State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

TAB 22

M e m o r a n d u m

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: June 25, 2014

Reference No.: 4.5
Information Item

From: NORMA ORTEGA
Chief Financial Officer

Prepared by: Glenn A. Yee, Chief
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Subject: **2015 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 2015 Facilities Infrastructure Plan (Facilities Infrastructure Plan) will be transmitted to the California Transportation Commission prior to their June 25, 2014 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.

IF YOU ARE VIEWING THIS DOCUMENT ELECTRONICALLY, THE PLAN IS ATTACHED. OTHERWISE, TO VIEW THE DRAFT 2015 FACILITIES INFRASTRUCTURE PLAN, PLEASE GO TO:
www.catc.ca.gov/meetings/agenda/2014Agenda/2014_06/022_4.5.pdf

DRAFT
APRIL 2014

Fiscal Years 2015-16 through 2019-20

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

CALIFORNIA DEPARTMENT OF TRANSPORTATION

2015 Facilities Infrastructure Plan

District 4, Fort Ross Highway Maintenance Station
Jenner, California

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June 2014

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

Introduction

Chapter 606, Statutes of 1999 (Assembly Bill 1473/Hertzberg), requires the Governor to submit an annual 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 (Caltrans) is required to provide information for office facilities to the DOF.

In addition to office facilities, the Caltrans workforce 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 Caltrans 2015 Facilities Infrastructure Plan (FIP) includes the office facilities reporting requirements for the Five-Year Capital Outlay Infrastructure Plan. It also provides information pertaining to the Caltrans transportation-related facilities.

Facilities Infrastructure Planning and Reporting

In conjunction with the annual DOF reporting requirement, Caltrans 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 (SHOPP) process.

State Highway Operation and Protection Program

Government Code Section 14526.5 requires Caltrans 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 Caltrans' State Highway Operation and Protection Program (SHOPP) fulfills this requirement. Office facilities projects and transportation-related facilities projects are included in the SHOPP.

Caltrans is required to submit the SHOPP to the California Transportation Commission (CTC) each even-numbered year. The Commission's review of the SHOPP includes an assessment of the impacts on the State Transportation Improvement Program. The 2014 SHOPP is the most recent four-year program

submitted to the CTC. 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 Caltrans to prepare a "10-year plan for the rehabilitation and reconstruction … of all state highways and bridges owned by the state". Caltrans 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.

Caltrans is required to submit this plan to the CTC each odd-numbered year. The most recent submittal was the 2013 Ten-Year SHOPP. Both the SHOPP and the Ten-Year SHOPP Plan 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 FIP.

Chronology and Fiscal Year Relationships: Facilities Infrastructure Plan and SHOPP

		Fiscal Years											
	Approximate Due Date	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*	*2019-20*	*2020-21*	*2021-22*	*2022-23*	*2023-24*	*2024-25*	*2025-26*
2013 Ten-Year SHOPP Plan	Jan 2013					10-Year Plan							
2014 Facilities Infrastructure Plan	Jul 2013		5-Year Plan										
2014 Four-Year SHOPP	Jan 2014		4-Year Plan										
2015 Facilities Infrastructure Plan	Jul 2014			5-Year Plan									

Facilities Infrastructure Plan Summary

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

The FIP includes $233.1 million in construction costs during the five-year plan period. There is no required land acquisition cost. Associated capital outlay support costs (e.g., engineering and right of way acquisition staff) for these projects are $74.6 million. The total estimated cost for the projects included in the FIP is $307.6 million. A summary of these costs is presented in the chart below.

Projected Facilities Infrasructure Needs Construction, Land, Capital, and Support

Fiscal Years 2015-16 through 2019-20

	2014 SHOPP Fiscal Years	2015 Facilities Infrastructure Plan Fiscal Years					
PROGRAMMED IN 2014 SHOPP							
Location/Descriptions	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
Office Buildings	$0	$0	$0	$0	$0	$0	**$0**
Equipment Shops	$0	$0	$0	$0	$0	$0	**$0**
Maintenance Facilities	$0	$0	$0	$0	$0	$0	**$0**
Materials Laboratories	$0	$0	$0	$0	$0	$0	**$0**
TMC	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	$0	$0	$0	$0	$0	$0	$0
UNPROGRAMMED NEEDS							
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
Office Buildings	$0	$0	$0	$0	$0	$0	**$0**
Equipment Shops	$0	$36,000,000	$69,500,000	$28,963,000	$5,000,000	$3,700,000	**$143,163,000**
Maintenance Facilities	$0	$25,200,000	$4,400,000	$21,000,000	$3,300,000	$36,000,000	**$89,900,000**
Materials Laboratories	$0	$0	$0	$0	$0	$0	**$0**
TMC	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$61,200,000	$73,900,000	$49,963,000	$8,300,000	$39,700,000	**$233,063,000**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$61,200,000	$73,900,000	$49,963,000	$8,300,000	$39,700,000	**$233,063,000**
Support	$0	$19,584,000	$23,648,000	$15,988,160	$2,656,000	$12,704,000	**$74,580,160**
Grand Total	$0	$80,784,000	$97,548,000	$65,951,160	$10,956,000	$52,404,000	$307,643,160

Notes:

Support is estimated at 32% of capital costs for projects not programmed in the 2014 SHOPP.

The Facilities Infrastructure Plan reflects the last three years of the 2014 SHOPP. Fiscal Year 2014-15 is depicted in the table above for illustrative purposes.

The first three years of the 2015 FIP coincide with the last three years of the 2014 Four-Year SHOPP (refer to the chart on page vi). The 2014 Four-Year SHOPP includes no average annual costs (construction costs) and the 2015 FIP includes no average annual (construction costs). The chart below presents a comparison by facility type of the average annual construction costs for the 2014 Four-Year SHOPP and 2015 FIP. 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
2015 Facilities Infrastructure Plan and 2014 SHOPP
(Dollars in millions)

Facility Type	2014 SHOPP	2015 FIP
Office Facilities	0.0	0.0
Equipment Facilities	0.0	0.0
Maintenance Facilities	0.0	0.0
Materials Laboratories	0.0	0.0
Totals:	**0.00**	**0.00**

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

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INTRODUCTION

This chapter provides a summary of the California Department of Transportation (Caltrans). It illustrates Caltrans' 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 Caltrans' workforce.

