenance Complex – Construction Costs: \$24,251,000**

The project replaces the existing East Bay Maintenance Complex and landscaping located in Oakland on the median of Interstate 80 at the Toll Plaza of the San Francisco – Oakland Bay Bridge. The Complex will be situated east of the existing facilities, which were damaged by the Loma Prieta earthquake in 1989.

#### Unprogrammed Projects

##### **District 2, Adin Maintenance Facility - Construction Costs: \$3,600,000**

The proposed project replaces the equipment/office/crew building, salt house, detention basin and re-pavement of the yard. The existing facility has critical infrastructure deficiencies and does not meet current fire, life safety and ADA codes. Furthermore, the National Pollutant Discharge Elimination System (NPDES) requirements for stormwater runoff need to be addressed.

##### **District 3, Auburn Maintenance Facility – Construction Costs: \$2,000,000**

The proposed project consolidates, replaces and enlarges the equipment barn, crew rooms, bathrooms, and offices within one building. The existing facility has critical infrastructure deficiencies. The facility is old, the space inadequate, and does not meet current building codes and ADA codes. The safety issues include lead paint and asbestos exposure.

##### **District 3, Roseville Maintenance Facility – Construction Costs: \$1,500,000**

The proposed project consolidates, replaces and enlarges the equipment barn, crew rooms, bathrooms, and offices within one building. The existing facility has critical infrastructure deficiencies. The facility is old, the space inadequate, and does not meet current building codes and ADA codes. The safety issues include lead paint and asbestos exposure.

##### **District 4, Petaluma Maintenance Facility – Construction Costs: \$1,500,000**

The proposed project upgrades the security fence, lighting, and electronic gate; repairs the roof; repaves the facility; and retrofits the facility to comply with applicable codes and regulations, including ADA codes. The existing facility has fire, life safety deficiencies and there have been numerous break-ins. The pavement at the facility has deteriorated and does not address NPDES requirements for stormwater runoff. Furthermore, the current restroom facilities are not ADA compliant.

**District 4, Queens Street Maintenance Facility – Construction Costs: \$1,800,000**

The proposed project upgrades the electrical supply to the facility; repairs the roof; upgrades the security fence and lighting; and retrofits the facility to comply with applicable codes and regulations, including ADA codes. The existing facility has fire, life safety and infrastructure deficiencies. The facility has frequent power overload issues that create an unsafe work environment and cause interruptions to the operation of the facility. The entrance to the facility and restrooms are not ADA compliant.

**District 7, Ojai Maintenance Facility Replacement – Construction Costs: \$3,300,000**

The proposed project replaces the existing maintenance building. The existing complex, located in a mixed residential, recreational and small-scale commercial neighborhood on a three and a half acre site was built in 1937. It is inadequate in size and antiquated in design. The existing complex has one under-sized office and one small unisex restroom. Furthermore, the crew utilizes the equipment bay portion of the building as a locker room. The maintenance vehicles must park outside because the equipment bays are too small to accommodate the vehicles. The complex does not meet current fire, life safety codes and is not ADA compliant.

**District 7, Florence Maintenance Facility Replacement – Construction Costs: \$1,600,000**

The proposed project replaces the existing maintenance building. The existing complex was built forty-five years ago. It is old, inadequate in size, and does not meet the fire, life safety codes and ADA requirements. It was constructed for one crew and is currently being used by two crews.

**District 8, San Bernardino Maintenance Facility Replacement – Construction Costs: \$3,500,000**

The proposed project replaces the existing maintenance building which will include an alternate Emergency Operations Center. The existing facility has critical infrastructure deficiencies; inadequate in size; and does not meet current seismic, ADA, and fire, life safety codes. Furthermore, the National Pollutant Discharge Elimination System (NPDES) requirements for stormwater runoff need to be addressed.

**District 9, Crestview Maintenance Facility Replacement – Construction Costs: \$3,300,000**

The proposed project rebuilds the existing maintenance building. The facility is effectively closed. Asbestos has been found throughout the buildings. The facility has critical infrastructure deficiencies that include inadequate space usage for personnel and equipment, non-compliance with current building, seismic, CalOSHA, and ADA codes.

**District 11, Boulevard Maintenance Facility – Construction Costs: \$2,700,000**

The proposed project modifies and expands the existing office and crew building and includes installation of a wash rack. The existing facility is inadequate in space and does not meet current building and ADA codes. Furthermore, the NPDES requirements for stormwater runoff need to be addressed. The pavement has deteriorated and needs to be repaved.

**District 11, Lake Henshaw Maintenance Facility – Construction Costs: \$1,200,000**

The project involves major rehabilitation to the maintenance building, which includes modifications and expansion to the existing office/crew building and adding a storage building. The existing building is old and does not meet current fire, life safety codes and is not ADA compliant.

**District 12, Stanton Maintenance Facility Replacement – Construction Costs: \$10,000,000**

The proposed project replaces the existing maintenance building. The existing maintenance station is 64 years old and is functionally obsolete and inadequate to properly service the area. The space is inadequate and does not meet current building and ADA codes. There are safety issues with lead paint and asbestos exposure. Furthermore, the NPDES requirements for stormwater runoff need to be addressed.

### MATERIALS LABORATORIES

#### Introduction

District Materials Engineering (DME) and Independent Assurance Laboratories are currently located in each District and the Translab is located in Sacramento. Additionally, the Department's new Southern Regional Laboratory in San Bernardino County is under construction with a scheduled date for completion in Fiscal Year 2010-11. Each of these laboratories provides support for all phases of the project development process and is required to perform federal and state mandated quality assurance testing.



*State Headquarters  
Materials and Testing Laboratory, Sacramento  
(Sacramento TransLab)*

Staff routinely perform field and laboratory testing of highway materials in the construction phase and are responsible for providing materials information during the planning and design phases, including the Project Materials Report. District laboratories perform routine testing on soils, aggregate, asphalt concrete, and Portland cement concrete. This effort includes the coordination of skid testing, roadway and bridge profilographing, nuclear gauge administration, preliminary testing, calibration of equipment, and pavement coring.

The Translab and DME laboratories are over 45 years of age, resulting in facilities that are not in compliance with current codes or lack electrical/mechanical capacity to run testing equipment efficiently. These facilities require infrastructure assessments be performed to determine actual facility safety conditions and electrical/mechanical conditions, repair costs, operational issues, and facility code deficiencies.

### Infrastructure Description

The facility inventory for the Department’s Materials Laboratories total 237,188 square feet.

INVENTORY			
Materials Laboratories			
District	Address	City	Square Feet
1	1726 Albee Street	Eureka	3,690
2	1657 Riverside Drive	Redding	5,841
3	5330 Arboga Road	Marysville	13,000
4	325 San Bruno Avenue	San Francisco	7,600
5	50 Higuera Street	San Luis Obispo	3,330
6	1352 West Olive	Fresno	5,600
7	1615 Wall Street	Los Angeles	9,400
7	1616 Maple Street	Los Angeles	16,200
8	732 East Carnegie	San Bernardino	2,000
9	500 South Main	Bishop	2,200
10	1976 East Charter Way	Stockton	5,617
11	7177 Opportunity Road	San Diego	12,710
HQ	5900 Folsom Boulevard	Sacramento	150,000
Total:			237,188

## Projects

The 2012 Facilities Infrastructure Plan<sup>3</sup> includes one Materials Laboratories project that is programmed in the 2010 SHOPP and one project, identified as an unprogrammed need, which is a candidate project for future SHOPP funding. Project descriptions are provided on the following page.

**Materials Laboratories  
PROGRAMMED IN 2010 SHOPP**

Location/Description	2010 SHOPP Fiscal Years		2012 Facilities Infrastructure Plan Fiscal Years					2012 FIP Total
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
D7 Demo	\$5,798,000							
D11 Upgrade			\$3,248,000	\$0	\$0	\$0	\$0	\$3,248,000
<b>Construction Totals</b>	\$5,798,000	\$0	\$3,248,000	\$0	\$0	\$0	\$0	\$3,248,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Sub-total (Capital)</b>	\$5,798,000	\$0	\$3,248,000	\$0	\$0	\$0	\$0	\$3,248,000
Support	\$3,285,000	\$0	\$1,727,000					\$1,727,000
<b>Grand Total</b>	<b>\$9,083,000</b>	<b>\$0</b>	<b>\$4,975,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,975,000</b>

**UNPROGRAMMED NEEDS**

Location/Description	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2012 FIP Total
D2 Redding FLS Corrections			\$10,000,000	\$0	\$0	\$0	\$0	\$10,000,000
<b>Construction Totals</b>	\$0	\$0	\$10,000,000	\$0	\$0	\$0	\$0	\$10,000,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Sub-total (Capital)</b>	\$0	\$0	\$10,000,000	\$0	\$0	\$0	\$0	\$10,000,000
Support	\$0	\$0	\$3,200,000	\$0	\$0	\$0	\$0	\$3,200,000
<b>Grand Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,200,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,200,000</b>

Note:

Support is estimated at 32% of capital costs for projects not programmed in the 2010 SHOPP.

<sup>3</sup> The 2011 Facilities Infrastructure Plan reflects three of the four years of the 2010 SHOPP.

### Project Description

#### Programmed Project

##### **District 11 Materials Lab - Construction Cost: \$3,248,000**

The District proposes improvements to the Kearny Mesa Materials Lab Facility, constructed in 1978, located at 7177 Opportunity Road, in San Diego. The project will rehabilitate the lab facility to meet the California Building Code seismic standards, upgrade the electrical to conform with fire-life safety codes and replace the heating ventilation and air conditioning units, diffusers, registers, control ductwork, and exhaust system.

#### Unprogrammed Project

##### **District 2 Materials Lab - Construction Cost: \$10,000,000**

The existing District 2 Materials Lab, built in 1953, provides materials testing for both engineering design and construction projects for the North Area (District 2) of North Region Construction. It consists of two floors totaling 5,841 square feet. The lab is literally on its last legs, with serious problems affecting the elevator, ventilation, and electrical systems - all impacting worker safety.

The large elevator (used to convey testing equipment and samples) has exceeded its design life and needs either a major overhaul or needs to be replaced. The ventilation system (critical in a lab environment where soils and asphalt are handled) is not working properly and does not circulate air according to Cal/OSHA guidelines. The electrical system (some aspects were recently upgraded through an emergency contract) lacks capacity to provide sufficient electric power for all lab equipment. Additionally, the lab is not ADA compliant.

## TRANSPORTATION MANAGEMENT CENTERS

### Introduction

Transportation Management Centers (TMCs) are centrally important to the transportation-system management strategies to limit traffic congestion as quickly as possible. Since the original Transportation Management Center was inaugurated thirty years ago, the role of the TMC has grown significantly to include managing virtually every aspect of State highway traffic flow within urban as well as rural areas.

A TMC Master Plan was written in 1997 to develop the framework for standardized statewide strategies for TMCs. California is divided into three transportation regions, managed with the eight TMCs, based on geography and population centers. All TMCs and Satellites within each region cooperate when needed.



*District 7, Los Angeles, Transportation Management Center (ground and aerial views)*

These eight urban-area TMCs conduct daily transportation management to smooth the flow of highway traffic and incident/emergency response coordination to limit the amount of resulting congestion. One urban TMC in each of the three regions is designated the “Regional TMC”, providing traffic operations services beyond their urban area as needed. Since California Highway Patrol (CHP) conducts the incident scene management and other public safety services (e.g., pacing traffic in foggy areas) on the state highways, communication and coordination between the Department’s Traffic Operations staff and CHP staff is critical. In some cases, CHP officers or dispatch staffs are co-located at a TMC. Also, in some locations, a local Emergency Operations Center (EOC) may be operated from the TMC due to its coordination and media capabilities.

### Infrastructure Description

The Department maintains 207,165 square feet of Transportation Management Center operating space, as shown in the table below. Typical TMCs may include security, communication, and dispatch areas; press coverage and briefing rooms; and staff offices and locker areas.

INVENTORY			
Transportation Management Centers			
District	Address	City	Square Feet
1	1656 Union Street	Eureka	230
2	1657 Riverside	Redding	830
3	3165 Gold Street	Sacramento	34,200
3	Donner Summit	Kingvale	1,760
4	111 Grand Ave	Oakland	10,200
5	50 Higuera St	San Luis Obispo	1,500
6	1352 West Olive St	Fresno	3,065
7	2901 W. Broadway	Los Angeles	82,300
8	464 W. 4th St	San Bernardino	6,000
9	500 S. Main St	Bishop	NA
10	1976 E. Charter Way	Stockton	1,860
11	7183 Opportunity Rd.	San Diego	37,720
12	6681 Marine Way	Irvine	27,500
Total:			207,165

## Projects

The 2012 Facilities Infrastructure Plan<sup>4</sup> includes no Transportation Management Center projects that are programmed in the 2010 SHOPP and no projects identified as unprogrammed needs, which are candidate projects for future SHOPP funding.

Transportation Management Centers PROGRAMMED IN 2010 SHOPP	2010 SHOPP		2012 FACILITIES INFRASTRUCTURE PLAN					2012 FIP Total
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
Location/Description								
Construction Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-total (Capital)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Support	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Grand Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>UNPROGRAMMED NEEDS</b>								
Location/Description								
Construction Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-total (Capital)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Support	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Grand Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

Note:  
Support is estimated at 32% of capital costs for projects not programmed in the 2010 SHOPP.

<sup>4</sup> The Facilities Infrastructure Plan reflects two of the four years of the 2010 SHOPP.

This page is intentionally left blank.

## **CHAPTER 4**

# **RESOURCE CONSERVATION**

This page is intentionally left blank.

## RESOURCE CONSERVATION EFFORTS

The California Department of Transportation's (Department) resource conservation policies, practices, and planning efforts are consistent with the Executive Order S-20-04 signed by Governor Schwarzenegger on December 14, 2004.

### Policy

#### Executive Order S-20-04

The Executive Order S-20-04 established the Green Building Initiative. Pursuant to Executive Order S-20-04, State agencies are to reduce their grid-purchased electricity by twenty percent by year 2015 as compared to baseline year 2003. The Executive Order S-20-04 also directs agencies to take "all practical and cost-effective measures" described in the Green Building Action Plan in order to meet the defined energy efficiency goals.

The Green Building Action Plan requires resource conservation measures implemented at all State-owned buildings. The scope of compliance varies upon the size and use of the facility. Statewide, the Department has over 240 State-owned facilities totaling approximately 6.0 million square feet, meeting the criteria by Executive Order S-20-04 and the Green Building Action Plan.

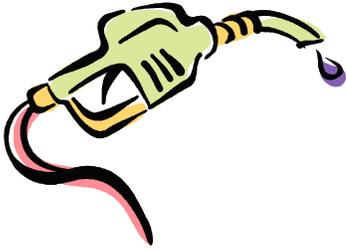
The Department continues to work towards reaching the goals articulated in Executive Order S-20-04 and support the state's renewable power statutes, "green power" electric grid demand, energy conservation, Leadership in Energy and Environmental Design (LEED), and climate change mandates.

### Practice and Planning

#### Clean Renewable Energy Bonds

The Department requested budget authority in Fiscal Year 2008-09 to spend \$20 million from the sale of Clean Renewable Energy Bonds (CREBs) to install roof-mounted solar panels at 70 transportation facilities. The goal is for the 70 sites to generate over 2.4 megawatts (MW) of energy. The funding for the debt service payments will come from the utilities savings in the State Highway Account (SHA) that result from the installation of the photovoltaic systems.

In, 2009, the bonds were sold and the design of the 70 projects started. As of April 2011, a total of 43 of the 70 projects were complete and generating 1,458 kW of electricity. Over the lifetime of the photovoltaic systems, these 43 CREBs



projects will remove approximately 14,580 vehicles from the roads; equivalent to removing more than 42,245 tons of carbon dioxide from the atmosphere. Currently, construction plans have approximately 60% of the projects completed by Fiscal Year 2010-11 and all 70 projects completed by Fiscal Year 2011-12.

### **Computer Energy Savings**

In late 2009, the Department began the statewide deployment of the Computer Energy Reduction and Documentation (CERD) which came online in July 2010. The software manages, measures, and reduces energy (and associated carbon dioxide emissions) consumption on personal computer networks. The CERD system tracks the Department's computer usage and average energy used by each district.

In February 2010, the Governor Schwarzenegger issued Executive Order S-03-10 which focuses on optimizing the State's Information Technology organization and setting cost reduction goals. Item 10, in Executive Order S-03-10, directly link computer energy savings goals to Executive Order S-20-04. Since April 2009, the CERD project has documented savings of about 1.4 million kWh which translates into a reduction in CO<sub>2</sub> by about 1,100 tons. These savings, when combined with other conservation and green power projects, will help the Department to meet or exceed the goals in Executive Order S-20-04 prior to its 2015 completion dates.

### **Leadership in Energy and Environmental Design**

In the past seven years, the Department has constructed three new office buildings in Districts 3, 7, and 11 that are sustainable and have obtained an United States Green Building Council LEED (Leadership in Energy and Environmental Design) Green Building Rating of Silver or better. In 2010, a leased office building tenant improvement project in District 12 achieved an United States Green Building Council LEED for Commercial Interiors rating of Gold. Incorporated in these buildings and office space are energy-efficient lighting, window systems, and HVAC (heating, ventilation, and air conditioning) systems.

### **Other Energy-Efficiency Projects**

- The Sacramento Headquarters office building was retrofitted with a modernized HVAC (heating, ventilation, and air conditioning) system.
- Utilizing a Los Angeles Water and Power (LADWP) rebate as a revenue resource, energy-efficient Light Emitting Diode (LED) lighting fixtures are

to be installed in the District 7 Los Angeles Headquarters office building. Conventional fluorescent lighting fixtures in the stairwells and the four-level parking structure will be replaced with approximately 850 new 69-watt-high/24-watt-low bi-level LED surface mount luminaries with occupancy sensors. In addition, the LED lighting technology will be used to replace 100 halide fixtures in the auto shop and loading dock.

- The Department identified the District 7 Data Center as a site for an United States Department of Energy (USDOE) compliant Data Center Dynamic Cooling demonstration project. The Datacenter Automation Hardware and Software (DASH) system will be installed in the existing Data Center. DASH will dynamically modulate cooling unit fan speeds to require cooling while saving energy. DASH software running on a server will monitor data center temperatures through Wireless Sensor Modules and control Variable Frequency Drives (VFDs) on cooling units using Wireless Control Modules. There is no cost to the Department and a 50 percent energy savings is targeted.

This page is intentionally left blank.



# APPENDIX

<u>Exhibit</u>	<u>Page</u>
1: SHOPP Priorities	55
2: Reconciliation to Previous Plan	59
3: Infrastructure Inadequacies	61
4: Estimated “Net Need” for Office Space	63
5: Major Project Categories	67
6: “Drivers of Need”	69
7: Alternatives to Utilizing the Capital Outlay Process	71
8: Budget Letter	73
9: Space Planning Guidelines/Standards	77
10: Facility Location Maps	93

This page is intentionally left blank.

State of California  
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

**Memorandum**

To: CHAIR AND COMMISSIONERS

CTC Meeting: December 10-11, 2008

Reference No.: 3.17  
Action Item

From: CINDY McKIM  
Chief Financial Officer

Prepared by: Rachel Falsetti  
Division Chief  
Transportation Programming

Subject: **FISCAL YEAR 2008-09 STATE HIGHWAY OPERATION AND PROTECTION PROGRAM ALLOCATION PLAN**

**RECOMMENDATION:**

The Department of Transportation (Department) recommends the California Transportation Commission (Commission) approve the attached FY 2008-09 State Highway Operation and Protection Program (SHOPP) Allocation Plan criteria based on the statutory requirements of Streets and Highways Code Section 167(a).

**ISSUE:**

The latest revenue estimate for FY 2008-09 of the 2008 SHOPP is lower than the value of projects planned for delivery in FY 2008-09. At the Commission’s September 2008 meeting, the Department presented an overview of the 2008-09 Enacted Budget, including the FY 2008-09 SHOPP capital allocation capacity. The capital allocation capacity available from the State Highway Account for the SHOPP is \$1.2 billion for FY 2008-09. However, the current total capital value of projects planned for delivery in FY 2008-09 is estimated at \$1.58 billion. This value includes projects allocated through the October 2008 Commission meeting, projects pending allocation at the December 2008 meeting, remaining FY 2008-09 programmed projects, reservations for anticipated safety and emergency response projects, and projects programmed in future fiscal years and planned for delivery in FY 2008-09. This value also includes the SHOPP portion of the annual right of way plan, as well as the \$106 million for minor projects.

The Department intends to use the attached priority criteria when submitting SHOPP allocation request for the remainder of FY 2008-09.

**BACKGROUND:**

Streets and Highway Code Section 167(a) states that funds in the State Highway Account in the State Transportation Fund shall be programmed, budgeted subject to Section 163, and expended to maximize the use of federal funds and shall be based on the following sequence of priorities:

- (1) Operation, maintenance, and rehabilitation of the State Highway System.
- (2) Safety improvements where physical changes, other than adding additional lanes, would reduce fatalities and the number and severity of injuries.

*“Caltrans improves mobility across California”*

CHAIR AND COMMISSIONERS

Reference No. 3.17  
December 10-11, 2008  
Page 2 of 2

- (3) Transportation capital improvements that expand capacity or reduce congestion, or do both.
  - (4) Environmental enhancement and mitigation programs.
- A majority of the SHOPP program falls into the first two priorities of Section 167(a).