Structure

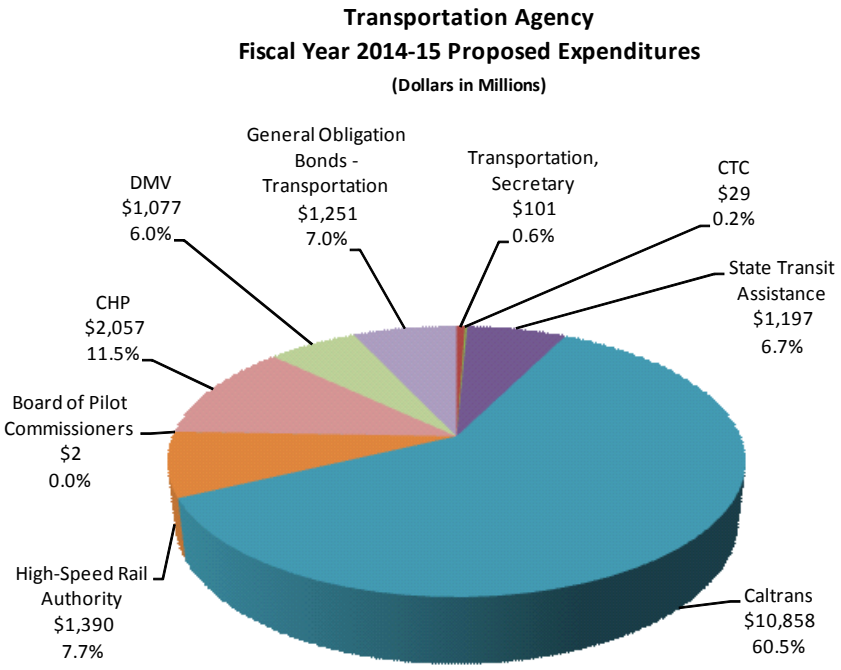
Transportation Agency

The Transportation Agency, established as part of the Governor's 2012 Reorganization Plan, became effective on July 1, 2013. The mission of the Transportation Agency is to develop and coordinate the policies and programs of the state's transportation entities to achieve the state's mobility, safety and air quality objectives from its transportation system. The new Agency oversees and coordinates the activities of the Departments of the California Highway Patrol (CHP), Motor Vehicles (DMV), and Caltrans; and the following boards and commissions: the High-Speed Rail Authority, the California Transportation Commission (CTC), and the Board of Pilot Commissioners. The Office of Traffic Safety is a program within the Office of the Secretary of Transportation.

The Governor's Proposed Budget for Fiscal Year 2014-15 allocates approximately 61% of the Transportation Agency budget to Caltrans, as shown in the table below and figure on the following page.

Transportation Agency
Fiscal Year 2014-15 Proposed Expenditures
(Dollars in Millions)

Department	Proposed Expenditures	Percent of Total
Transportation, Secretary	$ 101	0.6%
California Transportation Commission (CTC)	$ 29	0.2%
State Transit Assistance	$ 1,197	6.7%
Caltrans	$ 10,858	60.5%
High-Speed Rail Authority	$ 1,390	7.7%
Board of Pilot Commissioners	$ 2	0.0%
California Highway Patrol (CHP)	$ 2,057	11.5%
Department of Motor Vehicles (DMV)	$ 1,077	6.0%
General Obligation Bonds - Transportation	$ 1,251	7.0%
Total	**$ 17,962**	**100%**



California Department of Transportation

Caltrans has almost 20,000 employees and a budget of $10.9 billion. Caltrans designs and oversees the construction of state highways, operates and maintains the highway system, funds three intercity passenger rail routes, and provides funding for local transportation projects. Caltrans maintains approximately 50,000 road and highway lane miles and 12,559 state bridges, and inspects 402 public-use and special-use airports and heliports. The largest sources of funding for transportation projects are excise taxes paid on fuel consumption, federal funds also derived from fuel taxes, and weight fees on trucks.

Program Descriptions[1]

The Governor's Budget identifies six programs that relate to Caltrans 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 proposed positions for Fiscal Year 2014-2015. The following is a description of each of the programs listed numerically, by their program code.

Governor's Proposed Budget
Fiscal Year 2014-15

Code	Program	FY 2014-15 Positions
10	Aeronautics	24.0
20	Highway Transportation	16,535.6
30	Mass Transportation	108.4
40	Transportation Planning	673.4
50	Administration	1,567.5
60	Equipment	634.6
	Total Proposed Positions:	**19,543.5**

[1] Source: Citation taken from the California Department of Finance, Proposed Governor's Budget for Fiscal Year 2014-15

10 AERONAUTICS

The Division of Aeronautics supports California's aviation activities by promoting safe and effective use of existing airports and heliports. This program ensures that airports and heliports comply with safety regulations, provides engineering and financial assistance for safety and infrastructure improvements. Financial assistance is provided through state-matching funds for the federal aviation grant program. In addition, the division maintains California's Aviation System Plan to reflect changes in aviation network, provides guidance for land use compatibility in areas around airports, administers airport noise standards regulations, enhances good movement to and from airports through improved ground access, and promotes and maintains aviation safety.

20 HIGHWAY TRANSPORTATION

The Highway Transportation Program's operates, maintains, and continues development of California's 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 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 rail car management, (2) management of state and federal capital and operations grant programs, (3) planning, support, and coordination of mass transportation services, and (4) administering the Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA) of the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Bond Act). Additionally, the Mass Transportation Program serves to: (1) improve intercity bus passenger service through enhanced services and facilities, (2) improve public transportation needs for all persons, including the elderly, the disabled, and the economically-disadvantaged, (3) improve urban/commuter rail services, and (4) enhances mobility in congested corridors.

40 TRANSPORTATION PLANNING

The Transportation Planning Program implements statewide transportation policy through coordination at the local and regional levels and to develop transportation plans and projects. Caltrans 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 such as Good Movement, Climate Action, and Regional Blueprint Planning. Caltrans 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, workforce planning, and labor relations.

60 EQUIPMENT

The Equipment Program provides mobile fleet equipment and services to other departmental 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.

Caltrans Districts

Caltrans 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 Caltrans Headquarters office is located in Sacramento.

DISTRICT 1
1656 Union Street
Eureka
Del Norte
Humboldt
Lake
Mendocino

DISTRICT 2
1657 Riverside Drive
Redding
Lassen
Modoc
Plumas
Shasta
Siskiyou
Tehama
Trinity

DISTRICT 3
703 B Street
Marysville
Butte
Colusa
El Dorado
Glenn
Nevada
Placer
Sacramento
Sierra
Sutter
Yolo
Yuba

DISTRICT 4
111 Grand Avenue
Oakland
Alameda
Contra Costa
Marin
Napa
San Francisco
San Mateo
Santa Clara
Solano
Sonoma

DISTRICT 5
50 Higuera Street
San Luis Obispo
Monterey
San Benito
San Luis Obispo
Santa Barbara
Santa Cruz

DISTRICT 6
1352 West Olive Avenue
Fresno
Fresno
Kern
Kings
Madera
Tulare

DISTRICT 7
100 South Main Street
Los Angeles
Los Angeles
Ventura

DISTRICT 8
464 West Fourth Street
San Bernardino
Riverside
San Bernardino

DISTRICT 9
500 South Main Street
Bishop
Inyo
Mono

DISTRICT 10
1976 East Dr. Martin Luther King Jr. Blvd.
Stockton
Alpine
Amador
Calaveras
Mariposa
Merced
San Joaquin
Stanislaus
Tuolumne

DISTRICT 11
4050 Taylor Street
San Diego
Imperial
San Diego

DISTRICT 12
3337 – 3347 Michelson Drive
Irvine
Orange

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 respective activities. Caltrans 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 depends 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 Caltrans' districts of San Bernardino, Fresno, Los Angeles and Oakland. This is based on projected statewide population increases provided by the California Department of Finance (DOF) report on State and County Population Projections. The table below ranks Caltrans' districts by the greatest population increases through year 2060.

District Population Projections
Years 2010 through 2060

District Number and Name		District Population Year 2010	District Population Year 2060	Numeric Increase [1/]	Percentage Increase [1/]
1	Eureka	315,730	391,696	11	10
2	Redding	364,260	518,228	10	5
3	Marysville	2,691,419	4,374,884	5	4
4	Oakland	7,164,602	9,033,729	4	9
5	San Luis Obispo	1,428,632	1,838,096	8	8
6	Fresno	2,520,573	5,164,108	2	1
7	Los Angeles	10,649,983	12,597,371	3	11
8	San Bernardino	4,230,409	7,649,863	1	3
9	Bishop	32,768	44,676	12	7
10	Stockton	1,615,545	3,241,551	6	2
11	San Diego	3,278,134	4,507,785	7	6
12	Irvine	3,017,327	3,331,595	9	12
	California	**37,309,382**	**52,693,583** [2/]		

[1/] Data Source: California Department of Finance's Bienniel Report on State & County population, January 2013

[2/] Minor Variation Due to Rounding

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CHAPTER 2

OFFICE FACILITIES

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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 2015-16 through 2019-20. Only the California Department of Transportation's (Caltrans) 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 Caltrans 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 Caltrans' 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.

INFRASTRUCTURE DESCRIPTION

Caltrans occupies 13 office buildings, 12 state-owned and one leased. Five of Caltrans' 12 state-owned buildings are less than 25 years of age. Their location and the year of their construction completion are as follows: Oakland, 1991; San Bernardino, 1997; Los Angeles, 2004; San Diego, 2006; and Marysville, 2010.

There are seven state-owned office facilities that are at least 50 years of age. Caltrans 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 feasibiltiy of replacing the structure(s). A list of facility studies that identifies specific inadequacies of Caltrans' office building inventory may be found in the Appendix, Exhibit 2.

District 11 Headquarters Office Building
San Diego, California

State and District Headquarters Office Buildings

	District	Address	Year Built
1	Eureka	1656 Union Street	1953
2	Redding	1657 Riverside	1953
3	Marysville	703 B Street	2010
4	Oakland	111 Grand Avenue	1991
5	San Luis Obispo	50 Higuera Street	1955
6	Fresno	1352 West Olive Street	1958
7	Los Angeles	100 South Main Street	2004
8	San Bernardino	464 West 4th Street	1997
9	Bishop	500 South Main Street	1954
10	Stockton	1976 East Dr. Martin Luther King Jr. Blvd.	1955
11	San Diego	4050 Taylor Street	2006
12	Irvine	3337-3347 Michelson Drive [1/]	NA
HQ	Sacramento	1120 N Street	1936

[1/] The District 12 office building is a leased facility.

In general, the studies found that many of the buildings are functionally obsolete, inefficient, and expensive to maintain. Mechanical systems elevators and ventilation, heating and air conditioning; 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 Caltrans' office buildings and the respective year of construction.

Infrastructure Description – continued

Caltrans occupies approximately 3.0 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 Caltrans' office space inventory is shown in the Appendix, Exhibit 3.

Caltrans continues to take steps to improve facility management of its state-owned facilities. In an effort to optimize the use and occupancy of existing state-owned facilities, Caltrans consolidates staff from leased facilities into state-owned building, whenever possible. Recently, the District 4 Oakland Headquarters office building was re-stacked to maximize space that will result in a decrease of leased space for the District.

Leased and Owned Office Space

Department Summary by District

District		Owned (Gross SF)	Owned (Net SF)	Leased	Total (Net + Leased)
1	Eureka	91,456	63,789	0	63,789
2	Redding	55,581	38,077	47,027	85,104
3	Marysville	211,734	160,444	6,260	166,704
4	Oakland	539,742	473,893	16,850	490,743
5	San Luis Obispo	41,700	27,690	52,683	80,373
6	Fresno	78,000	56,935	149,348	206,283
7	Los Angeles	716,200	453,370	2,500	455,870
8	San Bernardino	235,714	165,000	0	165,000
9	Bishop	37,496	25,847	0	25,847
10	Stockton	90,174	61,460	0	61,460
11	San Diego	298,424	221,447	0	221,447
12	Irvine	0	0	151,453	151,453
RO	Regional Offices	0	0	8,950	8,950
HQ	State Headquarters	506,735	350,087	500,630	850,717
	Statewide Total:	**2,902,956**	**2,098,039**	**935,701**	**3,033,740**

PROJECT

There are no office building projects proposed for the 2015 Facilities Infrastructure Plan (FIP).