Attachment

*"Caltrans improves mobility across California"*

Reference No.: 3.17  
 December 10-11, 2008  
 Attachment 1

**FISCAL YEAR 2008-09 SHOPP ALLOCATION CRITERIA IN PRIORITY ORDER**

**Highway Emergency, Safety and Seismic Retrofit Projects**

20.XX.201.130	Emergency Damage Restoration
	Emergency Damage Reservation
20.XX.201.010	Safety Improvements
	Safety Improvement Reservation
20.XX.201.015	Collision Severity Reduction
20.XX.201.020	Upgrade Median Barriers
20.XX.201.131	Major Damage Restoration
20.XX.201.111	Bridge Scour Mitigation
20.XX.201.113	Bridge Seismic Restoration
20.XX.201.230	Freeway Maintenance Access
20.XX.201.325	Railroad At-Grade Crossing

**Legal and Regulatory Mandate Projects**

20.XX.201.361	ADA Curb Ramp Improvements
20.XX.201.335	Storm Water Mitigation
20.XX.201.330	Hazardous Waste Mitigation
20.XX.201.240	Surface Mining and Reclamation Act
20.XX.201.160	Relinquishments

**Highway Preservation, Rehabilitation and Restoration Projects**

20.XX.201.110	Bridge Rehabilitation
20.XX.201.119	Capital Bridge Preventive Maintenance
20.XX.201.120	Roadway Rehabilitation
20.XX.201.121	Pavement Rehabilitation
20.XX.201.112	Bridge Rail Replacement and Upgrade
20.XX.201.151	Drainage System Restoration
20.XX.201.125	Long Life Pavement Rehabilitation
20.XX.201.114	Bridge Widening

**Highway Betterment and Roadside Projects**

20.XX.201.150	Roadway Protective Betterment
20.XX.201.250	Safety Roadside Rest Area Restoration
20.XX.201.210	Highway Planting Restoration
20.XX.201.270	Noise Attenuation for Schools
20.XX.201.220	New Highway Planting

**Highway Operational Improvement Projects**

20.XX.201.310	Operational Improvements
20.XX.201.315	Traffic Management Systems
20.XX.201.321	Weigh Stations and Weigh In Motion (WIM)
20.XX.201.322	Transportation Permit Requirements for Bridges
20.XX.201.170	Signs and Lighting Rehabilitation

**Facility Projects**

20.XX.201.351	Equipment Facilities
20.XX.201.352	Maintenance Facilities
20.XX.201.353	Office Buildings
20.XX.201.354	Materials Laboratories
20.XX.201.260	New Safety Roadside Rest Area

**Advanced Delivery of Programmed Projects from Future Fiscal Years**

*"Caltrans improves mobility across California"*

This page is intentionally left blank.

## Reconciliation to Previous Plan | EXHIBIT 2

### Reconciliation to Previous Facilities Infrastructure Plan

(2012 FIP reconcile to 2011 FIP)

#### Programmed in 2010 SHOPP (Fiscal Years 2012-13 and 2013-14)

<u>District</u>	<u>Facility</u>	<u>Project</u>	<u>Reconciliation</u>	<u>2011 FIP</u>	<u>2012 FIP</u>
1	Office	Fire, Life Safety (construction)	"Dropped Off" 2012 FIP(programmed FY2011-12)	\$8,716,000	\$0
4	Maint	Reconstruction maintenance facilities at SF-Oak Bay Bridge Toll Plaza	No changes.	\$24,251,000	\$24,251,000
11	Maint	Construct new El Centro Maintenance Facility	"Dropped Off" 2012 FIP(programmed FY2011-12)	\$9,158,000	\$0
11	Lab	Fire, Life Safety corrections and structural rehab at Kearney Mesa Lab.	No changes.	<u>\$3,248,000</u>	<u>\$3,248,000</u>
				<b><u>\$45,373,000</u></b>	<b><u>\$27,499,000</u></b>

#### Unprogrammed Projects

<u>District</u>	<u>Facility</u>	<u>Project</u>	<u>Reconciliation</u>	<u>2011 FIP</u>	<u>2012 FIP</u>
1	Equipment	Retrofit Sub-Shop	New proposed need. (FY2016-17)		\$2,500,000
1	Equipment	Construct Clearlake Oaks Resident Mechanic Facility	New proposed need. (FY2015-16)		\$1,800,000
1	Equipment	Construct Garberville Resident Mechanic Facility	New proposed need. (FY2014-15)		\$1,900,000
6	Equipment	Construct new Equipment Shop	No changes.	\$25,463,000	\$25,463,000
12	Equipment	Construct new Equipment Shop	Revised estimate.	\$27,000,000	\$21,500,000
2	Maintenance	Adin Maintenance Facility - major rehabilitation	New proposed need. (FY2016-17)		\$3,600,000
3	Maintenance	Auburn Maintenance Facility - major rehabilitation	New proposed need (FY2014-15)		\$2,000,000
3	Maintenance	Roseville Maintenance Facility - major rehabilitation	New proposed need (FY2014-15)		\$1,500,000
4	Maintenance	Petaluma Maintenance Facility - major rehabilitation	New proposed need (FY2014-15)		\$1,500,000
4	Maintenance	Queens Street Maintenance Facility - major rehabilitation	New proposed need (FY2014-15)		\$1,800,000
7	Maintenance	Ojai Maintenance Facility replacement	New proposed need (FY2014-15)		\$3,300,000
7	Maintenance	Florence Maintenance Facility replacement	New proposed need. (FY2015-16)		\$1,600,000
8	Maintenance	San Bernardino Maintenance Facility replacement	New proposed need (FY2014-15)		\$3,500,000
9	Maintenance	Crestview Maintenance Facility - major rehabilitation	Revised estimate.	\$5,227,000	\$3,300,000
11	Maintenance	Boulevard Maintenance Facility - major rehabilitation	New proposed need (FY2014-15)		\$2,700,000
11	Maintenance	Lake Henshaw Maintenance Facility - major rehabilitation	New proposed need (FY2014-15)		\$1,200,000
12	Maintenance	Stanton Maintenance Facility - relocation	No change in construction costs. Land cost eliminated.	\$10,000,000	\$10,000,000
2	Lab	Redding Materials Lab - Fire, Life Safety corrections	No changes.	<u>\$10,000,000</u>	<u>\$10,000,000</u>
				<b><u>\$77,690,000</u></b>	<b><u>\$99,163,000</u></b>
<b>Total Construction Costs</b>				<b><u>\$123,063,000</u></b>	<b><u>\$126,662,000</u></b>
				(pg 7 2011 FIP)	(pg 7 2012 FIP)

APPENDIX

This page is intentionally left blank.

## Infrastructure Functional and Physical Inadequacies

The California Department of Finance requests departments to provide documentation of the “infrastructure functional and physical inadequacies”. The reports documenting these inadequacies are too extensive to include within this report; however, a list of documentation is provided in the table below. These documents are available upon request from the Department.

Facility Studies		
Dist	Study	Date
1	DGS Economic Analysis DGS Infrastructure Study Update	August 2007 June 2006
2	DGS Facility Study and Economic Analysis DGS Infrastructure Study Seismic Study (Risk Level 5)	March 2007 February 2003 October 1997
3	Seismic Study, (Risk Level 5), Rutherford & Chekene DGS Economic Analysis DGS Facility Study	January 1998 September 1999 1994
4	Seismic Report, Degenkolb Engineer/Crosby Group Physical & Numerical Performance Evaluation of Steel Monument Frames DGS Seismic Assessment	May 2004 December 2002 1990
5	DGS Facility Study and Economic Analysis DGS Infrastructure Study Seismic Study (Risk Level 5), Rutherford & Chekene	March 2007 February 2003 January 1999
6	DGS Infrastructure Study DGS Economic Analysis DGS Infrastructure Study	Cancelled September 2000 November 1990
8	Seismic Assessment, Wong Hobach and Lau Seismic Study (Risk Level 4), Rutherford & Chekene	1998 March 1998
9	DGS Feasibility Study Report, Shah Kawasaki Architects DGS Feasibility Study Report DGS Infrastructure Study	March 2008 October 2007 October 2003
10	DGS Infrastructure Study Seismic Study (Risk Level 3), State Architect	July 2009 September 1997
HQ	Equipment Shop, DGS Study State Headquarters, DGS Infrastructure Study	Cancelled July 2006

This page is intentionally left blank.

### Calculation of “Net Need”

The Department projects a “net need” for office space totaling approximately 26,000 square feet (less than 1% of the statewide total).

A significant amount of the Department’s State-owned office space inventory will exceed 50 years of age during the 2012 Facilities Infrastructure Plan time-period. These facilities will require renovation or replacement. Additionally, in some geographic areas a significant<sup>1</sup> number of the Department’s employees are housed in leased office space.

STATEWIDE SUMMARY OFFICE FACILITIES "NET NEED"					
	Facilities Infrastructure Plan Years				
	Year 1 FY2012-13	Year 2 FY2013-14	Year 3 FY2014-15	Year 4 FY2015-16	Year 5 FY2016-17
New Office Building Construction <sup>1</sup> (location of new office building)	--	--	--	--	--
Number of Buildings Vacated <sup>2</sup> (due to new office building construction)	--	--	--	--	--
Number of Leases Eliminated <sup>3</sup> (due to new office building construction)	--	--	--	--	--
Number of Space "Supply" <sup>4</sup> (net square feet of owned and leased space)	3,076,901	3,076,901	3,076,901	3,076,901	3,076,901
Number of Space "Demand" <sup>5</sup> (220 net square feet per person)	3,076,260	3,076,260	3,076,260	3,076,260	3,076,260
Number of Space "Net Need" <sup>6</sup> (supply less demand - in square feet)	641	641	641	641	641
Office Space "Net Need" <sup>7</sup> (supply less demand - as a percentage)	0.02%	0.02%	0.02%	0.02%	0.02%

Notes:

- <sup>1</sup> Actual and proposed construction of office facilities by location and fiscal year.
- <sup>2</sup> The number of office buildings vacated due to the actual or proposed new office facilities.
- <sup>3</sup> The number of leases terminated due to the actual or proposed new facilities.
- <sup>4</sup> The amount of office space statewide, stated in net square feet (nsf), based upon the actual inventory of space.
- <sup>5</sup> The amount of office space needed statewide, stated in net square feet (nsf), based upon 220 nsf per staff person and that office-related positions statewide are assumed stable at 13,983.
- <sup>6</sup> The surplus or shortage of office space statewide, stated in net square feet (nsf), based upon the actual inventory and the amount needed.
- <sup>7</sup> The surplus or shortage of office space statewide, stated as a percentage.

<sup>1</sup> Executive Order W-18-91 states that, “The State shall, where possible and feasible, own those real estate facilities necessary for State operations, where the need for the facility is long-term and ownership is economically advantageous over the life of the facility.”

**EXHIBIT 4 | "Net Need"**

**Office Facilities "Net Need"**  
Fiscal Years 2012-13 through 2016-17

District	Address		Owned (O) Leased (L)	Owned Gross	Owned Net	Leased	Total "gross space" (Owned Gross &	Total "net space" (Owned Net &	Other
<b>District Office Facilities</b>									
D1	1656 Union Street	Eureka	O	80,800	56,560				
	1835 6th Street (modular)	Eureka	O	6,480	4,536				
	TMC, 1656 Union Street	Eureka	O		(230)				
	1656 Union Street (modular)	Eureka	O	4,176					
	District Totals:				91,456	60,866	0	91,456	60,866
D2	1657 Riverside	Redding	O	55,581	38,907				
	TMC, 1657 Riverside	Redding	O		(720)				
	1031 Butte Street	Redding	L			47,027			
	District Totals:			55,581	38,187	47,027	102,608	85,214	
D3	703 B Street	Marysville	O	211,734	159,940				
	2379 Gateway Oaks	Sacramento	L			6,260			
	District Totals:			211,734	159,940	6,260	217,994	166,200	
D4	111 Grand Avenue	Oakland	O	525,000	473,774				
	TMC, 111 Grand Avenue	Oakland	O		(14,000)				
	595 Market Street, Suite 1700	San Francisco	L			14,823			
	595 Market Street, Suite 800	San Francisco	L			2,027			
	595 Market Street (storage)	San Francisco	L						140
	District Totals:			525,000	459,774	16,850	541,850	476,624	
D5	50 Higuera Street	San Luis Obispo	O	41,700	29,190				
	20 Higuera Street (vacant)	San Luis Obispo	O						7,500
	1150 Laurel Lane	San Luis Obispo	L			44,459			
	3232 S. Higuera	San Luis Obispo	L			8,224			
	District Totals:			41,700	29,190	52,683	94,383	81,873	7,500
D6	1352 West Olive Street	Fresno	O	78,000	60,000				
	TMC, 1352 West Olive Street	Fresno	O		(2,000)				
	2015 E Shields Avenue	Fresno	L			98,575			
	855 M Street	Fresno	L			50,773			
	3402 North Blackstone	Fresno	L			31,018			
	District Totals:			78,000	58,000	180,366	258,366	238,366	
D7	100 Main Street	Los Angeles	O	716,200	598,370				
	Space adjustment: 11th Floor	Los Angeles	O		(47,000)				
	Space adjustment: LADOT	Los Angeles	O		(98,000)				
	950 Country Square	Ventura	L			2,500			
	District Totals:			716,200	453,370	2,500	718,700	455,870	
D8	464 W. 4th Street	San Bernardino	O	235,714	165,000				
	TMC, 464 W. 4th Street	San Bernardino	O		(10,000)				
	720 East Carnegie (storage)	San Bernardino	L						2,015
	655 W. 2nd Street	San Bernardino	L			54,685			
	District Totals:			235,714	155,000	54,685			2,015

**Office Facilities "Net Need"**  
Fiscal Years 2012-13 through 2016-17

District	Address		Owned (O) Leased (L)	Owned Gross	Owned Net	Leased	Total "gross space" (Owned Gross &	Total "net space" (Owned Net &	Other
<b>District Office Facilities (continued)</b>									
D8	500 S. Main Street	Bishop	O	20,250	14,175				
	500 S. Main Street (modular)	Bishop	O	4,986	3,490				
	District Totals:			25,236	17,665	0	25,236	17,665	
D10	1976 E Charter Way	Stockton	O	64,574	45,202				
	TMC 1976 E Charter Way	Stockton	O		(300)				
	1976 E Charter Way (mod. R/W)	Stockton	O	5,760	4,032				
	1976 E Charter Way (mod. PFM)	Stockton	O	5,760	4,032				
	1976 E Charter Way (mod. Perm.)	Stockton	O	2,880	2,016				
	District Totals:			78,974	54,982	0	78,974	54,982	
D11	2829 Juan Street (vacant)	San Diego	O						102,950
	4050 Taylor Street	San Diego	O	298,424	221,447				15,428
	4024 Taylor (vacant Arch. Build.)	San Diego	O						2,345
	District Totals:			298,424	221,447	0	298,424	221,447	
D12	3337-3347 Michelson	Irvine	L			151,453			
	District Totals:			0	0	151,453	151,453	151,453	
<b>District Totals:</b>				<b>2,358,019</b>	<b>1,708,421</b>	<b>511,824</b>	<b>2,869,843</b>	<b>2,220,245</b>	
<b>Regional Office Facilities</b>									
D9	21073 Pathfinder Road, #200 (Lab)	Diamond Bar	L			8,950			
<b>Regional Totals:</b>				<b>0</b>	<b>0</b>	<b>8,950</b>	<b>8,950</b>	<b>8,950</b>	
<b>State Headquarters Facilities</b>									
Headquarters	1120 N Street	Sacramento	O	462,392	323,674				
	1120 N Street (CTCleased space)	Sacramento	O		(4,628)				
	5900 Folsom Blvd. (Lab)	Sacramento	O	15,146	10,602				
	5900 Folsom Blvd. (Lab; Qdz I)	Sacramento	O	6,480	4,536				
	5900 Folsom Blvd. (Lab; Qdz II)	Sacramento	O	6,480	4,536				
	5900 Folsom Blvd. (Lab; Qdz III)	Sacramento	O	6,480	4,536				
	1801 30th Street (FMP I)	Sacramento	L			160,900			
	1727 30th Street (FMP III)	Sacramento	L			123,736			
	1820 Alhambra Blvd (FMP II)	Sacramento	L			87,423			1,463
	1823 14th Street (backfill)	Sacramento	L			27,366			
	1500 5th Street (backfill 2415-001)	Sacramento	L			25,248			
	1500 5th Street (2nd floor 2415-003)	Sacramento	L			5,631			
	1500 5th Street (2nd floor 2415-004)	Sacramento	L			3,804			
	1304 "O" Street	Sacramento	L			18,695			
	1616 29th Street	Sacramento	L			18,101			
	1227 "O" Street	Sacramento	L			17,000			
	1515 Riverpark #210	Sacramento	L			6,642			
	1101 R Street	Sacramento	L			3,820			
	3390 Lanatt Street	Sacramento	L			3,769			26,146
	1115 P Street	Sacramento	L			2,315			
<b>State Headquarters Totals:</b>				<b>496,978</b>	<b>343,256</b>	<b>504,450</b>	<b>1,001,428</b>	<b>847,706</b>	
<b>GRAND TOTALS:</b>				<b>2,854,997</b>	<b>2,051,677</b>	<b>1,025,224</b>	<b>3,880,221</b>	<b>3,076,901</b>	<b>157,987</b>

This page is intentionally left blank.

## Categories for Existing Infrastructure

- 1. Critical Infrastructure Deficiencies.** Condition of existing facilities impairs program delivery or results in an unsafe environment. Such projects would correct conditions that significantly limit the efficiency and effectiveness of program delivery. Also included are projects that correct code deficiencies that pose a hazard to employees, client populations, or the public, such as compliance with Fire Marshal regulations, flood control projects, seismic projects, and health related issues such as asbestos abatement and lead removal.
- 2. Facility/Infrastructure Modernization.** Building is structurally sound but modernization of facility will result in an upgrade or betterment that will enable or enhance program delivery. Such projects could include lighting, HVAC, utilities (sewer, water, electrical) and remodeling of interior space to increase efficiency.
- 3. Workload Space Deficiencies.** Additional space required to serve existing programs because of increased workload (not E/C/P based). Within this category departments could divide the category into specified types of space such as offices, storage, laboratories, classrooms, field offices, etc.
- 4. Enrollment/Caseload/Population (E/C/P).** Changes to E/C/P estimates resulting in a reduction or increase in the amount of existing space needed or a change in the use of existing space.
- 5. Environmental Restoration.** Land restoration or modification for environmental purposes. Examples include wetlands restoration for habitat purposes.
- 6. Program Delivery Changes.** Modifications to existing facilities necessitated by authorized changes to existing programs or newly required programs.

## Categories for New Infrastructure

- 7. Workload Space Deficiencies.** Additional space required to serve existing programs because of increased workload (not E/C/P based). Within this category departments could divide the category into specified types of space such as offices, storage, laboratories, classrooms, field offices, etc.
- 8. Environmental Acquisitions and Restoration.** Land acquisitions and restoration of newly acquired land for the improvement or protection of wildlife habitat.
- 9. Public Access and Recreation.** Acquisitions or projects to facilitate, or allow public access to state resources and landholdings such as coastal and park acquisitions as well as development of access points to beaches for recreation or for open space preservation.
- 10. Enrollment/Caseload/Population (E/C/P).** Changes to E/C/P estimates resulting in the need for additional space.
- 11. Program Delivery Changes.** New facility needs resulting from authorized changes to the existing program delivery systems.



## Critical Infrastructure Deficiencies

Fire and Life Safety applies “minimum standards for the prevention of fire and for the protection of life and property against fire, explosion, and panic”<sup>3</sup>.

Seismic Deficiency takes into account both seismic rating of the facility (Seismic Risk Level) along with the geographic tendency (Seismic Zone) to a seismic event.

- Seismic Risk Level identifies the risk level (I through VII) as defined by the Department of General Services.
- Seismic Zone identifies Type “A”, “B”, or “C” Faults as defined in the Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, to be used with the 1997 Uniform Building Code, published by International Conference of Building Officials, February, 1998.

Building Deficiencies evaluates on a “cost to cure” basis Building Systems and Tenant Improvements.

- Building Systems include infrastructure such as heating, ventilation, and air conditioning (HVAC); electrical wiring; plumbing; security; fire alarm; and elevators.
- Tenant Improvements include any tenant-added infrastructure in/on the property.

Code Deficiencies examines ... “non-critical Fire and Life Safety issues, and all other code deficiencies except Americans with Disabilities Act requirements”<sup>4</sup>.

## Facility/Infrastructure Modernization

Operational Deficiencies examines the functional utility, or efficient use, of the existing space of the infrastructure.

American With Disabilities Act (ADA) Compliance considers how the existing facility fulfills ADA requirements.

Energy Inefficiencies considers inefficient energy-related systems, such as windows, heating, air-conditioning, gas lines, and water supply.

Security Deficiencies assesses employee and community exposure to criminal activity and other outside threats.

Effective Age evaluates the overall condition of infrastructure taking into account its actual age. Well-maintained infrastructure will have a lower effective age than poorly maintained infrastructure.

<sup>2</sup> DOF and Department staff met February 23, 2005 to review the Department’s drivers. The result of that and previous meetings is the agreement that the Department’s drivers are appropriate for the Existing Infrastructure classification.

<sup>3</sup> Source: State Fire Marshal, Title 19. Public Safety, Division 1, Chapter 1, Subchapter 1, Article 1.

<sup>4</sup> Source: State Administrative Manual; Section 6839.



## ALTERNATIVES TO UTILIZING THE CAPITAL OUTLAY PROCESS

State departments are required to explore non-capital outlay alternatives that can be utilized to address net needs. The Department’s office space needs are currently met by a combination of State-owned and leased office space. Alternatives that may be considered in lieu of the capital outlay process include: leasing office space, changing program/project delivery methods, alternative work schedules, and public-private partnerships.

### Lease Office Space

Utilizing short and/or long-term leased office space may result in increased support costs and may not be cost effective over the long term. Additionally, Executive Order W-18-91 states that, “The State shall, where possible and feasible, own those real estate facilities necessary for State operations, where the need for the facility is long-term and ownership is economically advantageous over the life of the facility.”

### Change Program/Project Delivery Methods

This alternative would encompass changes that would reduce staffing levels and the corresponding level of office space needs. This alternative may not be cost effective or efficient and could result in a negative impact on the Department’s project delivery efforts.

### Alternate Work Schedules/Telework/Hoteling

The California Department of Transportation (Department) will consider, when appropriate, the use of Telework as a viable management tool (where work performance can be measured) to improve the effectiveness and productivity of employees, optimize facility utilization, and improve asset management without jeopardizing safety, internal controls, Departmental needs, or services to the public.

The Department may use the Telework option, when viable, as one of the strategies to improve safety, mobility, delivery, stewardship, and service by reducing traffic congestion, improving air quality, or effectively resuming business as part of a disaster recovery or emergency. This policy recognizes the business, societal, and personal benefits made available through a carefully planned and well-managed Telework Program.

### Public-Private Partnerships

The Department will seek public-private partnerships as authorized by the California Legislature.



# BUDGET LETTER

	<b>NUMBER:</b> 10-05
<b>SUBJECT:</b> CAPITAL OUTLAY FIVE-YEAR INFRASTRUCTURE PLAN AND BUDGET SUBMISSION FOR 2011-12	<b>DATE ISSUED:</b> March 8, 2010
<b>REFERENCES:</b> STATE ADMINISTRATIVE MANUAL SEC 6821, ET. SEQ. AND AB 1473 (CHAPTER 606, STATUTES OF 1999)	<b>SUPERSEDES:</b> BL 09-07

TO: Agency Secretaries  
 Department Directors  
 Department Budget Officers  
 Department Accounting Officers  
 Department of Finance Budget Staff

FROM: DEPARTMENT OF FINANCE

**NOTE: Budget Officers are requested to forward a copy of this Budget Letter (BL) to the Department’s Facilities Manager as well as program personnel with capital outlay infrastructure needs.**

This Budget Letter (BL) provides detailed instructions and due dates for submitting Major and Minor Capital Outlay Budget Change Proposals (COBCPs) and Five-Year Infrastructure Plans. Major COBCPs, detailed Minor COBCPs and a summary Minor COBCP, if applicable, and Five-Year Infrastructure Plans are due by **July 1, 2010**. Any state agency with capital outlay needs in 2011-12 through 2015-16 must submit a Five-Year Infrastructure Plan, including the necessary COBCPs and/or Capital Outlay Concept Papers (COCPs) as detailed in this BL. Adjustments that are needed to conform to the enacted 2010-11 Budget and the 2010 Five-Year Infrastructure Plan are due by **September 1, 2010**.

**1. Submittal of the 2011 Five-Year Infrastructure Plans, COBCPs, and COCPs.**

**A. FIVE-YEAR INFRASTRUCTURE PLANS**

The Governor is required to annually submit a Five-Year Infrastructure Plan in conjunction with the Governor’s Budget. A procedures manual for completing the five-year plan in accordance with the statutory requirements is available on the Department of Finance’s (Finance) website: <http://www.dof.ca.gov/fisa/bag/bagtoc.htm>, Capital Infrastructure Plan Procedure. Per this BL, these plans are due **July 1, 2010**, along with all necessary COBCPs and COCPs.

**Reminder** – All Five-Year Infrastructure Plans must consider the state planning priorities, as required by Government Code section 65041.1, including, but not limited to the following:

- Promote infill development by rehabilitating existing infrastructure.
- Protect environmental and agricultural resources by protecting and preserving the state’s most valuable natural resources.
- Encourage efficient development patterns by ensuring that infrastructure associated with development, other than infill, support efficient use of land and is appropriately planned for growth.

APPENDIX

## EXHIBIT 8 | Budget Letter

All state entities are required to provide a narrative explanation of how these planning priorities have been incorporated into their five-year infrastructure plan on a statewide basis as it relates to programmatic drivers and infrastructure needs as reported in the Five-Year Infrastructure Plans.

Because these planning priorities are most relevant at the project level, **the COBCP includes a section to describe how each project is or is not consistent with these statewide planning priorities.** Additional justification must be provided for projects that are not consistent with these statewide planning priorities.

### B. MAJOR CAPITAL OUTLAY

Consistent with last year's schedule, all COBCPs and COCPs for all *major* capital outlay projects proposed for the 2011-12 Governor's Budget and the 2011 Five-Year Infrastructure Plan must be submitted to Finance no later than **July 1, 2010**.

**Reminder** – State agencies requesting new or expanded facilities must clearly demonstrate how existing facilities do not meet programmatic needs.

- **Documents Required to Request Capital Outlay Funds:**

- ✓ For budget year and project specific out-year proposals included in the Five-Year Infrastructure Plan: COBCP(s) as described in Attachment 1.
- ✓ For conceptual proposals: COCP(s) as described in Attachment 2.
- ✓ For **ALL** proposals: Fiscal Impact Worksheet(s) (FIW) as described in Attachment 3. All FIW documents must be e-mailed to the appropriate Finance capital outlay budget analyst. It is requested that FIWs for all COBCPs and COCPs be submitted in one Excel workbook (except as approved by Finance) with each tab clearly labeled with the corresponding project title.
- ✓ It is essential that FIW formatting, including the number of lines and calculated cells, is not adjusted. Therefore, the FIW in attachment 3 must be used to generate all FIWs for the 2011 Five Year Infrastructure Plan. **Do not use previous versions of the FIWs.**

All documents submitted to Finance must also be provided in hard copy.

- **When to Prepare a COBCP: Complete COBCPs are required for all new projects or capitalized leases (See Attachment 1) proposed to be included in the 2011-12 Governor's Budget.** For continuing phases of previously funded projects, departments may request continuation by submitting the COBCP cover sheet and the FIW, *provided* there has been no change to the cost or scope of the project. A complete COBCP must be submitted for continuing projects where the scope and/or costs have changed.
- **Requesting Budget Packages:** Budget packages are used to verify feasibility, scope, and costs of projects. Finance utilizes infrastructure planning funds for budget packages when Finance determines a budget package is required for a specific project and funding is not otherwise available. Departments may submit requests to Finance to fund specific budget packages or utilize departmental support funds to contract with the Department of General Services (DGS), Real Estate Services Division, prior to submission of COBCPs. However, use of support funds does not guarantee future funding of a project, so departments are advised to check with Finance prior to initiating their own budget package.

- **Agency Review and Distribution:** Five-Year Plans, including COBCPs and COCPs must be approved by the Agency Secretary, as applicable, *prior to* submission to Finance. After agency approval, submit:
  - ✓ Three copies to Finance, Capital Outlay Unit, 915 L Street, Ninth Floor. (Submit *four* copies to the Capital Outlay Unit for projects based on enrollment/caseload/population changes, program workload adjustments, or program policy changes [the extra copy will be given to the Finance support analyst]).
  - ✓ **DO NOT** submit copies of COBCPs or COCPs to the Legislative Analyst's Office (LAO). Finance will coordinate release of the information to the LAO.

These copies are in addition to any copies that the Agency Secretary may require.

- **Late Five-Year Plans:** Requests for late Five-Year Plan submittals must be approved by the Agency Secretary, as applicable, and submitted in writing to Greg Rogers, Assistant Program Budget Manager, by **June 1, 2010**. Late submittals without prior approval may be returned without review.
- **Updates to COBCPs, COCPs, and Five-Year Infrastructure Plan:** Updates to 2010-11 COBCPs, COCPs, and the Five-Year Infrastructure Plan will be accepted no later than **September 1, 2010**, and only under the following circumstances:
  - ✓ Changes in construction cost indexes (see Budget Letter 08-13 for more details).
  - ✓ Conforming action to the 2010-11 Budget (update must be technical in nature). Changes for any other reason will be deferred to the 2012-13 capital outlay budget cycle unless previously approved by Finance.
- **Major Capital Outlay Budget Reminders:**
  - ✓ All major capital outlay projects are subject to the administrative oversight of the State Public Works Board (PWB) unless specifically exempted. Departments must follow PWB and Finance administrative requirements when implementing projects. Questions on these requirements should be directed to the Finance Capital Outlay Unit at (916) 445-9694.
  - ✓ Augmentations to capital outlay appropriations may be made by the PWB in accordance with GC Section 13332.11, through the Budget Act, or through special legislation.
  - ✓ Project scope may *not* be altered except in conformance with GC Section 13332.11. The Director of Finance determines which project changes are classified as scope changes. Project managers and departments must review potential scope changes with the Finance Capital Outlay Unit. **Unapproved scope changes may result in project termination.**
  - ✓ Funds may not be transferred between major capital outlay projects, unless specifically authorized in the Budget Act or by other statute.
  - ✓ Capital outlay appropriations and reappropriations are generally available for three years. However, appropriations for preliminary plans and working drawings are only available for encumbrance for one year. Construction appropriations are available for encumbrance for up to three years, but revert at the end of the first year of appropriation if Finance has not allocated the funding through fund transfer or approval to proceed to bid (see Section 1.80, Budget Act of 2009 for current availability periods for all project phases).
- **Assistance for Major Projects and the Five-Year Plan:** Departments are encouraged to contact either their Finance capital outlay budget analyst at (916) 445-9694 or DGS at (916) 376-1800 for assistance.

## EXHIBIT 8 | Budget Letter

### C. MINOR CAPITAL OUTLAY

Minor capital outlay is any project under **\$400,000** (except an acquisition project), which has been specifically budgeted as a minor project and which a department has been authorized to implement directly pursuant to Public Contract Code Section 10808. Resources Agency capital outlay projects up to \$777,000 (adjusted per BL 10-01) may be budgeted as minor projects with the concurrence of Finance. Departments may not circumvent the budget process by "piecemealing" larger projects through several minor projects. Please note that the Department of Finance has proposed trailer bill language that would increase the limit for all minor capital outlay projects to \$800,000 for all departments. If this language is adopted, a subsequent Budget Letter will be issued.

Departments shall not include Minor COBCPs in the 2011 Five Year Infrastructure Plan that exceed the current minor capital outlay limits in anticipation of the increased project limits. Projects in excess of \$400,000 or acquisition projects (regardless of amount) must be submitted as Major COBCPs (\$777,000 for Resources Agency projects).

- **Deadlines and Distribution:** Minor capital outlay projects are included in the five-year program as a lump sum for each of the five years. As noted above, this lump sum is to be detailed by specific project with cost and scope information no later than **July 1, 2010**, as part of the Five-Year Infrastructure Plan submittal for 2011-12. A single summary COBCP is also required for minor projects. Send two copies to Finance and two copies to DGS.
- ✓ **Augmentations:** A minor capital outlay project is not subject to PWB oversight, and by practice PWB does not augment projects, which are not subject to its approval. However, Finance may authorize increases to the amount approved for a minor project by redirection within the department's minor program within the same fiscal year, if the increase does not result in a project that exceeds the minor capital outlay limit as set forth in Public Contract Code Section 10808.

If you have any questions, please contact your Finance capital outlay budget analyst at (916) 445-9694.

/s/ Karen Finn

Karen Finn  
Program Budget Manager

Attachments



# FACILITIES SPACE PLANNING GUIDELINES/STANDARDS

This page is intentionally left blank.

## EQUIPMENT SERVICE CENTER FACILITY DESIGN GUIDELINES<sup>1</sup>

The Equipment Service Center (EqSC), after discussions with Office of Structures Design, Headquarters Maintenance Program, and Transportation Programming have reached concurrence that the attached Equipment Shop facilities design guidelines shall be made integral to the Maintenance Station Design Manual and implemented by the Districts during the project scoping process. These guidelines shall be recognized as minimal standards when designing facilities for EqSC use.

It is also recognized that the EqSC's long-term "Master Plan" for siting of facilities, such as Resident Mechanic facilities, SubShops, and Main Shops, is reactive to the needs and actions of its various service group customers. No significant changes of numbers or locations of facilities are currently projected other than those addressed in the 1997 Equipment Service Facilities Location Assessment. Replacement of existing facilities that reach service life expectancy will be addressed as appropriate.

### Shop Functions

#### HEADQUARTERS FACILITY

The function of the Headquarters Facility is the management, research, development, specifications, procurement, component fabrication, assembly, repair and disposal of fleet equipment.

#### DISTRICT SHOP FACILITIES

The function of the District Shop is to fully support fleet equipment within the shop's area of responsibility. The district shop supports field personnel and may support one or more Subshops. District Shop personnel include superintendent, clerical staff, supervisors, parts personnel, and repair personnel. District Shops are divided into three "grades". According to the size of the fleet they support:

- A Grade 1 shop supports from 450 to 750 units.
- A Grade 2 shop supports from 850 to 1,000 units.
- A Grade 3 shop supports from 1,300 to 3,000+ units.

#### SUBSHOP FACILITIES

Subshops support concentrations of equipment in areas that cannot be conveniently serviced by the District Shop. Subshop personnel include parts personnel; supervisor(s) and three to ten repair personnel.

#### FIELD MECHANIC FACILITY

Field mechanics provide support wherever needed to most fully support fleet equipment. The goal of field mechanics facilities is to improve service, reduce travel and reduce downtime. They are staffed by one to three Heavy Equipment Mechanics. Neither parts personnel nor supervisors are stationed at field mechanic facilities.

## DISTRICT EQUIPMENT SHOPS and SUB-SHOPS

<sup>1</sup> In concurrence: A.D. Wells, Director Equipment Service Center; Randall H. Iwasaki, Program Manager, Maintenance Program; John L. Allison, Deputy Director, Engineering Service Center; Structures, Jim Nicholas, Program Manager, Transportation Programming.

## Standard Features and Options

### Communications Closet

All District Shops and Subshops shall have a communications closet to house telecommunications and computer equipment, i./c., servers, junction boxes, hubs, etc.

### Compressed Air

Compressed air outlets will be provided at the end of each stall and wherever else convenient to the repair and welding bays. Outlets will also be provided in the machine shop area. The shop shall be equipped with air compressor(s) and plumbing capable of providing 25 CFM to each repair bay at no less than 120 PSI at the outlets. Outlets shall be provided near doorways, for outside use.

### Cranes

Shops will be equipped with powered, three ton, two-speed 4 directional, raise/lower bridge cranes. A five-ton bridge crane may be substituted for one of the three-ton bridge cranes with adequate justification. Cranes for use by field mechanics need to be justified, and will be considered case by case.

### Crew Room/Customer Waiting Area/Meeting Room

A crew room will be provided for a break area for the crew members. Size will be determined by the number of personnel assigned at the location, and appropriate field staff. This area should be equipped with a sink, counter, and area for a refrigerator. When sized appropriately, this area can satisfy need for EqSC customer waiting area.

### Electrical

A 480V, 3-phase outlet should be supplied to alternate ends of each repair bay. Welding bays shall have 480V, 3-phase outlets at each end of the bay and one in the middle of the bay. A 120V, 1-phase outlet should be available at each end of every bay and wherever else they can be included in the shop design, to include overhead, between bays and outside. Other outlets shall be provided as identified at time of design. Adequate cabling for phone lines, PC modem and fax/data transmission to be included, both in the shop and in the Supervisors offices.

### Emergency Shower/Eyewash

Emergency shower(s) and eyewash(s) shall be located inside repair and welding bays.

### Heating

Shop heaters shall be blower type to provide maximum warmth at floor level. Heated floors will be acceptable in snow regions. Coolers shall be provided as appropriate.

### In-Floor-Tie-Downs

One set of in-floor-tie-downs will be provided in the welding bay. If the shop does not have a welding bay, the tie-downs will be located in a repair bay.

### Lighting

Interior lighting should be adequate for routine night operation of equipment repair. Lights should be mounted as low as possible to light the undercarriage of vehicles. Adequate exterior lighting will be provided to allow equipment to be repaired on the apron at night. Security lighting will be provided throughout the yard.

### Locker Room/Rest Rooms

A crew room will be provided for a break area for the crew members. Size will be determined by the number of personnel assigned at the location, and appropriate field staff.

**DISTRICT EQUIPMENT SHOPS and SUB-SHOPS**

**Standard Features and Options - continued**

This area should be equipped with a sink, counter, and area for a refrigerator. When sized appropriately, this area can satisfy need for EqSC customer waiting area.

**Lubrication Equipment**

Lube reels will be provided in service bays designated for vehicle lifts. Additional lubrication equipment will require justification.

**Machine Shop & Component Repair Area**

Machine shop and component repair area will be provided in main shops and larger subshops only. Any area will be provided between the supervisor's office and the Parts Department for a machine shop, tool storage and component rebuild. This area will vary based on justification and needs, but may require movable benches, and extra lighting.

**Overhead Doors**

All repair and welding bays will be equipped with 15' high overhead doors with electric operators. A 15' vertical clearance shall be maintained throughout the bay.

**Parts Department**

Grade 1 Shops:

The Parts Department will be located at one end of the shop across from the Supervisor's office.

Grade 2 and 3 Shops:

The Parts Department will be located in the center of the shop across from the Supervisor's office.

The Parts Department will be comprised of a parts storage area, parts counter, parts office and, a 150 sq. ft. office for the parts manager. The office will be adjacent and visible to the parts counter. A separate, non-conditioned area or building will be provided for the storage of tires, wear parts, lubricants, stock steel, etc. Size of these areas varies and will be determined by the fleet makeup and the amount of these items stocked. A powered overhead door to the parts storage area will require a number of computer terminals, a FAX and a copier as well as records storage area and parts manual storage area.

**Repair Bays**

Where ever possible, drive-through type bays should be used.

Type of Facility	Type of Bay	Length	Width
Resident Mechanic (counts as two bays configured end-to-end)	Drive-through	80'	25'
Resident Mechanic	Drive-in	55'	25'
Shop/Subshop	Drive-through	80'	25'
Shop/Subshop	Drive-in	60'	25'

Number of bays shall be determined by using the formula:

$$B = \frac{2 \times M}{3}$$

Where:

B = number of 80' long repair bays and

M = number of mechanics assigned to the shop

Sealed concrete should be used for bay floors, with slab joints at the sides of the bay rather than

in the middle of the bays. Floors shall be smooth and level. All bays will be equipped with a vehicle exhaust evacuation system for both diesel and gasoline powered vehicles. Overhead design is preferred. Additional repair bays require adequate justification.

**Shop Supervisors Office**

Resident Mechanic: Provide 240 sq. ft. of office/parts storage area.

Traveling Mechanics: Provide 120 sq. ft. parts storage area.

Grade 1 Shops: Provide a supervisor's office at one end of the shop for two people.

Grade 2 Shops: Provide a supervisor's office located in the middle of the shop for three people.

Space allocation will be 150 sq. ft. for the first supervisor and 120 sq. ft. for each additional supervisor/JHEM. Offices will be of sufficient size to accommodate computer terminals, FAX, copier, radio base station, file cabinets and reference library. (A field supervisor may be located with the shop supervisors.)

**Superintendent's Office**

The Superintendent's office area can be either attached to the shop building or separate. The size and make-up of the area will be determined at the time the fact sheet is drawn up and the staffing within the office is identified. Areas will need to be provided for clerical staff and offices as needed. A conference room may be included with adequate justification. Security gates or doors at lobby, should be included as appropriate.

**Vehicle Lifts**

One standard, 60,000 lbs, four-column electro mechanical vehicle lift will be provided, per facility. Additional lift(s) require adequate justification.

**Welding Bays**

Welding bays are the same size as repair bays. One end of welding bay will be equipped with in-floor be-downs. Welding bays should be isolated from work bays by a full floor to ceiling wall of required fire rating. A self-closing walk through door and an overhead door shall be provided for the movement of personnel and parts between the welding and the repair bays. Each Grade 1 District Shop will have one full welding bay. All Grade 2 and 3 District Shops will have two full-welding bays. Subshops will not have a separate welding bay unless justified. Resident Mechanic facilities will not have dedicated welding bays. Additional welding bays require adequate justification.

**Work Benches**

Work benches shall be provided at each bay. Bench tops shall be heavy gauge steel.

## **DISTRICT EQUIPMENT SHOPS and SUB-SHOPS**

### **Standard Features and Options**

#### **A. APPURTENANT STRUCTURES**

##### **Antifreeze Storage**

Each shop will be provided an outside covered area adjacent to the shop with a 200-gallon double containment type tank for fresh antifreeze mix. A 200-gallon double containment type tank will also be included in this area for antifreeze.

##### **Fencing/Security**

Yard shall be completely security fence. Building will be protected with adequate motion sensing alarm system.

##### **Hazardous Materials Storage Area**

Each shop and subshop will be provided an area for hazardous materials storage. The area should be fenced and covered and the floor sealed concrete with a berm to contain any spillage. Usable area should be a minimum of 15' x 20'. An all metal building with a containment type floor system, specifically designed for hazardous waste storage may be utilized, when provided with forklift access ramp.

##### **Outside Parts Storage Areas**

Secure outside storage areas will be provided as required by the needs of the particular shop. Some of area may need to be covered to protect parts from the environment.

##### **Paint Booth**

A down-draft style pain booth shall be an option at District Shop facilities which have sufficient justification and providing that required permits can be obtained. Paint booths will also require a flammable paint storage locker.

##### **Parking Areas**

Visitors parking will be located so as to reduce or eliminate visitor access to the rest of the shop yard. The amount of employee parking required will be determined by standard design guidelines for the staffing level of the shop. Parking area equivalent to 5 percent of the fleet will be provided for parking equipment awaiting repairs, assignment and delivery. Appropriate signage will be located through out the facility for all buildings.

##### **Radio Tower and Pad**

Available as designed by telecommunications.

##### **Surveyed Vehicle Storage Area**

Each shop shall have reasonable access to a secure fenced parking area for the storage of surveyed vehicles awaiting sale. Parking area shall be equivalent to 10 percent of the assigned fleet.

##### **Used Oil Storage**

Each shop will be provided a covered, minimum 300-gallon double containment type used oil storage tank. Adequate weather protection to be provided. A pump(s) and plumbing shall be provided to deliver the used oil to the tank from a collection point(s) within the shop. Approved, mobile, interior tanks may be considered for substitution.

##### **Vehicle Wash Rack**

Each shop shall have convenient access to a vehicle wash rack. On-site wash racks shall be equipped with a high pressure, hot water cleaner and a waste water treatment system. All shops shall have a single bay wash rack, not less than 60' x 25' minimal height. Additional bays may be included at a Grade 3 shop with adequate justification.

## **DESIGN STANDARDS**

### **Subshop Standard Design**

Larger subshops (i.e., five mechanics or more) will be constructed similar to a Grade 1 shop, except without the Superintendent's office. Smaller Subshops will be designed to the requirements of the areas.

### **RESIDENT MECHANIC FACILITY STANDARD DESIGN**

A building to house one to three resident mechanics will be constructed similar to the design of the Mt. Shasta mechanics' building. Justification and sizing of the building will be in accordance with the June 8, 1992 Memorandum from John Allison to all District Directors addressing the "Process for Determining Needs for Dedicated Field Equipment Repair Facilities". Minor changes may be made at time conceptual report is written up if they are justified.

## Equipment Service Center Facility Design Guidelines

### **UTILIZING THE EQUIPMENT SERVICE CENTER "STAFFING MODEL" TO JUSTIFY LAND AND BUILDING NEEDS**

The Equipment Service Center "Staffing Model" may be utilized when justifying facilities. The model is used by inputting the mobile equipment compliment of the area involved.