LINKAGE WITH PREVIOUS PLAN

In the 2014 FIP, the Eureka District Office Building (District 1) Critical Infrastructure Deficiencies Project was reported and is still in progress. The 2015 FIP reports a new emergency project, the Oakland District Office Building (District 4) Replace Fire Alarm System.

SUMMARY OF PROJECTS IN PROGRESS

Caltrans has two office facility projects currently in progress. The project description, status, estimated completion date, and funding levels for the two office facility projects are shown below.

Project:
Eureka District Office Building (District 1) Critical Infrastructure Deficiencies

Description:
Fire, Life Safety corrections and infrastructure upgrade to an 80,800 gsf office building.

Original Budget: $ 10,098,000 [1/]
Current Overage: $ 867,195

Status:
Planning phase completed.
Working drawings phase completed.
Construction phase underway.

Estimated Completion Date:
Fiscal Year 2014-15

Funding:

Cost	Phase
$ 695,000	Preliminary Planning
$ 678,000	Working Drawings
$ 8,716,000	Construction
$ 432,873	First Augmentation[2/]
$ 443,322	Second Augmentation
$10,965,195	Total

District 1 Headquarters
1656 Union Street, Eureka

Notes:

1. Based on Budget Year 2011-12 COBCP for Eureka (District 1) Fire, Life Safety and Infrastructure Repairs
2. The Eureka District Office Building began the construction phase in October 2012. The first augmentation occurred in August 2012 and was necessary due to the construction costs being higher than orignally estimated by the California Department of General Services (DGS). The second augmentation occurred in December 2013. Per DGS, the augmentation was necessary due to unforseen conditions and to maintain an adequate contingency. Also, according to the DGS the estimated completion date has been delayed from Fiscal Year 2013-14 to 2014-15.

Project:
District 4 – Replace Fire Alarm System

Description:
Fire, Life Safety corrections to a 525,000 gsf office building.

Status:
This is an emergency project to correct Fire, Life Safety deficiencies in the District 4 Headquarters Office Building. The contractor is inspecting the existing Fire, Life Safety System and equipment to establish a project baseline. The contractor is in the late stages of the design phase.

Estimated Completion Date:
Fiscal Year 2014-15

Funding:

Cost	*Phase*
$ $0	Phase 1 – Plans, Specification and Estimates
$ $0	Phase 2 – Right-Of-Way Support
$ 700,000	Phase 3 – Construction Support
$ 6,700,000	Phase 4 – Construction Capital
$ 7,400,000	Total

District 4 Headquarters
111 Grand Avenue, Oakland

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CHAPTER 3

TRANSPORTATION-RELATED FACILITIES

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

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INTRODUCTION

This chapter provides transportation-related facility information for the 2015 Facilities Infrastructure Plan (FIP). These projects are approved by the California Transportation Commission (CTC) 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 2014 SHOPP spans Fiscal Years 2014-15 through 2017-18. The facility projects included in the final three years of the 2014 SHOPP (i.e., 2015-16, 2016-17 and 2017-18) are also included in the 2015 FIP. The table below illustrates the chronology and fiscal year relationships of one complete cycle for the FIP and the SHOPP.

Chronology and Fiscal Year Relationships: Facilities Infrastructure Plan and SHOPP

		Fiscal Years											
	Approximate Due Date	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*	*2019-20*	*2020-21*	*2021-22*	*2022-23*	*2023-24*	*2024-25*	*2025-26*
2013 Ten-Year SHOPP Plan	Jan 2013					10-Year Plan							
2014 Facilities Infrastructure Plan	Jul 2013		5-Year Plan										
2014 Four-Year SHOPP	Jan 2014		4-Year Plan										
2015 Facilities Infrastructure Plan	Jul 2014			5-Year Plan									

Infrastructure Description

Caltrans' transportation-related facilities include approximately 441 sites consisting of approximately 4,000,000 square feet of equipment shops, maintenance facilities, materials laboratories, and transportation management centers, as displayed below.

Summary
Transportation-Related Facilities

Facility Type	Square Feet	Number of Sites
Equipment Shops	666,561	26
Maintenance Facilities	2,742,000	391
Materials Laboratories [1/]	312,093	11
Transportation Management Centers	265,685	13
Total	**3,986,339**	**441**

[1/] Chart only reflects Category I (Program Laboratories) and Category II (Main District Materials Engineering Testing Laboratories). The Field Construction Laboratories (113 sites) are not included in the figures in the table.

Projects

The 2015 FIP includes no projects for transportation-related facility projects programmed in the 2014 SHOPP and $233.1 million in "unprogrammed" needs, which represent candidate projects for future SHOPP funding. Specific project funding for transportation-related facilities are presented on the following pages.

Projected Facilities Infrasructure Needs Construction, Land, Capital, and Support

Fiscal Years 2015-16 through 2019-20

	2014 SHOPP Fiscal Years	2015 Facilities Infrastructure Plan Fiscal Years					
PROGRAMMED IN 2014 SHOPP							
Location/Descriptions	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2015 FIP Total**
Office Buildings	$0	$0	$0	$0	$0	$0	**$0**
Equipment Shops	$0	$0	$0	$0	$0	$0	**$0**
Maintenance Facilities	$0	$0	$0	$0	$0	$0	**$0**
Materials Laboratories	$0	$0	$0	$0	$0	$0	**$0**
TMC	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	$0	$0	$0	$0	$0	$0	$0

UNPROGRAMMED NEEDS							
Location/Description	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2015 FIP Total**
Office Buildings	$0	$0	$0	$0	$0	$0	**$0**
Equipment Shops	$0	$36,000,000	$69,500,000	$28,963,000	$5,000,000	$3,700,000	**$143,163,000**
Maintenance Facilities	$0	$25,200,000	$4,400,000	$21,000,000	$3,300,000	$36,000,000	**$89,900,000**
Materials Laboratories	$0	$0	$0	$0	$0	$0	**$0**
TMC	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$61,200,000	$73,900,000	$49,963,000	$8,300,000	$39,700,000	**$233,063,000**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$61,200,000	$73,900,000	$49,963,000	$8,300,000	$39,700,000	**$233,063,000**
Support	$0	$19,584,000	$23,648,000	$15,988,160	$2,656,000	$12,704,000	**$74,580,160**
Grand Total	$0	$80,784,000	$97,548,000	$65,951,160	$10,956,000	$52,404,000	$307,643,160

Notes:

Support is estimated at 32% of capital costs for projects not programmed in the 2014 SHOPP.