#### **DISTRICT SHOP FACILITY**

Input into the model all equipment in the shop's fleet.

##### **Repair Bays**

Total Average Repair Hours + Other Paid Time Hours = Total PY's Expended  
1984 Hrs./PY

Total PY's Expended – Subshop Mechanics – PY's Expended in Field = District Shop PY's

District Shop PY's x 2 = Number of 80' Drive-Through Bays Needed

##### **Supervisor Personnel**

Sup. Needed Hours – Subshop Supervisors = District Shop Supervisors  
1984 Hrs./PY

This may include both shop supervisors and field supervisor(s); does not include Superintendent.

##### **Parts Personnel**

Parts Staff Needed Hours = Total Parts Personnel for all Shop Facilities  
1984 Hrs./PY

Total Parts Personnel – Subshop Parts Personnel = Number of Parts Personnel Assigned to District Shop

##### **Staff Personnel**

Office Staff Needed Hours  
1984 Hrs./PY = Total Office Personnel Assigned to District Shop Includes Superintendent.

##### **Subshop Facilities**

Input all units assigned to the subshops service area, include EqSC units that are stationed in the area and any transient vehicles that are in the area on a regular basis. Transient vehicles are added at a percentage of their time as shown under Resident Mechanic Facilities.

##### **Repair Bays**

Total Average Repair Hours + Other Paid Time Hours  
1984 Hrs./PY = Total PY's Expended

Total PY's Expended – Field Assigned Mechanics = Subshop Mechanic

Subshop Mechanics x 2

3 = Number of 80' Drive-Through Bays Needed

##### **Supervisory Personnel**

Sup. Needed Hours  
1984 Hrs./PY = Number of Supervisor Assigned to Sub-shop.

This may include both shop supervisors and field supervisors.

##### **Parts Personnel**

Parts Staff Needed Hours  
1984 Hrs./PY = Number of Parts Personnel Assigned to Subshop

##### **Resident Mechanic's Facility**

Input into the model all mobile equipment within the assigned area under consideration; be sure to include any EqSC assigned units kept within that area. Transient units which are in the area on a regular basis, i.e., construction vehicles and special crews units are inputted into the model separately, and the result added in as a percent representing the time the units actually spend in the area, i.e., if the units are in the area 60 percent of the time, then multiply transient unit hour by 60 percent.

Total Average Repair Hours + Other Paid Time Hours  
1984 Hrs./PY = Total PY's Expended

Total PY's Expended = PY's Expended at field Location  
2

Use the "PY's Expended at Field Location" in Phases I & II of the evaluation process.

# Maintenance Facility Design Manual

Name	Regional Manager's Office	Category: Regional Office Building Space
<b>Description</b>	Office space for Regional Manager, whose duties include administration and management of maintenance facilities located within the region.	
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> One per Regional Office</p> <p><i>Special justification Required?</i> No</p> <p><i>Designed for:</i> Clerical Space, Office Supplies Closet</p> <p><i>Related Spaces:</i> 1 person per space</p> <p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> One occupant per 100 SF</p> <p><i>CBC or Title 24 Special Design Requirements:</i> None noted</p> <p><i>Heating, Ventilation, and Cooling System:</i> Central HVAC and/or better. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.</p>	
<b>Code Information</b>	<p><i>Lighting Level:</i> 60 fc general illumination @ 2'-6" workplane without windows. 40 fc general illumination @ 2'-6" workplane with windows.</p> <p><i>Electrical Power:</i> 110v duplex outlet as 8'-0" max. spacing; bottom of box 1'-6" above floor. Provide isolated ground type 110v duplex outlet and one dedicated circuit for the computers.</p> <p><i>Plumbing:</i> N/A</p> <p><i>Telephone:</i> Two telephone outlets bottom of 1'-6" above floor.</p> <p><i>Radio/Speaker:</i> Two 4' X 4' junction boxes bottom of boxes 7'-0" and 1'-6" above floor.</p> <p><i>Telecommunications:</i> Two data outlets.</p> <p><i>Hazards:</i> None noted.</p>	
<b>Mechanical and Electrical Systems:</b>	<p><i>Standard floor area:</i> 150 SF</p> <p><i>Minimum ceiling height:</i> 8'-0"</p>	
<b>Materials and Finishes</b>	<p><i>Floor:</i> Carpet, tight closed-loop, standard commercial grade; resilient base.</p> <p><i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint.</p> <p><i>Door:</i> HC Metal or SC Wood in PMF, vision panel optional.</p> <p><i>Furnishings:</i> Venetian blinds on windows; 4' X 4' whiteboard; 4' X 4' tackboard.</p>	
<b>Remarks</b>	*This space can be included at Regional Offices only. Regional Manager's Office Building is normally separated from, but on the same site as, the maintenance facility.	
Regional Office Building Space - Dec 2002		
PAGE II - 1		

Name	Record Storage Room	Category: Regional Office Building Space
<b>Description</b>	Space for active and inactive files.	
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> One per Regional Office</p> <p><i>Special justification Required?</i> No</p> <p><i>Designed for:</i> N/A</p> <p><i>Related Spaces:</i> Clerical Space</p> <p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> One occupant per 200 SF</p> <p><i>CBC or Title 24 Special Design Requirements:</i> None noted</p> <p><i>Heating, Ventilation, and Cooling System:</i> Central HVAC and/or better. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.</p>	
<b>Code Information</b>	<p><i>Lighting Level:</i> 50 fc general illumination @ 3'-0" workplane.</p> <p><i>Electrical Power:</i> Verify equipment to be installed; dedicated circuit required for each desktop computer, 2 dedicated circuits minimum; bottom of duplex boxes at 1'-6" above floor.</p> <p><i>Plumbing:</i> N/A</p> <p><i>Telephone:</i> N/A</p> <p><i>Radio/Speaker:</i> N/A</p> <p><i>Telecommunications:</i> N/A</p>	
<b>Mechanical and Electrical Systems:</b>	<p><i>Special Requirements Area and Height Standards</i></p> <p><i>Standard floor area:</i> 200 SF. More area is allowed with special justification</p> <p><i>Minimum ceiling height:</i> 8'-0"</p>	
<b>Materials and Finishes</b>	<p><i>Floor:</i> Resilient tile, standard commercial grade; resilient base.</p> <p><i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint.</p> <p><i>Door:</i> HC Metal or SC Wood in PMF, vision panel optional, lockable.</p> <p><i>Furnishings:</i> 2'-0" deep counter-top for equipment with knee space for seated operator. Telephone; 4' X 4'</p>	
<b>Remarks</b>	This space can be included in Regional Offices only.	
Regional Office Building Space - Dec 2002		
PAGE II - 2		

<b>Name</b>	Generic Office	<i>Category:</i> Regional Office Building Space
<b>Description</b>	Office space for Region Administrator (RAO), Contract Manager, Permits Officer, TMC/Hazmat Supervisor, or other full time management personnel.	
<b>Space Allocation</b>	<i>Standard Allocation:</i> N/A <i>Special Justification Required?</i> Yes <i>Designed for:</i> 1 person per space	Clerical Space: Office Supplies Closet
<b>Code Information</b>	<i>Related Spaces:</i> Clerical Space <i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load Factor": CBC or Title 24 Special Design</i> One occupant per 100 SF	
<b>Mechanical and Electrical Systems:</b>	<i>Requirements:</i> None noted <i>Heating, Ventilation, and Cooling</i> Central HVAC. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.	
	<i>Lighting Level:</i> 60 fc general illumination @ 2'-6" workplane without windows. 40 fc general illumination @ 2'-6" workplane with windows.	
	<i>Electrical Power:</i> 110v duplex outlet at 8'-0" max. spacing; bottom of box 1'-6" above floor. Provide one isolated ground type 110v duplex outlet on a dedicated circuit for a computer.	
	<i>Plumbing:</i> N/A <i>Telephone:</i> Two telephone outlets. <i>Radio/Speaker:</i> Two 4"x4" junction boxes bottom of boxes 7'-0" and 1'-6" above floor. <i>Telecommunications:</i> Two data outlets.	
<b>Special Requirements</b>	<i>Hazards:</i> None noted.	
<b>Area and Height Standards</b>	<i>Standard floor area:</i> 130 SF <i>Minimum ceiling height:</i> 8'-0"	
<b>Materials and Finishes</b>	<i>Floor:</i> Carpet, tight closed-loop, standard commercial grade, resilient base. <i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint. <i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint. <i>Door:</i> HC Metal or SC Wood in PMF, vision panel optional. <i>Furnishings:</i> Venetian blinds on windows, 4'x4' whiteboard, 4'x4' tackboard.	
<b>Remarks</b>	Private office for RAO, open space for others.	

Regional Office Building Space - Dec 2002

PAGE II - 3

<b>Name</b>	Office Equipment Alcove/Mail Room	<i>Category:</i> Regional Office Building Space
<b>Description</b>	Space for copiers, shredder's, desktop computers, FAX machine, and other electrical equipment.	
<b>Space Allocation</b>	<i>Standard Allocation:</i> One per each Regional Manager <i>Special Justification Required?</i> No <i>Designed for:</i> 2 persons per space	Clerical Space
<b>Code Information</b>	<i>Related Spaces:</i> Clerical Space <i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load Factor": CBC or Title 24 Special Design</i> One occupant per 100 SF	
<b>Mechanical and Electrical Systems:</b>	<i>Requirements:</i> None noted <i>Heating, Ventilation, and Cooling</i> Included in Clerical Space	
	<i>Lighting Level:</i> 50 fc general illumination @ 2'-6" workplane.	
	<i>Electrical Power:</i> Verify equipment installation. Separate dedicated circuit with isolated ground required for each desktop computer, 2 dedicated circuits minimum. All outlets at 1'-6" above floor, 8' max spacing.	
	<i>Plumbing:</i> N/A <i>Telephone:</i> N/A <i>Radio/Speaker:</i> One telephone outlet; one FAX machine outlet.	
<b>Special Requirements</b>	<i>Telecommunications:</i> One data outlet <i>Hazards:</i> None noted	
<b>Area and Height Standards</b>	<i>Standard floor area:</i> 90 SF <i>Minimum ceiling height:</i> 8'-0"	
<b>Materials and Finishes</b>	<i>Floor:</i> Carpet, tight closed-loop, standard commercial grade, resilient base. <i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint. <i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint. <i>Door:</i> None, one wall open to Clerical Space. <i>Furnishings:</i> 2'-0" deep counter-top for equipment with knee space for seated operator. Telephone, 4'x4'	
<b>Remarks</b>	This space can be included at Regional Offices only.	

Regional Office Building Space - Dec 2002

PAGE II - 4

## Maintenance Facility Design Manual

<b>Name</b>	<b>Foyer</b>	<b>Category:</b> Regional Office Building Space
<b>Description</b>	Public entry and waiting area. Service Counter is located along a wall separating this space and the Clerical Space.	
<b>Space Allocation</b>	<i>Standard Allocation:</i> One per each Regional Manager <i>Special Justification Required?</i> Security measures <i>Designed for:</i> N/A <i>Related Spaces:</i> Permits Office, Clerical Space, Public Counter, access corridor to the rest of the building.	
<b>Code Information</b>	<i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load" Factor:</i> One occupant per 100 SF <i>CBC or Title 24 Special Design Requirements:</i> None noted <i>Heating, Ventilation, and Cooling System:</i> Central HVAC. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.	
<b>Mechanical and Electrical Systems:</b>	<i>Lighting Level:</i> 30 fc general illumination @ floor, 60 fc @ public counter. <i>Electrical Power:</i> 110v duplex outlet at 8'-0" max. spacing; bottom of box 1'-6" above floor. 110v duplex outlet at each end of service counter.	
<b>Special Requirements</b>	<i>Plumbing:</i> N/A <i>Telephone:</i> One outlet at each end of service counter. <i>Radio/Speaker:</i> N/A <i>Telecommunications:</i> N/A <i>Hazards:</i> None noted	
<b>Area and Height Standards</b>	<i>Standard floor area:</i> 100 SF <i>Minimum ceiling height:</i> 8'-0"	
<b>Materials and Finishes</b>	<i>Floor:</i> Resilient tile, standard commercial grade; resilient base. <i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint. <i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint. <i>Door:</i> Metal/wood door in PMF, vision panel optional, or aluminum window wall system. <i>Furnishings:</i> Two 4'-x4' tack boards	
<b>Remarks</b>	This space can be included at Regional Offices only. Space requirements handled individually.	

Regional Office Building Space - Dec 2002

PAGE II - 6

<b>Name</b>	<b>Training/Conference Room</b>	<b>Category:</b> Regional Office Building Space
<b>Description</b>	This space provides an assembly space for groups of up to 49 people for training or conference. May be used for staff meeting room.	
<b>Space Allocation</b>	<i>Standard Allocation:</i> One per each Regional Manager <i>Special Justification Required?</i> No <i>Designed for:</i> 49 persons per space <i>Related Spaces:</i> One-hour corridor.	
<b>Code Information</b>	<i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load" Factor:</i> One occupant per 15 SF <i>CBC or Title 24 Special Design Requirements:</i> Need two out swinging exit doors, low-level exit signs, panic hardware, one-hour corridor access. <i>Heating, Ventilation, and Cooling System:</i> Central HVAC. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.	
<b>Mechanical and Electrical Systems:</b>	<i>Lighting Level:</i> 50 fc general illumination @ 2'-6" workplane. <i>Electrical Power:</i> 110v duplex outlet at 8'-0" max. spacing; bottom of box 1'-6" above floor. 110v duplex outlet at each end of service counter.	
<b>Special Requirements</b>	<i>Plumbing:</i> N/A <i>Telephone:</i> One to two outlets for a wall with partitions. <i>Radio/Speaker:</i> One 4" x 4" junction box <i>Telecommunications:</i> Five data outlets/LAN connection <i>Hazards:</i> None noted	
<b>Area and Height Standards</b>	<i>Standard floor area:</i> 900 SF + 100 SF separate storage <i>Minimum ceiling height:</i> 10' - 0"	
<b>Materials and Finishes</b>	<i>Floor:</i> Resilient tile, standard commercial grade; resilient base. <i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint. <i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint. <i>Door:</i> Metal/wood door with vision panel in PMF. <i>Furnishings:</i> Venetian blinds on windows, 4'x4' whiteboard; 4'x4' tackboard. Pull down project screen each space and stub out for projector. Counter along one wall.	
<b>Remarks</b>	This space can be included at Regional Offices only. Consider using a folding partition to divide the space in two and add flexibility; two exits recommended.	

Regional Office Building Space - Dec 2002

PAGE II - 7

## Maintenance Facility Design Manual

Name	Description	Category:
Kitchen/Breakroom	Used for breaks and lunch.	Regional Office Building Space
<b>Space Allocation</b>	<i>Standard Allocation:</i> One per Regional Office or large Maintenance Station. <i>Special Justification Required?</i> No <i>Designed for:</i> N/A <i>Related Spaces:</i> Staff Meeting Room	
<b>Code Information</b>	<i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load" Factor:</i> N/A <i>CBC or Title 24 Special Design</i>	
<b>Mechanical and Electrical Systems:</b>	None noted Central HVAC. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting. Include exhaust fan over cooking area, switched w/ pilot light.	
	<i>Lighting Level:</i> 75 fc @ 3'-0" high kitchen counter. 40fc general illumination at 2'-6" workplane.	
	<i>Electrical Power:</i> 110v duplex outlet at 5'-0" spacing above countertop or at 3'-6" above floor. 220v if required for appliances.	
	<i>Plumbing:</i> Hot and cold water, waste and vent. <i>Telephone:</i> N/A <i>Radio/Speaker:</i> N/A <i>Telecommunications:</i> N/A <i>Hazards:</i> None noted	
<b>Special Requirements Area and Height Standards</b>	<i>Standard floor area:</i> 10 SF/person with 150 SF minimum. <i>Minimum ceiling height:</i> 8'-0"	
<b>Materials and Finishes</b>	<i>Floor:</i> Resilient tile, standard commercial grade, resilient base. <i>Ceiling:</i> Gypsum wallboard with acrylic enamel paint. <i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint. HC Metal or SC Wood in PMF. <i>Door:</i> HC Metal or SC Wood in PMF. <i>Furnishings:</i> Microwave oven, refrigerator, double sink with disposal, cabinet, and countertop.	
<b>Remarks</b>	Include seating area. All furnishing shall be ADA compliant.	
Regional Office Building Space - Dec 2002		

Name	Description	Category:
Storage Closet	Storage for office supplies for day-to-day operation.	Regional Office Building Space
<b>Space Allocation</b>	<i>Standard Allocation:</i> One per each Regional Manager <i>Special Justification Required?</i> No <i>Designed for:</i> N/A <i>Related Spaces:</i> Clerical Space, Superintendent's Office.	
<b>Code Information</b>	<i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load" Factor:</i> N/A <i>CBC or Title 24 Special Design</i>	
<b>Mechanical and Electrical Systems:</b>	None noted.	
	<i>Lighting Level:</i> 20fc general illumination @ floor.	
	<i>Electrical Power:</i> One 100v duplex outlet, bottom of box 1'-6" above floor.	
	<i>Plumbing:</i> N/A <i>Telephone:</i> N/A <i>Radio/Speaker:</i> N/A <i>Telecommunications:</i> N/A <i>Hazards:</i> None noted	
<b>Special Requirements Area and Height Standards</b>	<i>Standard floor area:</i> 80 SF per three clerical spaces. <i>Minimum ceiling height:</i> 8'-0"	
<b>Materials and Finishes</b>	<i>Floor:</i> Resilient tile, standard commercial grade, resilient base. <i>Ceiling:</i> Gypsum wallboard with acrylic enamel paint. <i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint. HC Metal or SC Wood in PMF. <i>Door:</i> HC Metal or SC Wood in PMF. <i>Furnishings:</i> Floor to ceiling shelves.	
<b>Remarks</b>	This space can be included at Regional Offices only.	
Regional Office Building Space - Dec 2002		

## Maintenance Facility Design Manual

<b>Name</b>	Vestibule Between Office and Equipment Space	<b>Category:</b> Maintenance Office Building Space
<b>Description</b>	Internal passage way between maintenance office and equipment bays. Serves as an air lock to prevent the passage of fumes from equipment to office area.	
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> One per Maintenance Office</p> <p><i>Special Justification Required?</i> Yes</p> <p><i>Designed for:</i> N/A</p> <p><i>Related Spaces:</i> Equipment Bays and Office Spaces</p>	
<b>Code Information</b>	<p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> N/A</p>	
<b>Mechanical and Electrical Systems:</b>	<p><i>Requirements:</i> Must have self-closing doors with weather-stripping. Supply air must maintain a positive pressure relative to adjacent spaces. Should supply minimum 15 air charges per hour.</p> <p><i>Heating, Ventilation, and Cooling System:</i></p> <p><i>Lighting Level:</i> 20 fc general illumination @ floor</p> <p><i>Electrical Power:</i> One 110v duplex outlet with bottom of box 1'-6" above floor.</p> <p><i>Plumbing:</i> N/A</p> <p><i>Telephone:</i> N/A</p> <p><i>Radio/Speaker:</i> N/A</p> <p><i>Telecommunications:</i> N/A</p> <p><i>Hazards:</i> Potential hazardous atmosphere</p>	
<b>Special Requirements Area and Height</b>		
<b>Standards</b>	<p><i>Standard floor area:</i> 80 SF</p> <p><i>Minimum ceiling height:</i> 8'-0"</p>	
<b>Materials and Finishes</b>	<p><i>Floor:</i> Resilient tile, standard commercial grade; resilient base.</p> <p><i>Ceiling:</i> Gypsum wallboard with semi-gloss acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint.</p> <p><i>Door:</i> HC Metal or SC Wood in PMF with weather -stripping.</p> <p><i>Furnishings:</i> N/A</p>	
<b>Remarks</b>		
<b>Maintenance Office Building Space - Dec 2002</b>		
Page IV-1		

<b>Name</b>	Vestibule Between Office and Equipment Space	<b>Category:</b> Maintenance Office Building Space
<b>Description</b>	Internal passage way between maintenance office and equipment bays. Serves as an air lock to prevent the passage of fumes from equipment to office area.	
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> One per crew</p> <p><i>Special Justification Required?</i> No</p> <p><i>Designed for:</i> 2 persons per space</p> <p><i>Related Spaces:</i> Crew Room</p>	
<b>Code Information</b>	<p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> One occupant per 100 SF</p>	
<b>Mechanical and Electrical Systems:</b>	<p><i>Requirements:</i> None noted</p> <p><i>Heating, Ventilation, and Cooling System:</i> Central HVAC and/or better. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.</p> <p><i>Lighting Level:</i> 60 fc general illumination @ 2'-6" workplane without windows. 40 fc general illumination @ 2'-6" workplane with windows.</p> <p><i>Electrical Power:</i> 110v duplex outlets at 8'-0" max. spacing; bottom of box 1'-6" above floor. One dedicated circuit with isolated ground type 110v outlet for each computer.</p> <p><i>Plumbing:</i> N/A</p> <p><i>Telephone:</i> One telephone outlet, one machine outlet</p> <p><i>Radio/Speaker:</i> One 4"x4" junction box</p> <p><i>Telecommunications:</i> Internet LAN</p> <p><i>Hazards:</i> None noted.</p>	
<b>Special Requirements Area and Height</b>		
<b>Standards</b>	<p><i>Standard floor area:</i> 160 SF for first Leadworker + 40 SF for each additional Leadworker.</p> <p><i>Minimum ceiling height:</i> 8'-0"</p>	
<b>Materials and Finishes</b>	<p><i>Floor:</i> Resilient tile, standard commercial grade; resilient base.</p> <p><i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint.</p> <p><i>Door:</i> HC Metal or SC Wood in PMF, vision panel optional</p> <p><i>Furnishings:</i> Venetian blinds on windows; 4"x4" whiteboard; 4"x4" tackboard.</p>	
<b>Remarks</b>	Typical space has two desks, a personal computer on a network, FAX machine, and copier.	
<b>Maintenance Office Building Space - Dec 2002</b>		
Page IV-2		

## Maintenance Facility Design Manual

<b>Name</b>	Crew Room	<i>Category:</i> Maintenance Office Building Space
<b>Description</b>	Crews meet at beginning of workday to discuss daily work schedule and safety.	
<b>Space Allocation</b>	<i>Standard Allocation:</i> One per crew <i>Special Justification Required?</i> No <i>Designed for:</i> 12 persons per space <i>Related Spaces:</i> Locker Room	
<b>Code Information</b>	<i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load" Factor:</i> One occupant per 15 SF <i>CBC or Title 24 Special Design Requirements:</i>	
<b>Mechanical and Electrical Systems:</b>	<i>Heating, Ventilation, and Cooling System:</i> None noted <i>Central HVAC and/or better:</i> See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.	

<b>Lighting Level:</b>	30 fc general illumination @ 2'-6" workplane
<b>Electrical Power:</b>	One 110v duplex outlet with bottom of box 1'-6" above floor.
<b>Plumbing:</b>	N/A
<b>Telephone:</b>	One telephone outlet
<b>Radio/Speaker:</b>	One 4"x4" junction box
<b>Telecommunications:</b>	One data outlet
<b>Hazards:</b>	None noted
<b>Special Requirements Area and Height Standards</b>	<i>Standard floor area:</i> 200 SF per additional person over 12 persons <i>Minimum ceiling height:</i> 8'-0"
<b>Materials and Finishes</b>	<b>Floor:</b> Resilient tile, standard commercial grade, resilient base. <b>Ceiling:</b> Suspended T-bar acoustical ceiling or gypsum wallboard with acrylic enamel paint. <b>Wall:</b> Gypsum wallboard with semi-gloss acrylic enamel paint. <b>Door:</b> HC Metal or SC Wood in PMF, visions panel optional
<b>Furnishings:</b>	4'x4' whiteboard; 4'x4' tackboard
<b>Remarks</b>	Must meet staff size needs. Accordion doors are optional convert multiple crew rooms into one large room.

Maintenance Office Building Space - Dec 2002

Page IV-3

<b>Name</b>	Locker Room	<i>Category:</i> Maintenance Office Building Space
<b>Description</b>	Change room for maintenance workers. Change room for mechanics at sub-shops.	
<b>Space Allocation</b>	<i>Standard Allocation:</i> Two per Maintenance Office <i>Special Justification Required?</i> No <i>Designed for:</i> N/A <i>Related Spaces:</i> Restroom; Crew Rooms	
<b>Code Information</b>	<i>CBC "Occupancy" Classification:</i> B <i>CBC "Occupant Load" Factor:</i> One occupant per 50 SF <i>CBC or Title 24 Special Design Requirements:</i>	
<b>Mechanical and Electrical Systems:</b>	<i>Heating, Ventilation, and Cooling System:</i> Two exits when serving 30 or more people interlocked with light switch, exhaust fan; exhaust minimum 10 air changes per hour. Supply air provided from HVAC system and adjacent space other than restroom through door louver or jumper duct, and may require five dampers.	

<b>Lighting Level:</b>	30 fc general illumination @ floor
<b>Electrical Power:</b>	110v duplex outlets at 8'-0" max. spacing; bottom of box 1'-6" above floor.
<b>Plumbing:</b>	N/A
<b>Telephone:</b>	N/A
<b>Radio/Speaker:</b>	N/A
<b>Telecommunications:</b>	N/A
<b>Hazards:</b>	None noted.
<b>Special Requirements Area and Height Standards</b>	<i>Standard floor area:</i> Dependent on size and number of crews <i>Minimum ceiling height:</i> 8'-0"
<b>Materials and Finishes</b>	<b>Floor:</b> Resilient tile, standard commercial grade; resilient base. <b>Ceiling:</b> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint. <b>Wall:</b> Gypsum wallboard with semi-gloss acrylic enamel paint. <b>Door:</b> Two HC Metal or SC Wood in PMF, 15"x18"x5" metal wardrobe locker with sloped top, one per person. 10: wide x 18" high. Moveable wooden bench in front of lockers.
<b>Furnishings:</b>	
<b>Remarks</b>	Should be located adjacent to restroom; door to restroom must have self-closer and no louvers; door to Crew Room or other access should have louvers. In one-and-two-crew stations, lockers could be in an anteroom open to the restroom area. For crews that

Maintenance Office Building Space - Dec 2002

Page IV-4

## Maintenance Facility Design Manual

Name	Shower Room	Category: Maintenance Office Building Space
<b>Description</b>	Shower to wash off. Mandated by CAL OSHA.	
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> At least one per Maintenance Office - see below.</p> <p><i>Special Justification Required?</i> No</p> <p><i>Designed for:</i> 1 person per space</p> <p><i>Related Spaces:</i> Locker Room</p> <p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> N/A</p> <p><i>CBC or Title 24 Special Design Requirements:</i> N/A</p>	
<b>Code Information</b>	Handicap accessibility	
<b>Mechanical and Electrical Systems:</b>	<p><i>Heating, Ventilation, and Cooling System:</i> Combination ceiling-mounted heat/light/exhaust fan, exhaust minimum 10 air changes per hour. Supply air provided through door louver from</p> <p><i>Lighting Level:</i> 30 fc general illumination @ floor.</p> <p><i>Electrical Power:</i> N/A</p> <p><i>Plumbing:</i> Hot and cold water, sewer, and vent.</p> <p><i>Telephone:</i> N/A</p> <p><i>Radio/Speaker:</i> N/A</p> <p><i>Telecommunications:</i> N/A</p> <p><i>Hazards:</i> None noted</p>	
<b>Special Requirements</b>		
<b>Area and Height</b>	Standard floor area: 80 SF	
<b>Standards</b>	Minimum ceiling height: 8'-0"	
<b>Materials and Finishes</b>	<p><i>Floor:</i> Ceramic tile on mortar bed; tile base.</p> <p><i>Ceiling:</i> Gypsum wallboard with acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with acrylic enamel paint.</p> <p><i>Door:</i> HC Metal or SC Wood door, with louver, in PMF. Single-piece fiberglass shower on pre-cast concrete base.</p> <p><i>Furnishings:</i> Mirror, fold-down seat, two clothes hook, shelf 5'-0" above floor.</p>	
<b>Remarks</b>	Provide a unisex shower in one or two crew stations. Typically, a separate men and women showers are installed in stations with more than 2 crews.	

Maintenance Office Building Space - Dec 2002

Page IV-5

## 2012 Facilities Infrastructure Plan

Name	Utility Cove	Category: Maintenance Office Building Space
<b>Description</b>	Space for coffee maker, microwave oven, and refrigerator.	
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> One per Maintenance Office.</p> <p><i>Special Justification Required?</i> No</p> <p><i>Designed for:</i> N/A</p> <p><i>Related Spaces:</i> None noted.</p> <p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> N/A</p> <p><i>CBC or Title 24 Special Design Requirements:</i> None noted.</p>	
<b>Code Information</b>	<p><i>Heating, Ventilation, and Cooling System:</i> Central HVAC and/or better. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.</p> <p><i>Lighting Level:</i> 50 fc general illumination @ 3'-0" workplane.</p> <p><i>Electrical Power:</i> Pair 11 0v GFCI duplex outlets mounted 3'-6" above floor, plus refrigerator and garbage disposal outlets.</p> <p><i>Plumbing:</i> Hot and cold water, waste, and vent.</p> <p><i>Telephone:</i> N/A</p> <p><i>Radio/Speaker:</i> N/A</p> <p><i>Telecommunications:</i> N/A</p> <p><i>Hazards:</i> None noted.</p>	
<b>Special Requirements</b>		
<b>Area and Height</b>	Standard floor area: 30 SF cove for one crew or 100 SF for two or more crew stations.	
<b>Standards</b>	Minimum ceiling height: 8'-0"	
<b>Materials and Finishes</b>	<p><i>Floor:</i> Resilient tile, standard commercial grade; resilient base.</p> <p><i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint.</p> <p><i>Door:</i> Open to adjacent space.</p> <p><i>Furnishings:</i> Cabinet base and countertop with cabinet above sink.</p>	
<b>Remarks</b>	Doors on lower cabinets. Utility Cove should be part of a room.	

Maintenance Office Building Space - Dec 2002

Page IV-6

Name	Category:
<b>Supply Storage Room</b>	Maintenance Office Building Space
<b>Description</b>	General office supply storage, miscellaneous paper materials, and office equipment.
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> One per Maintenance Office</p> <p><i>Special Justification Required?</i> No</p> <p><i>Designed for:</i> N/A</p> <p><i>Related Spaces:</i> Office</p>
<b>Code Information</b>	<p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> N/A</p> <p><i>CBC or Title 24 Special Design Requirements:</i> None noted</p>
<b>Mechanical and Electrical Systems:</b>	<p><i>Heating, Ventilation, and Cooling System:</i> Same as building</p> <p><i>Lighting Level:</i> 20 fc general illumination @ floor.</p> <p><i>Electrical Power:</i> Four 110v duplex outlets bottom of box 1'-6" above floor.</p> <p><i>Plumbing:</i> N/A</p> <p><i>Telephone:</i> N/A</p> <p><i>Radio/Speaker:</i> N/A</p> <p><i>Telecommunications:</i> N/A</p> <p><i>Hazards:</i> None noted</p>
<b>Special Requirements Area and Height Standards</b>	<p><i>Standard floor area:</i> 100 SF</p> <p><i>Minimum ceiling height:</i> 8'-0"</p>
<b>Materials and Finishes</b>	<p><i>Floor:</i> Resilient tile, standard commercial grade, resilient base.</p> <p><i>Ceiling:</i> Gypsum wallboard with acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with acrylic enamel paint.</p> <p><i>Door:</i> HC Metal or SC Wood in PMF.</p> <p><i>Furnishings:</i> Floor to ceiling shelves on one wall.</p>
<b>Remarks</b>	

Name	Category:
<b>District Irrigation Control Room/Alcove</b>	Maintenance Office Building Space
<b>Description</b>	Command post for monitoring irrigation operation in major metropolitan areas. Alcove for Remote Irrigation Control System (RICS) computer and operator.
<b>Space Allocation</b>	<p><i>Standard Allocation:</i> As required by district.</p> <p><i>Special Justification Required?</i> Yes, part-time personnel to operate the system.</p> <p><i>Designed for:</i> 1 person per space</p> <p><i>Related Spaces:</i> None noted</p>
<b>Code Information</b>	<p><i>CBC "Occupancy" Classification:</i> B</p> <p><i>CBC "Occupant Load" Factor:</i> One occupant per 100 SF</p> <p><i>CBC or Title 24 Special Design Requirements:</i> None noted.</p>
<b>Mechanical and Electrical Systems:</b>	<p><i>Heating, Ventilation, and Cooling System:</i> Central HVAC and/or better. See Part 2, Section 1, "Mechanical Systems - Heating, Ventilation and Air Conditioning (HVAC)" (b) Mechanical Venting.</p> <p><i>Lighting Level:</i> 60 fc general illumination @ 3'-0" workplane.</p> <p><i>Electrical Power:</i> 110v duplex outlets 8'-0" max. spacing; bottom of box 1'-6" above floor. Provide one isolated ground-type 110v duplex outlet on a dedicated circuit for computer.</p> <p><i>Plumbing:</i> N/A</p> <p><i>Telephone:</i> One telephone outlet, one data outlet.</p> <p><i>Radio/Speaker:</i> One 4"x4" junction box</p> <p><i>Telecommunications:</i> Intranet LAN</p> <p><i>Hazards:</i> None noted.</p>
<b>Special Requirements Area and Height Standards</b>	<p><i>Standard floor area:</i> 80 SF</p> <p><i>Minimum ceiling height:</i> 8'-0"</p>
<b>Materials and Finishes</b>	<p><i>Floor:</i> Resilient tile, standard commercial grade, resilient base.</p> <p><i>Ceiling:</i> Suspended T-bar acoustical ceiling or gypsum board with acrylic enamel paint.</p> <p><i>Wall:</i> Gypsum wallboard with semi-gloss acrylic enamel paint.</p> <p><i>Door:</i> HC Metal or SC Wood in PMF, vision panels optional.</p> <p><i>Furnishings:</i> Venetian blinds on windows; 4'x4' whiteboard; 4'x4'</p>
<b>Remarks</b>	Provide office space for full-time dedicated Irrigation Specialist. See Section 1 "Generic Office."

**POLICY**

**Space Allocation Standards**  
State Administrative Manual

**Code Requirements**  
American with Disabilities Act (ADA)  
Uniform Building Code  
California Building Code (Title 24)

**SPACE ALLOCATION**

Description Size NSF

**General Space Planning**  
Office space per person 220 NSF  
Circulation @ less than 500 NSF 40%  
Circulation @ 500 NSF and greater 25%  
Space Conversion Factor 1.3  
Space Conversion Factor "Gross-to-Net" GSF / 1.3 = NSF  
Space Conversion Factor "Net-to-Gross" NSF X 1.3 = GSF

**Open Space**  
Rank and File 72  
Student Assistants 36  
Retired Annuitants 36

**Private Space**  
Attorneys 150  
Supervising Professional 200  
Managerial 200  
SSM III 200  
CEA or Equivalent 200  
District Director 300  
Program Chief 300  
Division Chief 300

Notes:  
Deviation from the stated guidelines is appropriate if justified. The Department requires Space Plans for all new leases or building construction.

Caltrans space standards allow private offices for classifications with "M" managerial designations or those without the subject designation on a case-by-case basis, if warranted due to handling sensitive personnel matters.

**SPECIAL USE STANDARDS**

Description Size NSF Allocation

**Area or Room**  
Cafeteria 3,000 1 per District Office  
Library 1,500 1 per District Office  
Storage (general) 1,500 1 per 500 staff  
Conference (large) 1,000 1 per 400 staff  
Video 600 1 per 400 staff  
Break (large) 500 1 per 250 staff (none if cafeteria)  
Conference (medium) 500 1 per 125 staff  
Break (small) 200 1 per 150 staff (none if large break room)  
Reception (Program area) 200 1 per Program Office  
IDF 150 1 per floor  
Quiet 150 1 per 35 staff  
Security (room) 150 1 per 500 staff + 30 NSF for each 100 staff  
Storage (equipment) 150 as needed  
Supply 150 3 NSF per employee based on need.  
Squad Table/Layout Area 144 1 per 20 Specialized staff  
Copy 100 1 per Program Office  
Security (kiosk) 72 1 at each main building entrance  
Coffee Bar 60 1 per 75 staff  
Mail 60 1 per Program Office

**Requires written justification**

Dining tbd Capacity based on 15 NSF per person  
Training tbd Capacity based on 20 NSF per person  
Auditorium/Assembly tbd Capacity based on 7 NSF per person  
Common Workstations (CAD) tbd Part of General Storage  
File tbd Part of General Storage  
Map tbd Part of General Storage  
Plotter tbd Part of General Storage  
Project File tbd Part of General Storage

**Based on use/functional character of operations housed in the building**

Loading Dock tbd  
Shipping and Receiving tbd

**Based on local building codes**

Bicycle lockers tbd  
Lockers tbd  
Showers tbd

**Based on ISC determination**

UPS tbd

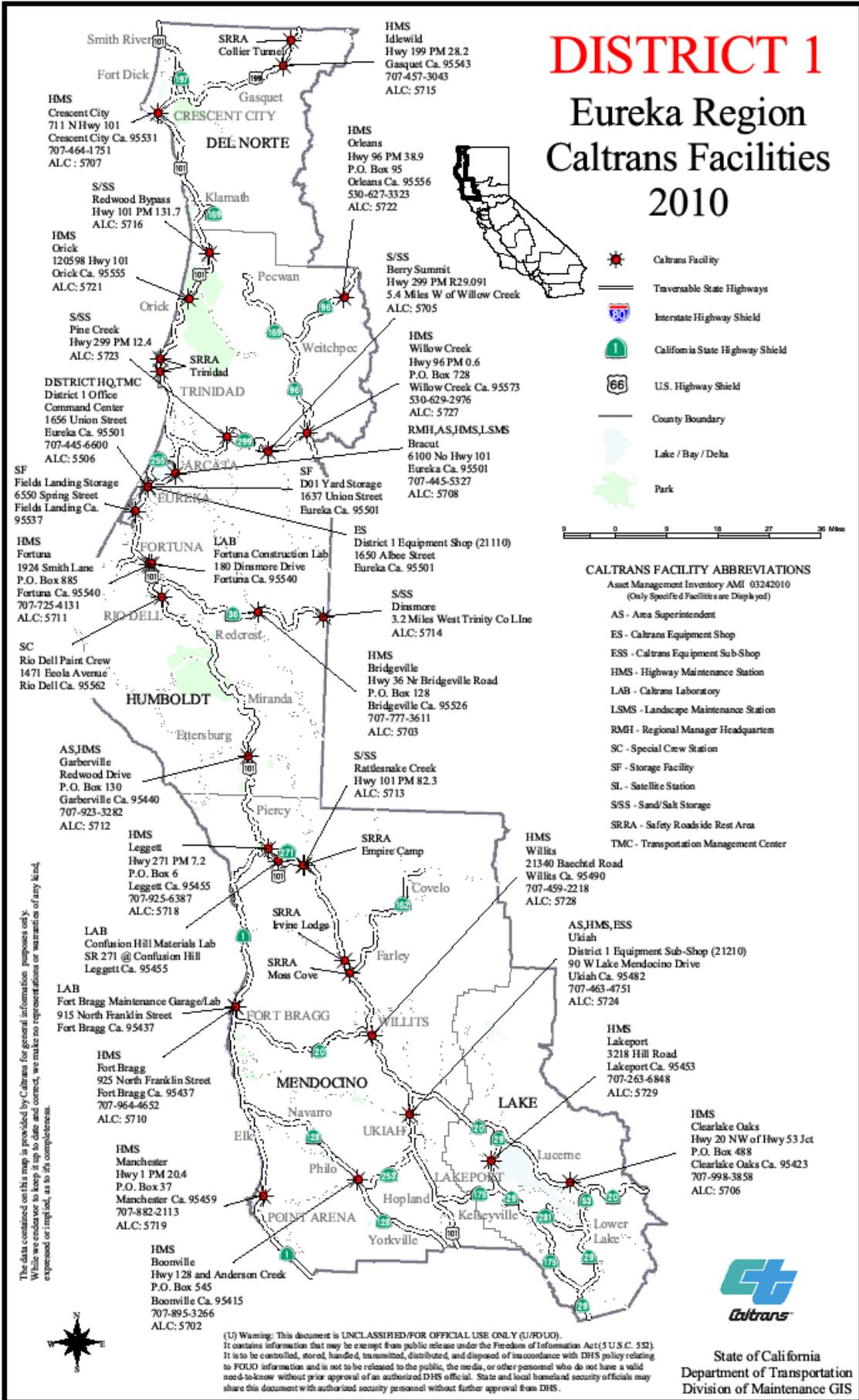


# DISTRICT 1

## Eureka Region

### Caltrans Facilities

### 2010

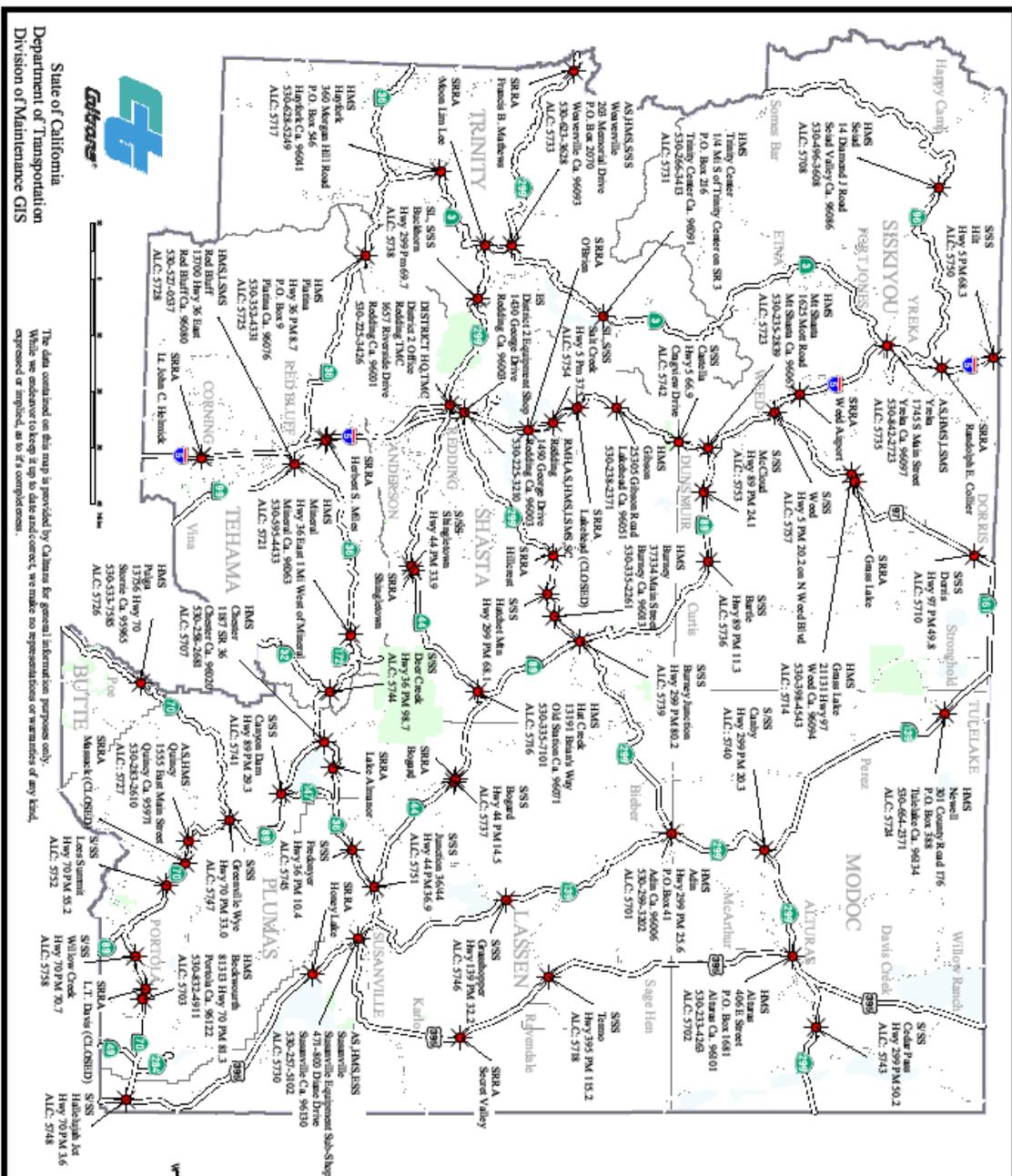


# DISTRICT 2

## Field Region

### Caltrans Facilities

#### 2010



**Caltrans Facility**

**Traversable State Highways**

**Interstate Highway Shield**

**California State Highway Shield**

**U.S. Highway Shield**

**County Boundary**

**Canary / Hwy / Delta**

**Park**

**Caltrans Facility ABBREVIATIONS**

Asset Management Inventory AMI 03/24/2010  
(Only Specified Facilities are Displayed)

AS - Area Superintendent

ES - Caltrans Equipment Shop

ESS - Caltrans Equipment Shop-Shop

HMS - Highway Maintenance Station

LAB - Caltrans Laboratory

LSMS - Landscape Maintenance Station

RMR - Regional Manager Headquarters

SC - Special Crew Station

SL - Sled-Rite Station

SSS - Snow/Salt Storage

SRRA - Safety Roadside Rest Area

TMC - Transportation Management Center

(1) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (UFOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to the protection of information that may be exempt from public release under the Freedom of Information Act. This document is not to be disseminated without prior approval of the authorized DHS official. Show and location of security facilities may differ from this document with authorized security personnel without the prior approval of the DHS.