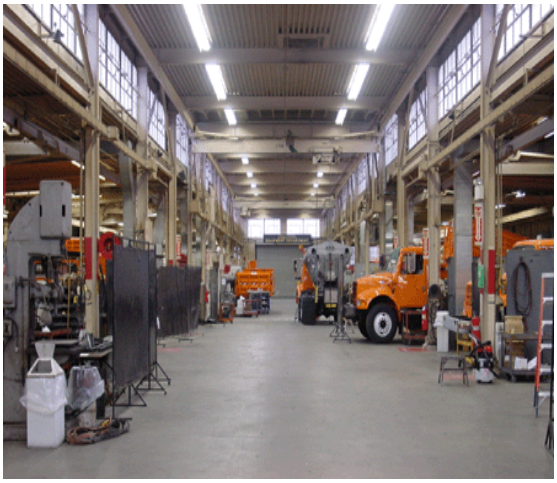
The Facilities Infrastructure Plan reflects the last three years of the 2014 SHOPP. Fiscal Year 2014-15 is depicted in the table above for illustrative purposes.

EQUIPMENT SHOPS

Introduction

The Division of Equipment (DOE) is responsible for Caltrans' fleet of light vehicles and heavy construction equipment consisting of approximately 12,000 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 DOE.

Headquarters Shop



Inside Equipment Shop Headquarters, Sacramento

Equipment shops provide space to store tools and materials for mechanics to repair and sustain Caltrans' 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

DOE maintains 13 shops and 13 sub-shops totaling 26 total shops and 666,561 square feet statewide as displayed in the table below.

In addition to the 26 Equipment shops/sub-shops, there are 123 resident mechanic facilities and 86 traveling mechanic facilities that are located within 209 of the maintenance facilities, which are under the Division of Maintenance, but are used/occupied by the DOE staff for the repair and maintenance of Caltrans' fleet.

Transportation-Related Facilities
Equipment Shops Inventory

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

Projects

The 2015 FIP identifies no Equipment Shop projects that are programmed in the 2014 SHOPP[1] and ten projects, identified as unprogrammed needs, which are candidate projects for future SHOPP funding. Project descriptions are provided on the following page.

Equipment Shops	2014 SHOPP Fiscal Years						
PROGRAMMED IN 2014 SHOPP		2015 Facilities Infrastructure Plan Fiscal Years					
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	$0	$0	$0	$0	$0	$0	$0

UNPROGRAMMED NEEDS							
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
D1 Ukiah Sub-Shop Retrofit	$0	$0	$0	$0	$2,500,000	$0	**$2,500,000**
D1 Clearlake Oaks Resident Mechanic Facility Replacement	$0	$0	$0	$0	$0	$1,800,000	**$1,800,000**
D1 Garberville Resident Mechanic Facility Replacement	$0	$0	$0	$0	$0	$1,900,000	**$1,900,000**
D3 South Lake Tahoe Sub-Shop Facility Expansion	$0	$0	$3,000,000	$0	$0	$0	**$3,000,000**
D4 Fairfield Sub-Shop Facility Relocation	$0	$0	$6,500,000	$0	$0	$0	**$6,500,000**
D4 San Leandro Equipment Shop C Facility Renovation	$0	$0	$0	$3,500,000	$0	$0	**$3,500,000**
D6 Fresno Equipment Shop	$0	$0	$0	$25,463,000	$0	$0	**$25,463,000**
D7 Commerce Sub-Shop Facility	$0	$10,000,000	$0	$0	$0	$0	**$10,000,000**
D8 Indio Resident Mechanic Facility	$0	$0	$0	$0	$2,500,000	$0	**$2,500,000**
D11 El Centro Sub-Shop Facility	$0	$5,000,000	$0	$0	$0	$0	**$5,000,000**
D12 Irvine New Equipment Shop	$0	$21,000,000	$0	$0	$0	$0	**$21,000,000**
HQ Division of Equipment HQ Facility	$0	$0	$60,000,000	$0	$0	$0	**$60,000,000**
Construction Totals	$0	$36,000,000	$69,500,000	$28,963,000	$5,000,000	$3,700,000	**$143,163,000**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$36,000,000	$69,500,000	$28,963,000	$5,000,000	$3,700,000	**$143,163,000**
Support	$0	$11,520,000	$22,240,000	$9,268,160	$1,600,000	$1,184,000	**$45,812,160**
Grand Total	$0	$47,520,000	$91,740,000	$38,231,160	$6,600,000	$4,884,000	$188,975,160

Note:

Support is estimated at 32% of capital costs for projects not programmed in the 2014 SHOPP.

[1] The Facilities Infrastructure Plan reflects the last three years of the 2014 SHOPP, Fiscal Years 2015-16 through 2017-18.

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 DOE and will better accommodate the work being performed at the facility. The retrofit will provide an efficient working environmental 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 DOE. 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 – Construction 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 – Construction 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 DOE.

District 3, South Lake Tahoe Sub-Shop Facility Expansion – Construction Cost: $3,000,000
The District proposes to add a new 2 ½ mechanic bay, crew room, and parts department, on the side of the existing sub-shop at the South Lake Tahoe maintenance facility. The proposed building will comply with the new building codes, ADA, California Department of Industrial Relations – Division of Occupational Safety and Health (Cal/OSHA) and

standards set forth by the DOE. The proposed facility will provide a safe work environment for its personnel and help better serve the needs of the customers in the region.

The existing sub-shop was built in the 1960s and does not comply with current DOE standards. There is no crew room or parts department and the bays are undersized to fit any large equipment. The current facility is inadequate in size and antiquated in design for the work taking place. Servicing Caltrans' fleet must take place outdoors – in violation of environmental regulation.

District 4, Fairfield Sub-Shop Facility Relocation – Construction Cost: $6,500,000.
The District proposes to relocate the existing Fairfield sub-shop to the existing Tri-Bridge maintenance facility in the city of Benicia. The new facility will have six bays, comply with the new building codes, ADA and standards set forth by the DOE. The proposed facility will provide a safer work environment for its personnel and help better serve the needs of the customers in the region.

The existing sub-shop in the city of Fairfield was built in the 1950s. It consists of several small, undersized maintenance bays and does not meet the current functional and safety standards set forth by DOE or other regulatory agencies. The current facility is inadequate in size and antiquated in design for the work taking place. Serving Caltrans' fleet is both difficult and efficient and must take place outdoors – in violation of environmental regulations.

District 4, San Leandro Equipment Shop C Facility Renovation – Construction Cost: $3,500,000.
The District proposes to renovate a portion of the equipment shop, build larger bays to accommodate larger equipment, build a new wash rack, and comply with standards set forth by DOE. The proposed facility will provide a safe work environment for its personnel and help better serve the needs of the customers in the region.

The existing Shop C facility was built in the 1960s and does not meet the current functional and safety standards. Additionally, the facility frequently floods when it rains. The current Shop C is inadequate in size and antiquated in design for the work taking place. Servicing Caltrans fleet must take place outdoors – in violation of environmental regulations.

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 1950s and built in the early 1960s. The current facility is inadequate in size and antiquated in design. Servicing Caltrans' fleet must take place outdoors - in violation of environmental regulations. The facility does not meet the current ADA codes or DOE 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 7, Commerce Sub-Shop Facility - Construction Cost: $10,000,000
The District proposes to replace the existing sub-shop on 7301 East Slauson Avenue with an upgraded sub-shop. The proposed facility will be replaced to comply with new building codes, such as ADA, and comply with standards set forth by the DOE. The proposed facility will provide a safe work environment for its personnel and help better serve the needs of the customers in the region.

The existing sub-shop repair facility was originally built in the 1960s and has critical infrastructure deficiencies and is functionally obsolete. Some of the concerns include lead paint, asbestos, lack of a vehicle exhaust system, no fire suppression system, and the work bays are short and not wide enough to meet the current standards.

District 8, Indio Resident Mechanics Facility - Construction Cost: $2,500,000
The District proposes to replace the existing resident mechanics facility with a new 2 ½-bay facility. The proposed facility will be replaced to comply with new building codes, such as ADA, and comply with standards set forth by the DOE. The proposed facility will provide a safe work environment for its personnel and help better serve the needs of the customers in the region.

The existing facility was built in the 1960s which has asbestos, lead paint, does not meet the current functional and safety standards, and gets flooded due to rain storms.

District 11, El Centro Sub-Shop Facility - Construction Cost: $5,000,000
The District proposes to replace the existing sub-shop in the city of El Centro with an upgraded sub-shop. The proposed facility will comply with new building codes, such as ADA, and standards set forth by the DOE. The proposed facility will provide a safe work environment for its personnel and help better serve the needs of the customers in the region.

The existing sub-shop repair facility was originally built in the 1950's and has critical infrastructure deficiencies and is functionally obsolete. The current facility does not

comply with today's DOE standards; the work bays are short and not wide enough to meet the current equipment standards for large vehicles. It is inadequate in size and antiquated in design. Servicing Caltrans' fleet is both difficult and inefficient and must take place outdoors- in violation of environmental regulations. The current facility which was originally located in the outer limits of the city is now currently adjacent to residential neighborhoods.

District 12, Irvine Equipment Facility - Construction Cost: $21,000,000
The District proposes to build an equipment shop in the city of Irvine. Caltrans 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 DOE programmatic needs for District 12. The existing facilities do not meet the current ADA standards for accessibility, DOE design guidelines, and are in violation with Cal/OSHA and environmental regulations.

Headquarters, Division of Equipment Headquarter Facility - Construction Cost: $60,000,000
The Division of Equipment proposes to replace the existing Headquarters (HQ) Shop/Administration facility with a new facility in a more industrial setting. The proposed building will comply with the new building codes, ADA, California Department of Industrial Relations – Division of Occupational Safety and Health (Cal/OSHA) and standards set forth by the DOE. The proposed facility will provide a safe work environment for its personnel and help better serve the needs of our customers for the entire state.

The existing HQ DOE facility was originally built in 1918 making it almost a century old. It has many critical infrastructure deficiencies and is functionally obsolete. Portions of the existing facility are considered historically protected and cannot be altered or rebuilt. The current facility is inadequate in size, antiquated in design, and very small for daily operation. Servicing Caltrans' fleet must take place outdoors – in violation of environmental regulations. The facility does not meet the current seismic, electrical, mechanical and ADA codes or today's DOE standards. Lead and asbestos have been found in the construction materials of this facility. The existing facility which at one time was in the industrial region of the county is currently bordering residential neighbor hoods.

MAINTENANCE FACILITIES

Introduction

The Division of Maintenance is responsible for maintenance of the state highway system in a manner consistent with Caltrans mission of providing a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. 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 5,000 employees who work in partnership with other state agencies, local agencies, and private contractors to maintain the state highway system.

District 8 San Bernardino Maintenance Station

Together, the Division of Maintenance and its partners maintain approximately 50,000 lane miles of highway, 12,559 bridges, 250,000 roadside acres, 25,000 acres of landscaping, 87 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 2,700,000 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

Transportation-Related Facilities Maintenance Facilities Inventory

District		Square Feet
1	Eureka	137,000
2	Redding	317,000
3	Marysville	376,000
4	Oakland	363,000
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	126,000
12	Irvine	163,000
	Total:	**2,742,000**

District 7 Las Flores Maintenance Station

Projects

The 2015 FIP includes no Maintenance Facility projects that are programmed in the 2014 SHOPP[2] and seventeen projects identified as unprogrammed needs, which are candidate projects for future SHOPP funding. Project descriptions are provided on the following page.