The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representation or warranty of any kind, expressed or implied, as to its completeness.

State of California  
Department of Transportation  
Division of Maintenance GIS



**CALTRANS FACILITY ABBREVIATIONS**  
 Asset Management Inventory AMI 03/24/2010  
 (Only Spec-Fix Facilities as of 4/1/2010)

- AS - Area Superintendent
- ES - Caltrans Equipment Shop
- ESS - Caltrans Equipment Sub-Shop
- HMS - Highway Maintenance Station
- LAB - Caltrans Laboratory
- LSMS - Landscape Maintenance Station
- RMH - Regional Manager/Headquarters
- SC - Special Crew Station
- SL - Satellite Station
- SSS - San of/Sah Storage
- SRRA - Safety Roadside Rest Area
- TMC - Transportation Management Center

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (UFOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). This information is provided for informational purposes only. It is not to be released to the public, the media, or other personnel who do not have a valid need-to-know without prior approval of an authorized DHS official. Size and local translated security officials may share this document with authorized security personnel without further approval from DHS.

The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representations or warranties of any kind, expressed or implied, as to its completeness.

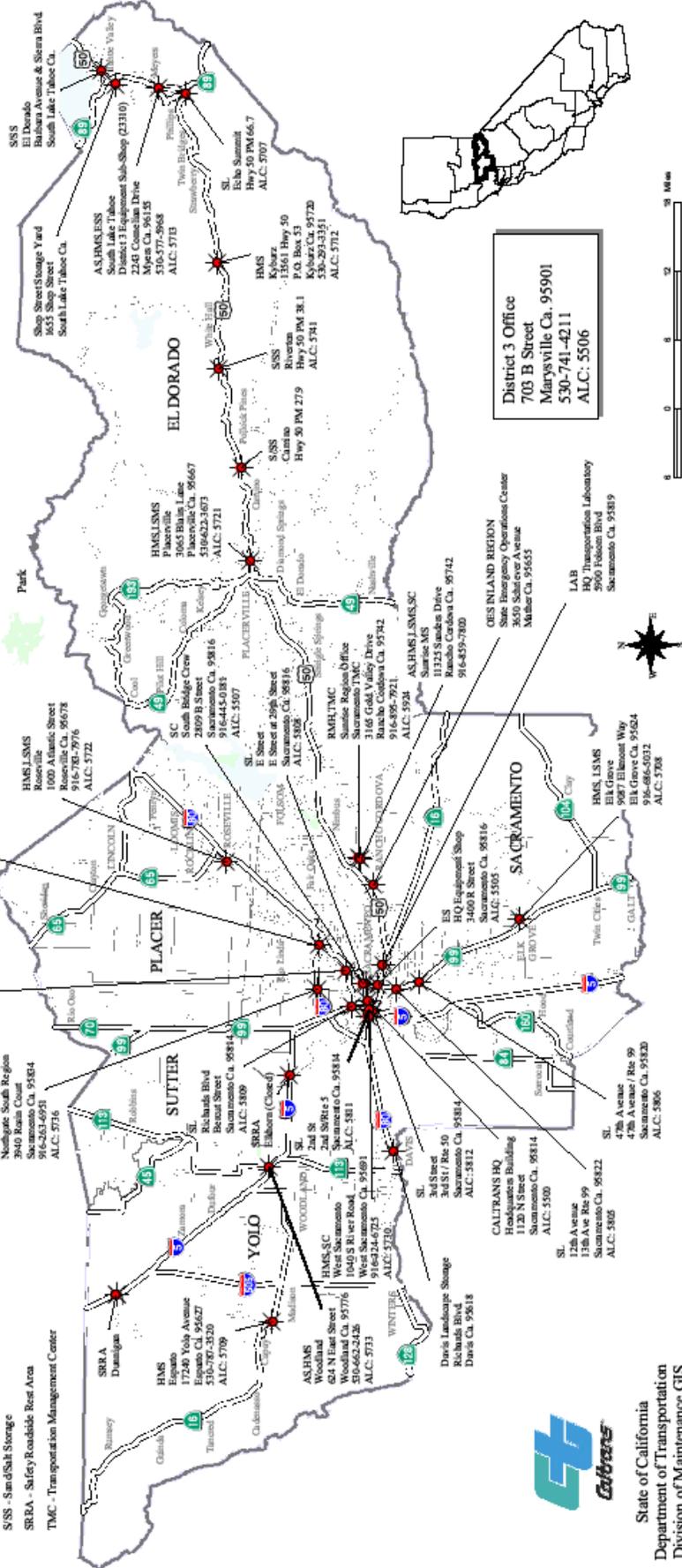
# DISTRICT 3

## Sunrise Region

### Caltrans Facilities

#### 2010

- Caltrans Facility
- Traversable State Highways
- Interstate Highway Shield
- California State Highway Shield
- U.S. Highway Shield
- County Boundary
- Lake / Bay / Delta
- Park

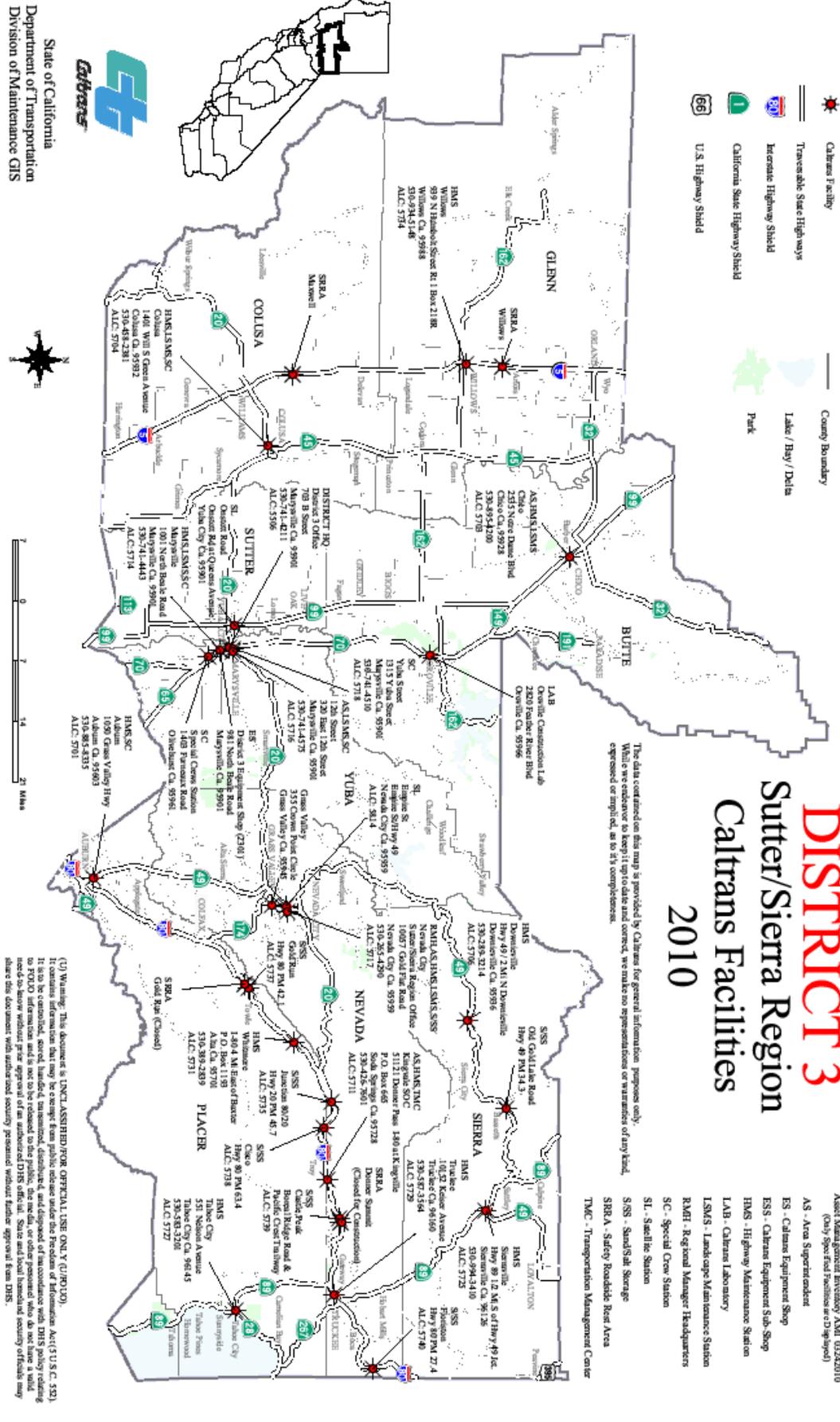


**District 3 Office**  
 703 B Street  
 Marysville Ca, 95901  
 530-741-4211  
 ALC: 5506



State of California  
 Department of Transportation  
 Division of Maintenance GIS

- California Facility
- Traversable State Highways
- Interstate Highway Shield
- California State Highway Shield
- U.S. Highway Shield
- County Boundary
- Lake / Bay / Delta
- Park



# DISTRICT 3

## Sutter/Sierra Region

### Caltrans Facilities

#### 2010

The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representations or warranties of any kind, expressed or implied, as to its completeness.

- CALTRANS FACILITY ABBREVIATIONS**  
 Asset Management Inventory (AMI) 03/24/2010  
 (Only Special Facilities are Displayed)
- AS - Area Superintendent
  - ES - Caltrans Equipment Shop
  - ESS - Caltrans Equipment Sub-Shop
  - HMS - Highway Maintenance Station
  - LMS - Caltrans Laboratory
  - LMS/M - Landscape Maintenance Station
  - RAMH - Regional Manager Headquarters
  - SC - Special Crew Station
  - SI - Satellite Station
  - SSS - Standstill Storage
  - SRRA - Safety Roadside Rest Area
  - TMC - Transportation Management Center

(1) Warning: This document is UNCLASSIFIED/FROM OFFICIAL (U//FOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to FROD information and is not to be released to the public, the media, or other personnel who do not have a valid need to know without prior approval of an authorized DHS official. Share and post internal industry officials may share this data however, with suitable and necessary permission without further approval from DHS.





# DISTRICT 4

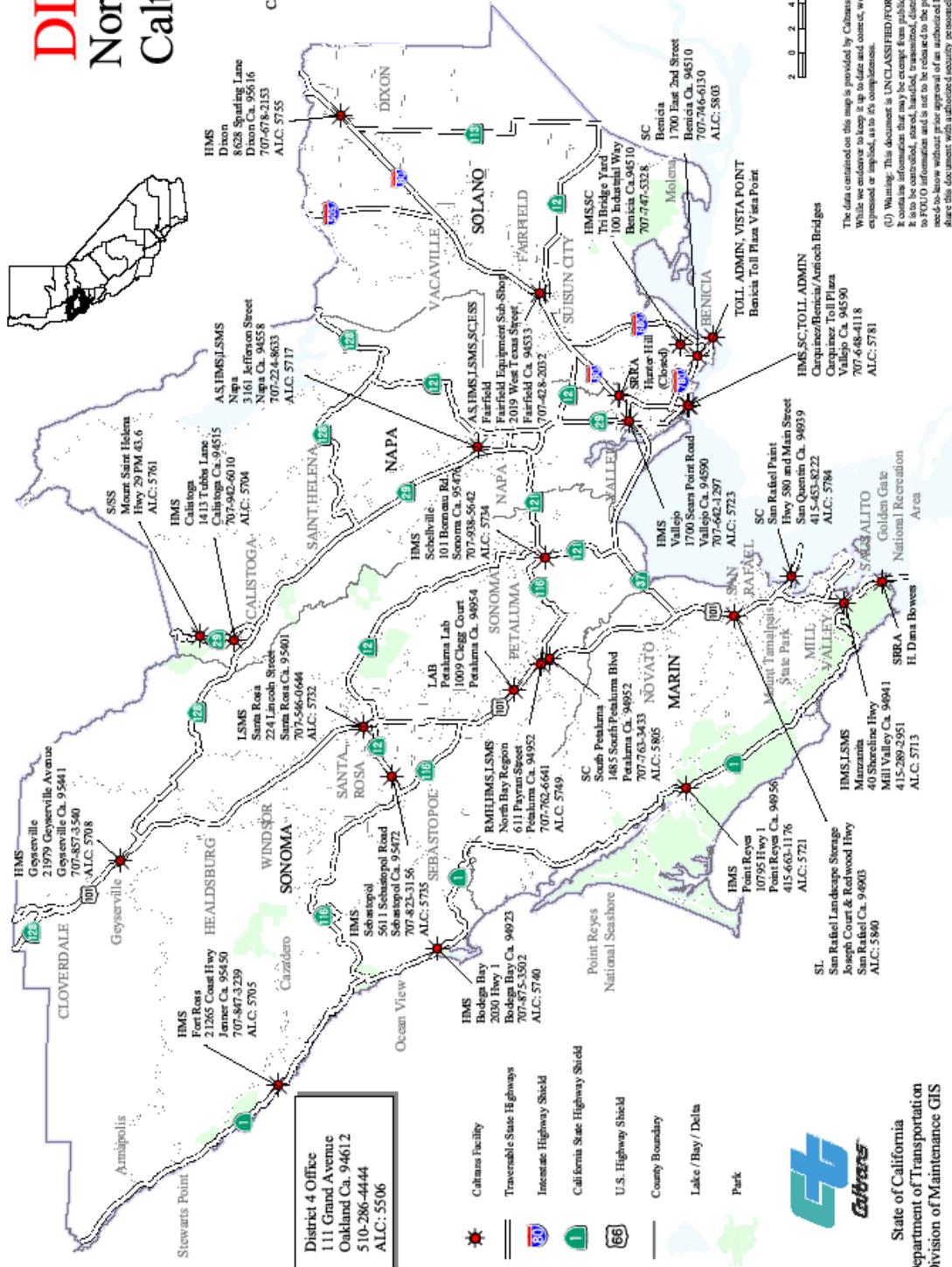
## North Bay Region

### Caltrans Facilities

#### 2010

CALTRANS FACILITY ABBREVIATIONS  
 Asset Management Inventory AMI 03/24/2010  
 (Only Specified Facilities are Displayed)

- AS - Area Superintendent
- ES - Caltrans Equipment Shop
- ESS - Caltrans Equipment Sub-Shop
- HMS - Highway Maintenance Station
- LAB - Caltrans Laboratory
- LSMS - Landscape Maintenance Station
- RMH - Regional Management Headquarters
- SC - Special Crew Station
- SL - Scaffolding Station
- SSS - Sand/Salt Storage
- SRR - Safety Roadside Rest Area
- TMC - Transportation Management Center



District 4 Office  
 111 Grand Avenue  
 Oakland Ca. 94612  
 510-286-4444  
 ALC: 5506



State of California  
 Department of Transportation  
 Division of Maintenance GIS

The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representations or warranties of any kind, expressed or implied, as to its completeness.

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (U/FOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be unclassified, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to FOUO information and is not to be released to the public, the media, or other personnel who do not have a valid "need to know" approval of an authorized DHS official. State and local laws and regulations may vary and security officials may direct the use of this information in a different facility. Printed without further approval from DHS.



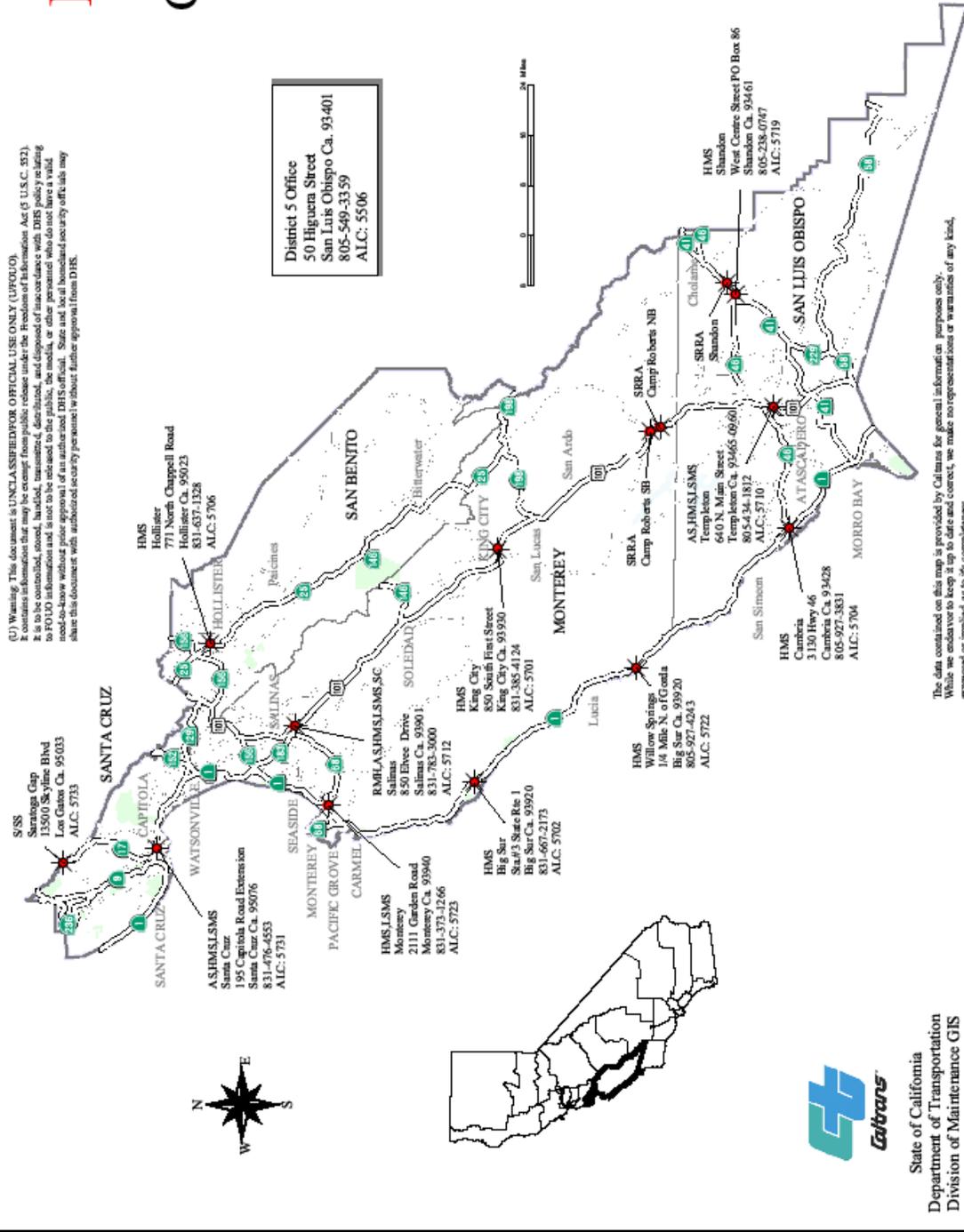
# DISTRICT 5

## North Region

### Caltrans Facilities

#### 2010

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (UFOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to information security. This document is for official use only. Some and, but, based on security officials may share this document with authorized personnel without further approval from DHS.