Maintenance Facilities	2014 SHOPP Fiscal Years						
PROGRAMMED IN 2014 SHOPP		2015 Facilities Infrastructure Plan Fiscal Years					
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
	$0	$0	$0	$0	$0	$0	**$0**
	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	$0	$0	$0	$0	$0	$0	$0

UNPROGRAMMED NEEDS							
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
D1 Idlewild Maintenance Facility Replacement	$0	$1,500,000	$0	$0	$0	$0	**$1,500,000**
D2 Adin Maintenance Facility Replacement	$0	$0	$0	$0	$0	$3,600,000	**$3,600,000**
D3 Auburn Maintenance Facility Replacement	$0	$0	$0	$0	$0	$2,000,000	**$2,000,000**
D3 Roseville Maintenance Facility Replacement	$0	$0	$0	$0	$0	$1,500,000	**$1,500,000**
D4 Petaluma Maintenance Facility Rehabilitation	$0	$0	$0	$0	$1,500,000	$0	**$1,500,000**
D4 Queens Street Maintenance Facility Rehabilitation	$0	$0	$0	$0	$1,800,000	$0	**$1,800,000**
D5 San Luis Obispo Maintenance Facility Relocation	$0	$0	$0	$0	$0	$26,900,000	**$26,900,000**
D7 Camarillo Maintenance Facility Replacement	$0	$0	$0	$6,000,000	$0	$0	**$6,000,000**
D7 Doran Maintenance New Facility	$0	$0	$4,400,000	$0	$0	$0	**$4,400,000**
D7 Florence Maintenance Facility Replacement	$0	$1,600,000	$0	$0	$0	$0	**$1,600,000**
D8 Blythe Maintenance Facility Replacement	$0	$2,300,000	$0	$0	$0	$0	**$2,300,000**
D8 Dry Creek Maintenance Facility Replacement	$0	$2,500,000	$0	$0	$0	$0	**$2,500,000**
D8 Mountain Pass Maintenance Facility Replacement	$0	$2,500,000	$0	$0	$0	$0	**$2,500,000**
D8 Riverside Maintenance Facility Replacement	$0	$0	$0	$15,000,000	$0	$0	**$15,000,000**
D11 Boulevard Maintenance Facility Rehabilitation	$0	$2,800,000	$0	$0	$0	$0	**$2,800,000**
D11 Lake Henshaw Maintenance Facility Rehabilitation	$0	$0	$0	$0	$0	$2,000,000	**$2,000,000**
D12 Stanton Maintenance Facility Replacement	$0	$12,000,000	$0	$0	$0	$0	**$12,000,000**
Construction Totals	$0	$25,200,000	$4,400,000	$21,000,000	$3,300,000	$36,000,000	**$89,900,000**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$25,200,000	$4,400,000	$21,000,000	$3,300,000	$36,000,000	**$89,900,000**
Support	$0	$8,064,000	$1,408,000	$6,720,000	$1,056,000	$11,520,000	**$28,768,000**
Grand Total	$0	$33,264,000	$5,808,000	$27,720,000	$4,356,000	$47,520,000	$118,668,000

Note:
Support is estimated at 32% of capital costs for projects not programmed in the 2014 SHOPP.

[2/] The Facilities Infrastructure Plan reflects the last three years of the 2014 SHOPP, Fiscal Years 2015-16 through 2017-18.

Project Description

Unprogrammed Projects

District 1, Idlewild Maintenance Facility Replacement - Construction Cost Estimate: $1,500,000
The proposed project would replace the maintenance office, shop building, backup generator, and water supply pipe. The existing building complex was built in 1971 and is becoming functionally obsolete and inadequate. The station does not meet the fire, life safety codes and ADA requirements. The rest room has only one stall, no women's bathroom, and there is no a janitorial area or shower. This station is in a high elevation area where 24-hour shifts are normal during the winter season.

District 2, Adin Maintenance Facility Replacement - Construction Cost Estimate: $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 Replacement– Construction Cost Estimate: $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, has inadequate spacing, and does not meet current building codes and ADA codes. The safety issues include lead paint and asbestos exposure.

District 3, Roseville Maintenance Facility Replacement– Construction Cost Estimate: $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, has inadequate spacing, and does not meet current building codes and ADA codes. The safety issues include lead paint and asbestos exposure.

District 4, Petaluma Maintenance Facility Rehabilitation – Construction Cost Estimate: $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 Rehabilitation – Construction Cost Estimate: $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 5, San Luis Obispo Maintenance Facility Relocation – Construction Cost Estimate: $26,900,000
The proposed project relocates the existing maintenance facility on an acquired 56-acre parcel in San Luis Obispo. The purpose of the project is to mitigate issues with overcrowding at the facility that is shared with the District 5 San Luis Obispo office complex. There are safety concerns regarding heavy equipment from the maintenance facility being operated in close proximity to pedestrians from the offices and difficulty in accessing the highway due to increased traffic on adjacent streets. In addition, the site has flooded numerous times from the nearby creek and a majority of the buildings were built in 1955 and are in disrepair. The facility to be relocated includes road, landscaping, electrical, tree, sign, and bridge crews.

District 7, Camarillo Maintenance Facility Replacement – Construction Cost Estimate: $6,000,000
The existing facility, built in 1988, has outgrown its functional use and lacks storage space. The existing office building is extremely noisy and chaotic with four crews coming and going and lacks adequate space for the crews and supervisors offices. A new building is proposed to accommodate all crews and provide a better storage system.

District 7, Doran Maintenance New Facility – Construction Cost Estimate: $4,400,000
The existing maintenance facility, constructed in 1970, currently accommodates one sign crew and consists of a trailer, office building, and warehouse. The new facility will provide facilities for three traveling structural steel crews.

District 7, Florence Maintenance Facility Replacement – Construction Cost Estimate: $1,600,000

The proposed project replaces the existing maintenance building. The existing complex was built in 1967. It is old, inadequate in size, and has critical infrastructure deficiencies. It was constructed for one crew and is currently being used by two crews.

District 8, Blythe Maintenance Facility Replacement – Construction Cost Estimate: $2,300,000
The proposed project replaces the equipment barn, materials warehouse, supervisor's office, and crew building. The Blythe facility, built in 1959, has exceeded its functional service life and exhibits numerous functional deficiencies. The existing buildings have critical infrastructure deficiencies; inadequate space for equipment and material storage; non-compliance with stormwater NPDES and ADA requirements; and outdated HVAC, electrical, and plumbing systems.

District 8, Dry Creek Maintenance Facility Replacement – Construction Cost Estimate: $2,500,000
The proposed project replaces the mechanics office and equipment barn; supervisor and the superintendent offices; and crew building. The Dry Creek facility, built in 1960, has exceeded its functional service life and exhibits numerous functional deficiencies. The existing buildings have critical infrastructure deficiencies; insufficient space for the crew and mechanic; inadequate size for equipment and material storage; non-compliance with stormwater NPDES and ADA requirements; and outdated HVAC, electrical, and plumbing systems.

District 8, Mountain Pass Maintenance Facility Replacement – Construction Cost Estimate: $2,500,000
The proposed project replaces the equipment barn, warehouse, offices, and crew building. The Mountain Pass facility, built in 1960, has exceeded its functional service life and exhibits numerous functional deficiencies. The existing buildings have critical infrastructure deficiencies; inadequate water supply and filtration system; inadequate size for equipment and material storage; non-compliance with stormwater NPDES and ADA requirements; and outdated HVAC, electrical, and plumbing systems.

District 8, Riverside Maintenance Facility Relocation – Construction Cost Estimate: $15,000,000
The proposed project replaces the equipment barn, crew building , warehouse, superintendents, manager, and region offices. The Riverside facility, built in 1966, has exceeded its functional service life and exhibits numerous functional deficiencies. The existing buildings have critical infrastructure deficiencies; insufficient space for the crew and supervisor offices; inadequate size for equipment and material storage; non-compliance with stormwater NPDES and ADA requirements; and outdated HVAC, electrical, and

plumbing systems. The present location is incompatible with the surrounding community and has become inappropriately situated in a retail/commercial area.

District 11, Boulevard Maintenance Facility Rehabilitation – Construction Cost Estimate: $2,800,000
The proposed project modifies and expands the existing office and crew building and includes installation of a wash rack. The existing facility, built in 1961, 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 Rehabilitation– Construction Cost Estimate: $2,000,000
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, built in 1977, is old and does not meet current fire, life safety codes and is not ADA compliant.

District 12, Stanton Maintenance Facility Replacement – Construction Cost Estimate: $12,000,000
The proposed project replaces the existing maintenance building. The existing maintenance station was built in 1949. It 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

Caltrans currently operates approximately 124 materials testing facilities, ranging in size from large complex laboratories to small field construction testing facilities. District Materials Engineering (DME) and Independent Assurance Laboratories are currently located in each District and the Translab is located in Sacramento. Additionally, Caltrans' new Southern Regional Laboratory in San Bernardino County was completed 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 materials testing facilities are divided into the following three category types:

- Category I – Program Laboratories (2)
  - Sacramento Translab
  - Southern Regional Laboratory
- Category II – Main District Materials Engineering Testing Laboratories (9)
- Category III – Field Construction Laboratories (113)
  - Fixed Sites – 42
  - Mobile Sites 71

The facility inventory for Caltrans' Materials Laboratories (Category I and II) total 312,093 square feet as displayed in the table below.

Transportation-Related Facilities
Materials Laboratories Inventory [1/]

District		Address	City	Square Feet
1	Eureka	1726 Albee Street	Eureka	4,000
2	Redding	1657 Riverside Drive	Redding	5,841
3	Marysville	5330 Arboga Road	Olivehurst	13,000
4	Oakland	324 San Bruno Avenue	San Francisco	7,600
5	San Luis Obispo	50 Higuera Street	San Luis Obispo	3,330
6	Fresno	1352 West Olive	Fresno	5,600
8	San Bernardino	13970 Victoria Street [2/]	Fontana	81,000
9	Bishop	500 South Main	Bishop	2,200
10	Stockton	1976 East Dr. Martin Luther King Jr. Blvd	Stockton	5,617
11	San Diego	7177 Opportunity Road	San Diego	12,710
HQ	Sacramento	5900 Folsom Boulevard	Sacramento	171,195
			Total	**312,093**

[1/] Table only reflects Category I (Program Laboratories) and Category II (Main District Materials Engineering Testing Laboratories).
[2/] The Southern Regional Laboratory in District 8 San Bernardino supports Districts 7, 8, and 12.

Projects

The 2015 FIP includes no Materials Laboratories projects that are programmed in the 2014 SHOPP[3] and no projects identified as an unprogrammed need, which are a candidate project for future SHOPP funding.

Materials Laboratories	2014 SHOPP Fiscal Years						
PROGRAMMED IN 2014 SHOPP		2015 Facilities Infrastructure Plan Fiscal Years					
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
	$0	$0	$0	$0	$0	$0	$0
Construction Totals	$0	$0	$0	$0	$0	$0	$0
Land	$0	$0	$0	$0	$0	$0	$0
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	$0
Support	$0	$0	$0	$0	$0	$0	$0
Grand Total	$0	$0	$0	$0	$0	$0	$0

UNPROGRAMMED NEEDS							
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
Construction Totals	$0	$0	$0	$0	$0	$0	$0
Land	$0	$0	$0	$0	$0	$0	$0
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	$0
Support	$0	$0	$0	$0	$0	$0	$0
Grand Total	$0	$0	$0	$0	$0	$0	$0

Note:

Support is estimated at 32% of capital costs for projects not programmed in the 2014 SHOPP.

3/ The Facilities Infrastructure Plan reflects the last three years of the 2014 SHOPP, Fiscal Years 2015-16 through 2017-18.

TRANSPORTATION MANAGEMENT CENTERS

Introduction

A Transportation Management Center (TMC) Master Plan was written in 1997 to develop the framework for standardized statewide strategies for TMCs. Based on geography and population centers, California was divided into three transportation regions that are managed by three regional TMCs located in Districts 3, 4 and 7; five urban TMCs located in Districts 6, 8, 10, 11 and 12; and five smaller TMCs/Satellite Operations Centers (SOCs) located in Districts 1, 2, 3, 5 and 9.

District 7 – Los Angeles Regional Transportation Management

TMCs coordinate with each other and with neighboring states to optimize the efficiency of the transportation system, minimize traveler delays, and increase the safety of the traveling public and the highway workers that maintain the system. The TMCs conduct daily transportation management activities to smooth the flow of traffic, coordinate traffic incident management response in order to limit non-recurring congestion, and provide traveler information to the public to help them make informed travel decisions. The three urban TMCs designated as regional TMCs provide traffic operations services beyond their urban area as needed.

Transportation Management Center Locations

Since the California Highway