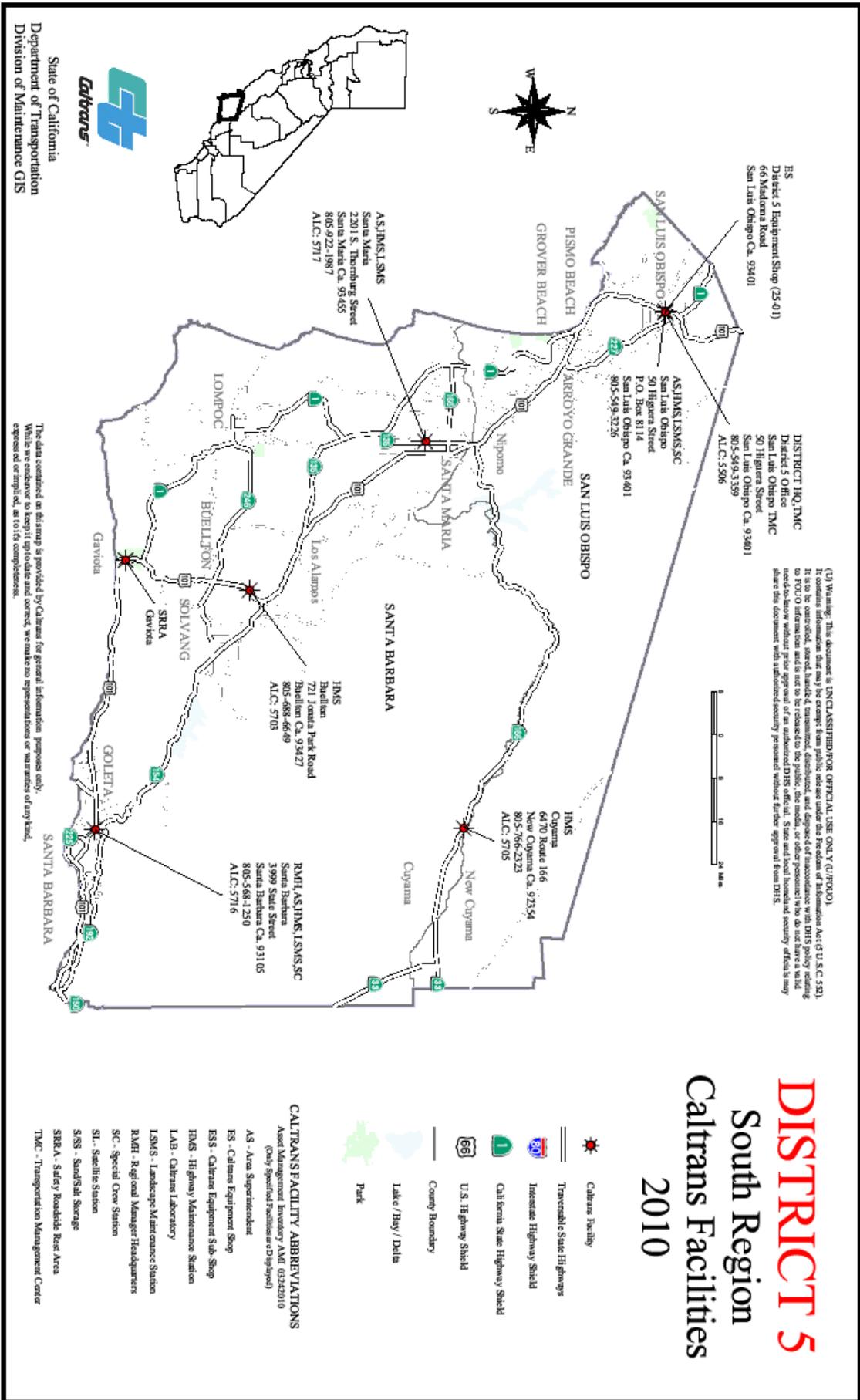
The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representations or warranties of any kind, expressed or implied, as to its completeness.



State of California  
Department of Transportation  
Division of Maintenance GIS

# DISTRICT 5

## South Region Caltrans Facilities 2010

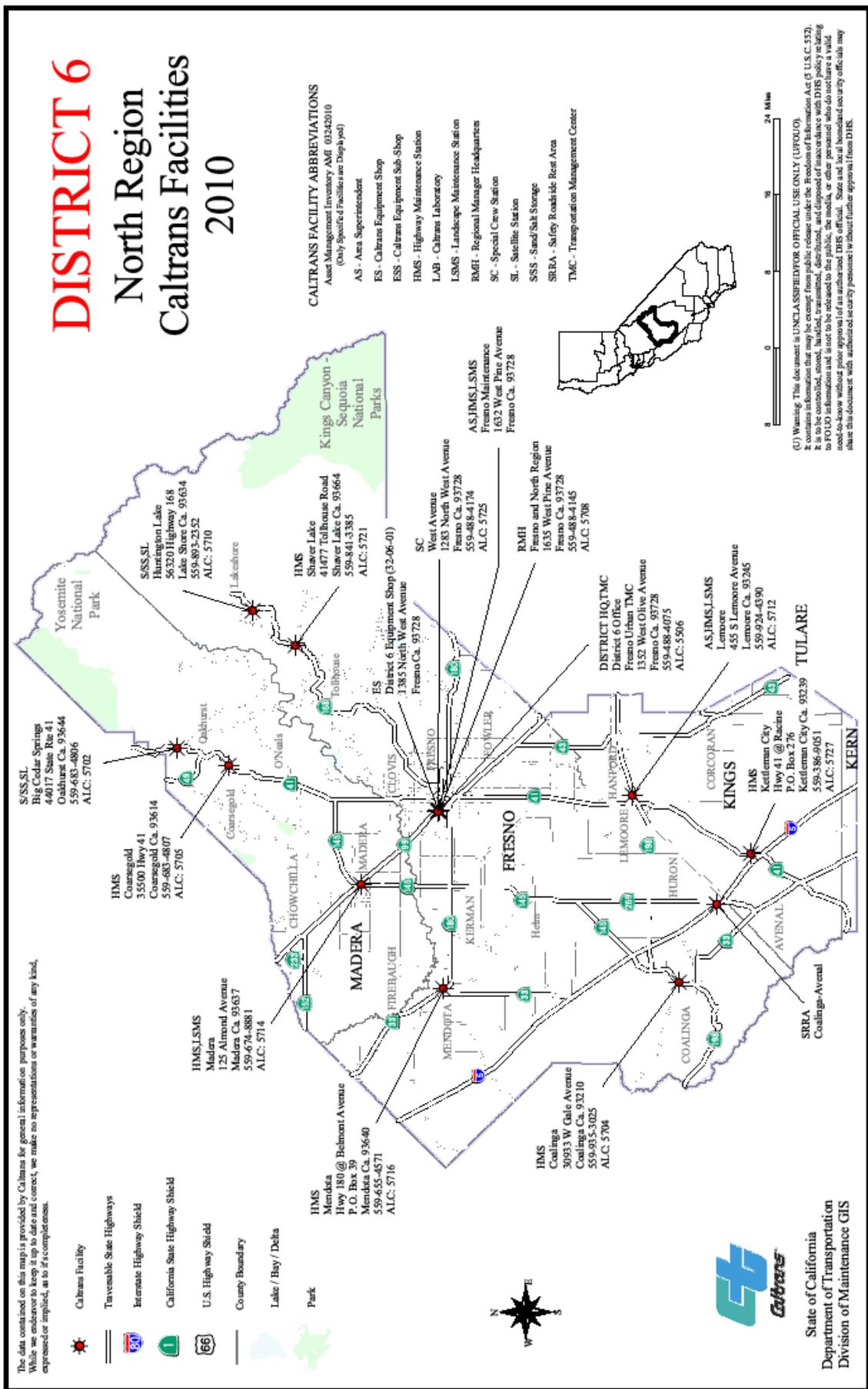


# DISTRICT 6

## North Region

### Caltrans Facilities

#### 2010



**CALTRANS FACILITY ABBREVIATIONS**  
 Asset Management Inventory AMI: 03/24/2010  
 (Only Specific Facilities are Displayed)

- AS - Area Superintendent
- ES - Caltrans Equipment Shop
- ESS - Caltrans Equipment Sub Shop
- HMS - Highway Maintenance Station
- LAB - Caltrans Laboratory
- LSMS - Landscape Maintenance Station
- RMH - Regional Manager Headquarters
- SC - Special Crew Station
- SL - Satellite Station
- SSS - Sand/Salt Storage
- SRRA - Safety Roadside Rest Area
- TMC - Transportation Management Center

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (UFOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). This information, including the text and graphics, is the property of the State of California and is loaned to the public. The information is not to be disseminated to the public, be it in print or electronic form, without the prior written approval of the authorized DHS official. State and local homeland security officials may share this document with authorized security personnel without further approval from DHS.

The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep the information current, we make no representations or warranties of any kind, expressed or implied, as to its completeness.



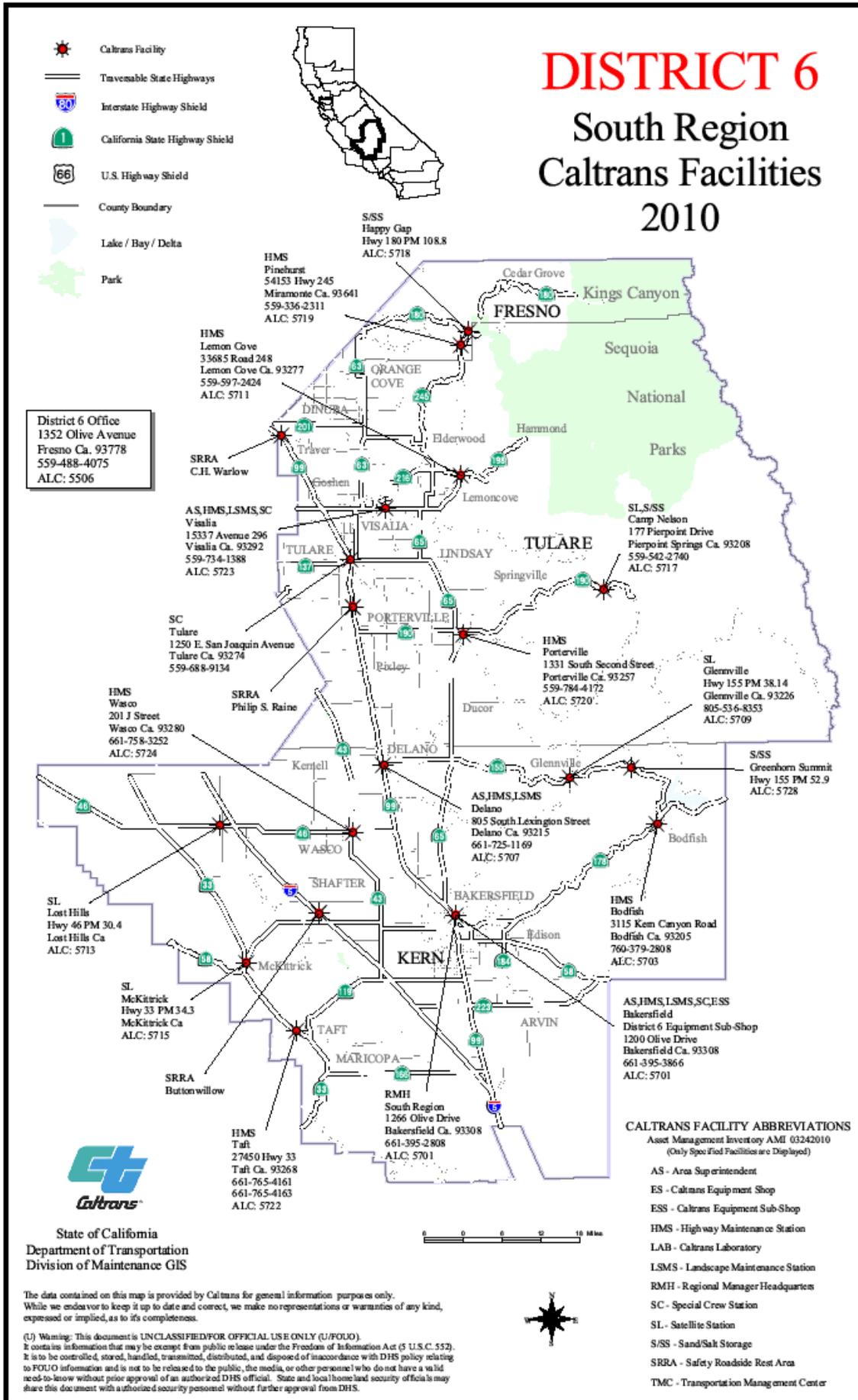
State of California  
 Department of Transportation  
 Division of Maintenance GIS

# DISTRICT 6

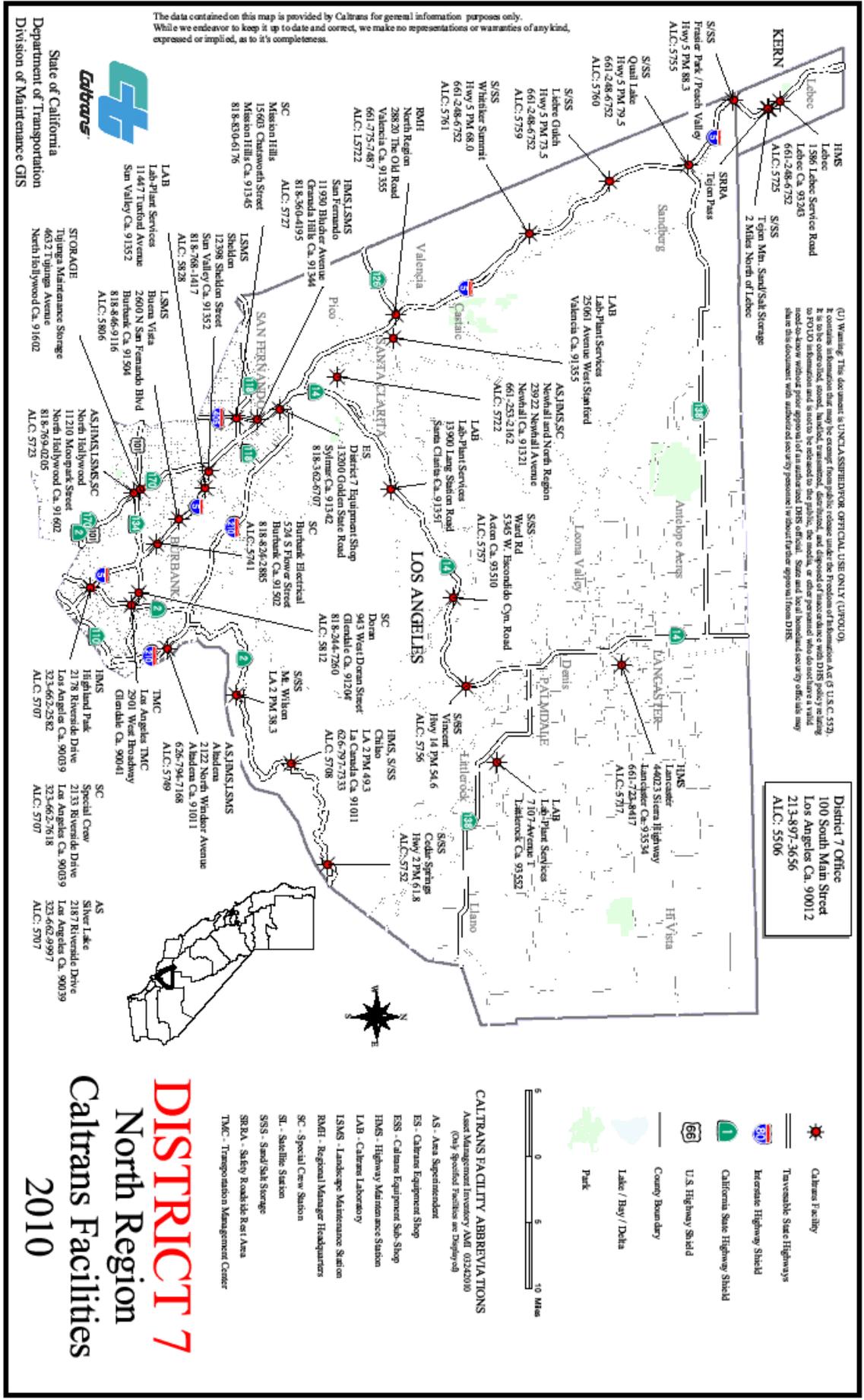
## South Region

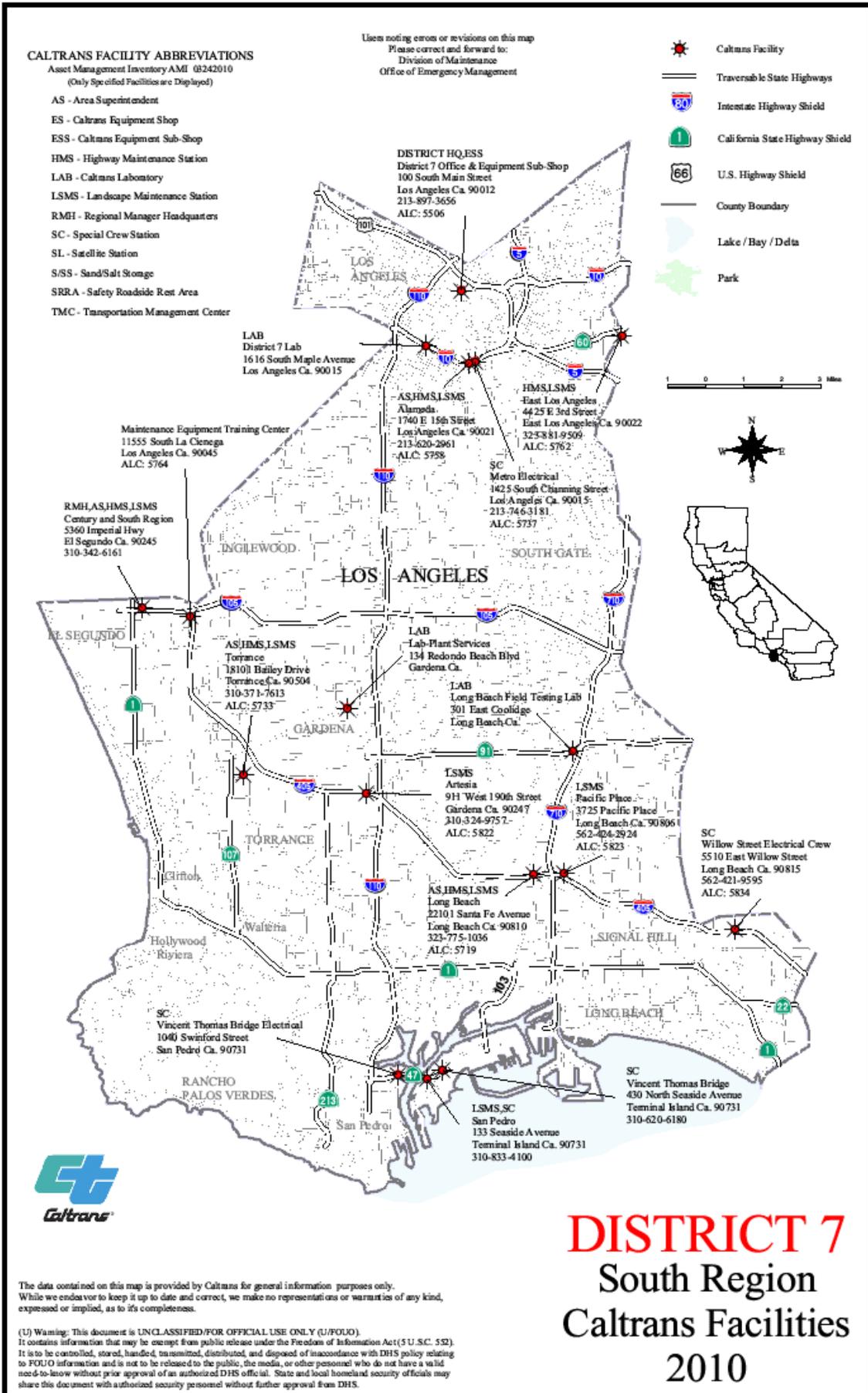
### Caltrans Facilities

#### 2010









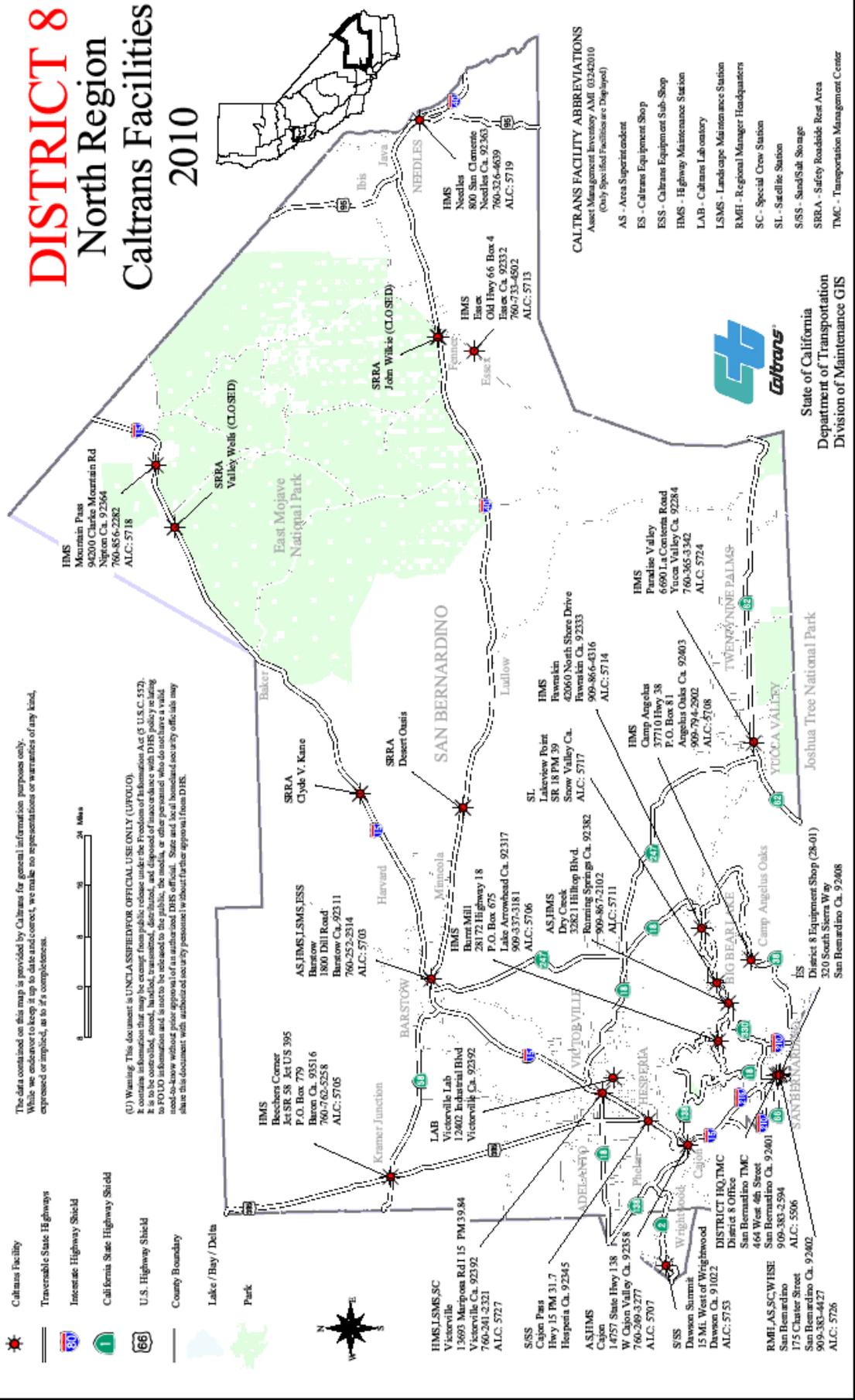


# DISTRICT 8

## North Region

### Caltrans Facilities

#### 2010





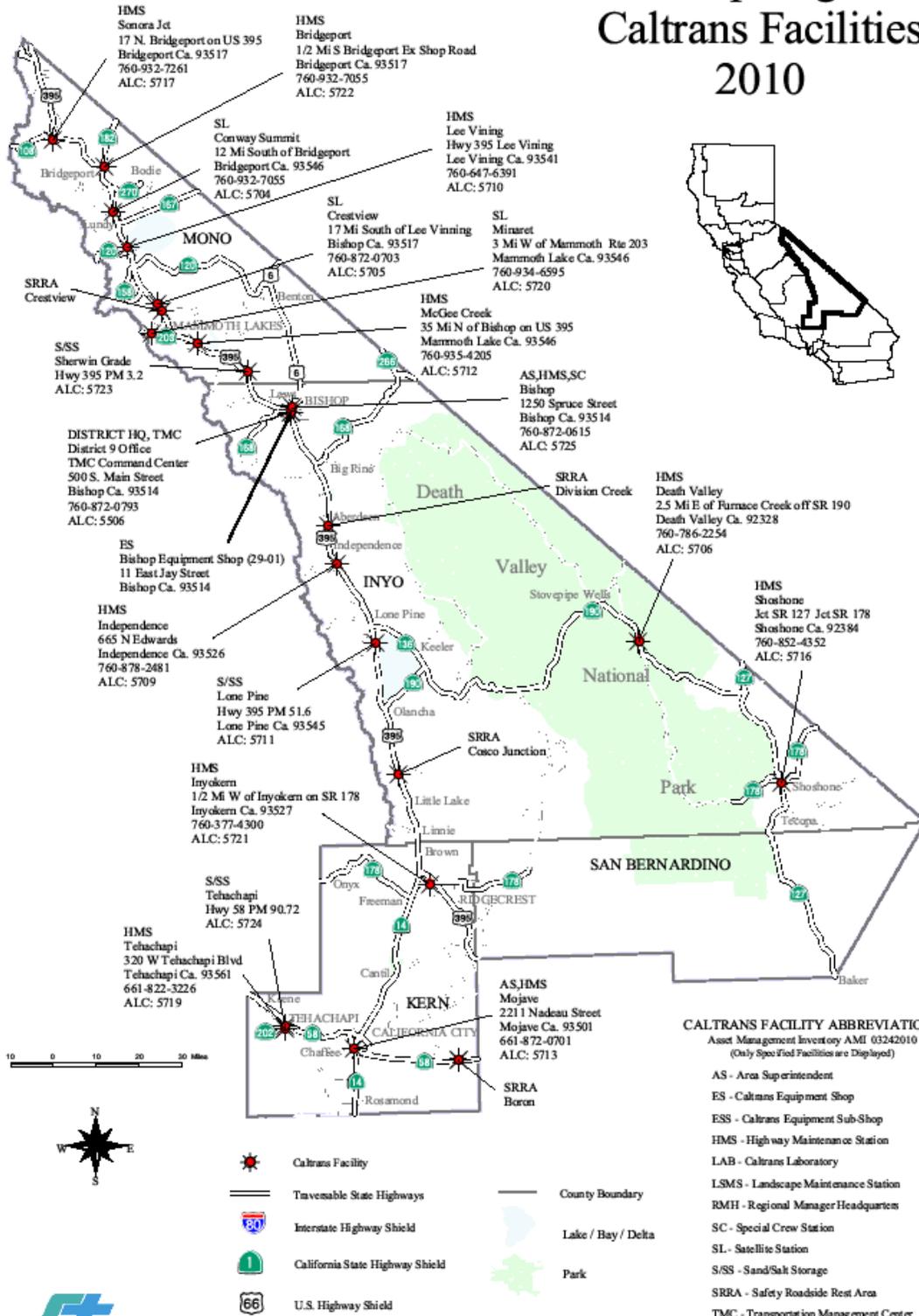
The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representations or warranties of any kind, expressed or implied, as to its completeness.

# DISTRICT 9

## Bishop Region

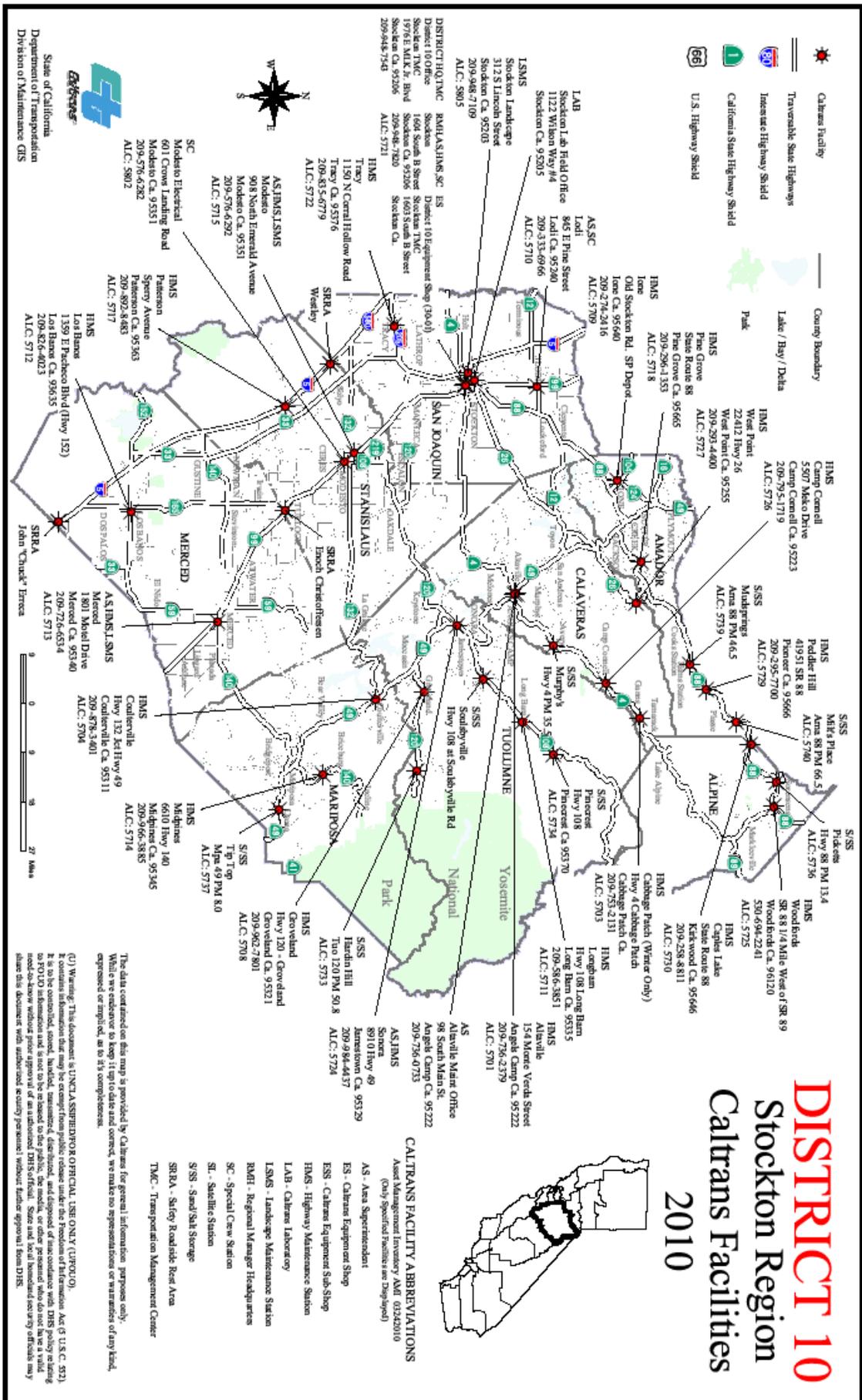
### Caltrans Facilities

### 2010



State of California  
 Department of Transportation  
 Division of Maintenance GIS

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (UFOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to FOUO information and is not to be released to the public, the media, or other personnel who do not have a valid need-to-know without prior approval of an authorized DHS official. State and local homeland security officials may share this document with authorized security personnel without further approval from DHS.



# DISTRICT 11

## East Region

### Caltrans Facilities

#### 2010



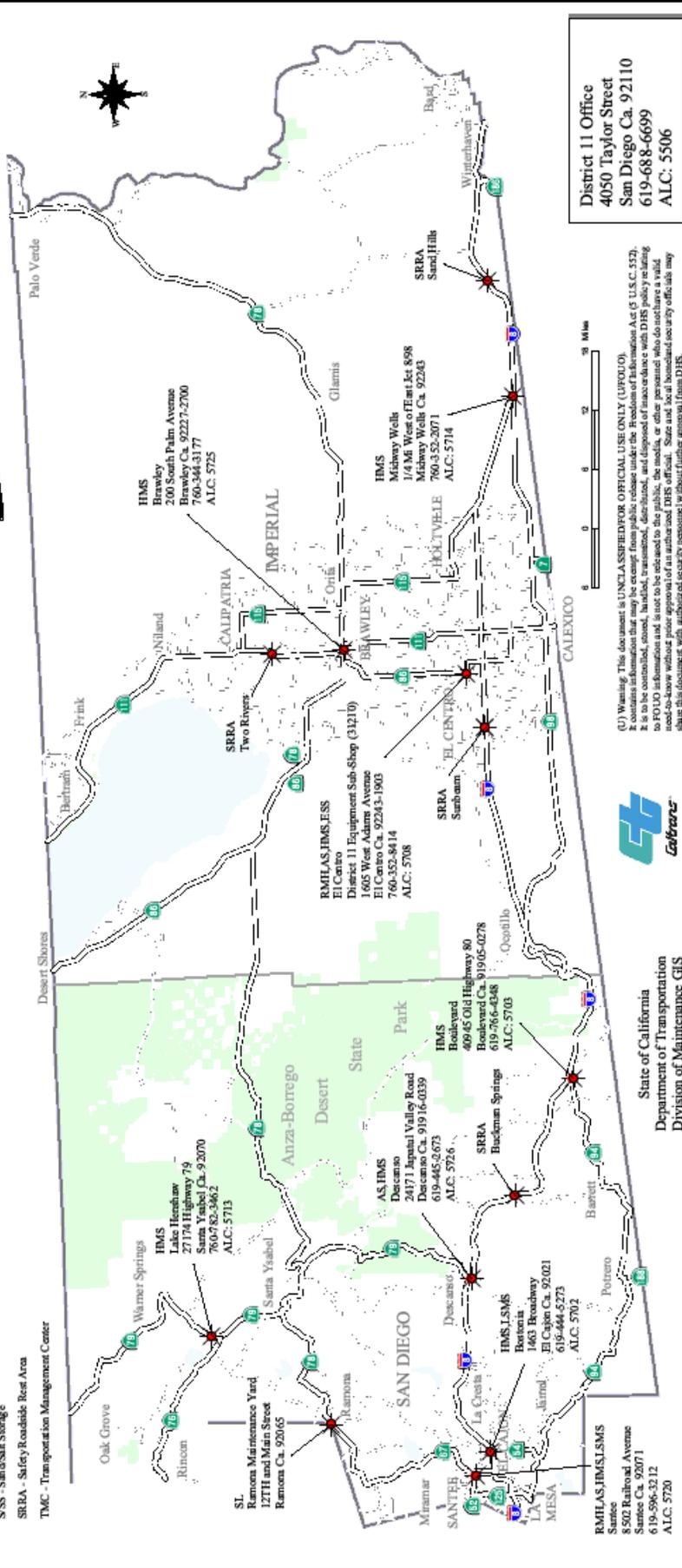
#### CALTRANS FACILITY ABBREVIATIONS

Asset Management Inventory AMI 03/24/2010  
(Only Spec-Final Facilities are displayed)

- AS - Area Superintendent
- ES - Caltrans Equipment Shop
- ESS - Caltrans Equipment Sub-Shop
- HMS - Highway Maintenance Station
- LAB - Caltrans Laboratory
- LSMS - Landscape Maintenance Station
- RMH - Regional Manager/Headquarters
- SC - Special Crew Station
- SL - Satellite Station
- S/S - Sand/Salt Storage
- SRRA - Safety Roadside Rest Area
- TMC - Transportation Management Center

- Caltrans Facility
- Traversable State Highways
- Interstate Highway/Shield
- California State Highway Shield
- U.S. Highway Shield
- County Boundary
- Lake / Bay / Delta
- Park

The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representations or warranties of any kind, expressed or implied, as to its completeness.



District 11 Office  
4050 Taylor Street  
San Diego Ca. 92110  
619-688-6699  
ALC: 5506

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (U/FOUO). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to FOUO information and is not to be released to the public, the media, or other personnel who do not have a valid need-to-know without prior approval of an authorized DHS official. State and local homeland security officials may share this document with authorized security personnel without further approval from DHS.



State of California  
Department of Transportation  
Division of Maintenance GIS

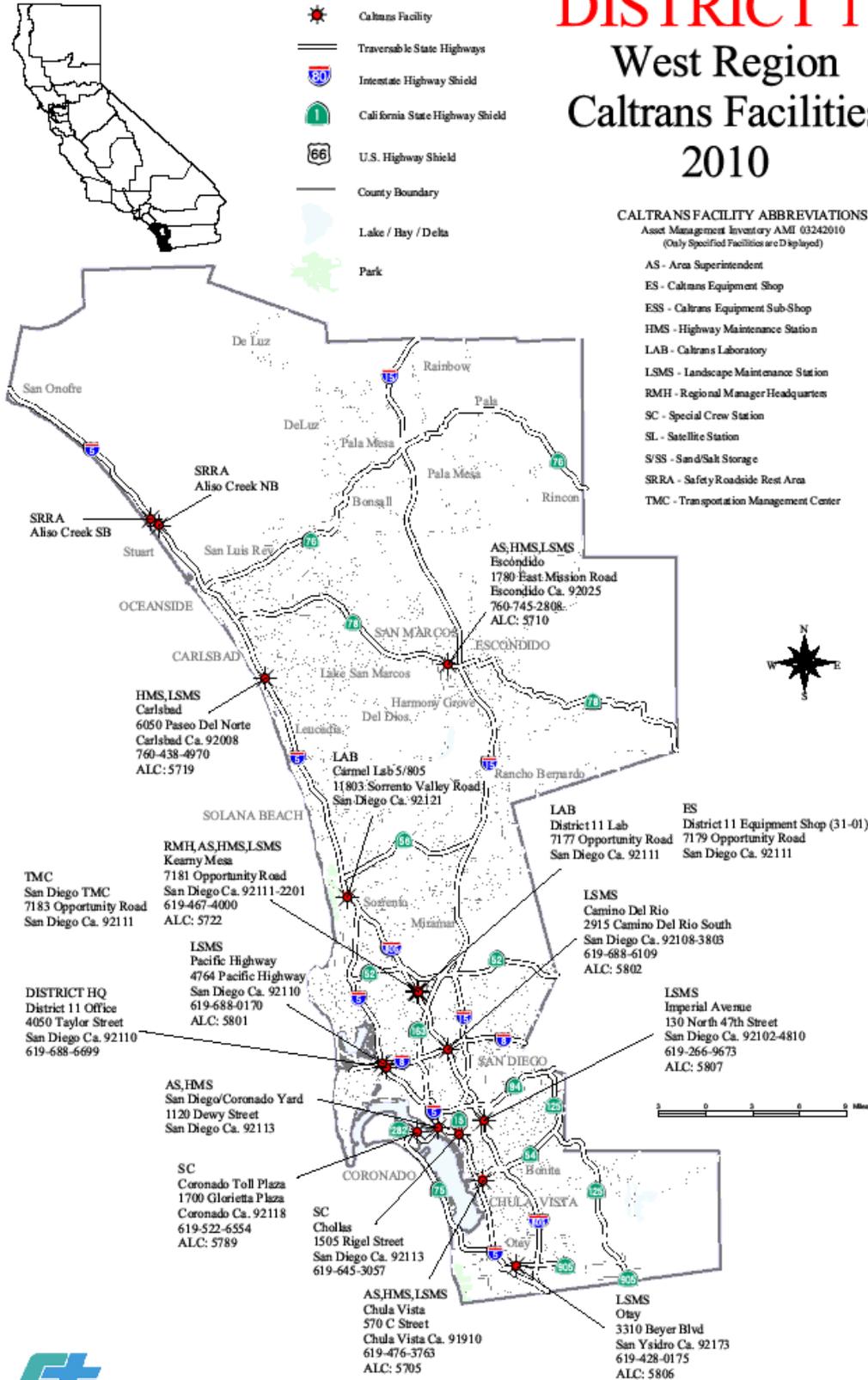
The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representations or warranties of any kind, expressed or implied, as to its completeness.

# DISTRICT 11

## West Region

### Caltrans Facilities

### 2010



State of California  
 Department of Transportation  
 Division of Maintenance GIS

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (U/FOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to FOUO information and is not to be released to the public, the media, or other personnel who do not have a valid need-to-know without prior approval of an authorized DHS official. State and local homeland security officials may share this document with authorized security personnel without further approval from DHS.

# DISTRICT 12

## Orange Region

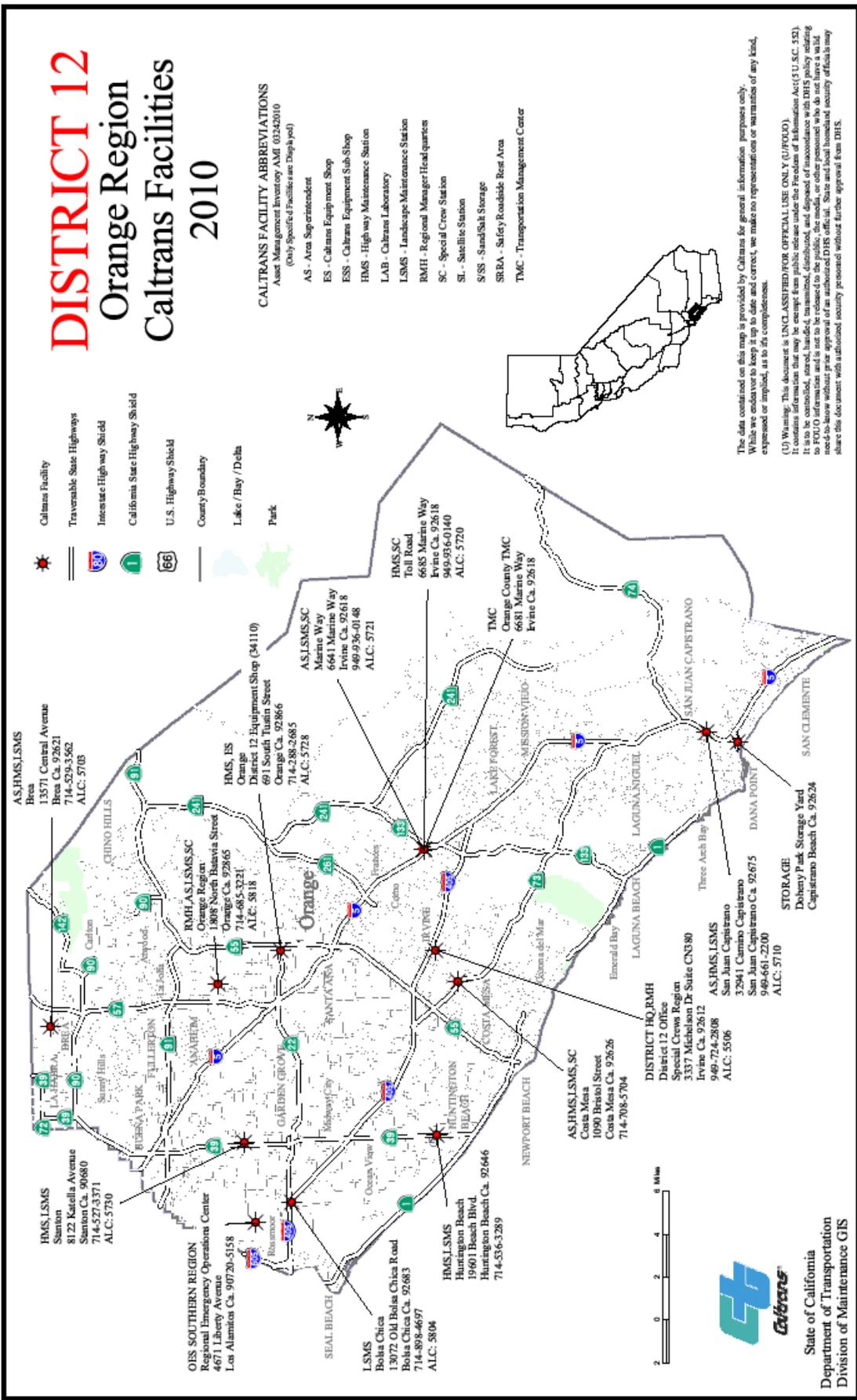
### Caltrans Facilities

#### 2010

CALTRANS FACILITY ABBREVIATIONS  
 Asset Management Inventory AMI 01/24/2010  
 (Only Specific Facilities are Displayed)

- AS - Area Superintendent
- ES - Caltrans Equipment Shop
- ESS - Caltrans Equipment Sub-Shop
- HMS - Highway Maintenance Station
- LAB - Caltrans Laboratory
- LSMS - Landscape Maintenance Station
- RMH - Regional Manager/Headquarters
- SC - Special Crew Station
- SL - Satellite Station
- S/S - Sand/Silt Storage
- SRRA - Safety Roadside Rest Area
- TMC - Transportation Management Center

- Caltrans Facility
- Traversable State Highways
- Interstate Highway Shield
- California State Highway Shield
- U.S. Highway Shield
- County Boundary
- Lake / Bay / Delta
- Park



The data contained on this map is provided by Caltrans for general information purposes only. While we endeavor to keep it up to date and correct, we make no representation or warranty of any kind, expressed or implied, as to its completeness.

(U) Warning: This document is UNCLASSIFIED FOR OFFICIAL USE ONLY (U/FOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with DHS policy relating to information security. This document is not to be disseminated, distributed, or otherwise made available to the public without the need to know without prior approval of an authorized DHS official. State and local homeland security officials may share this document with authorized security personnel without further approval from DHS.







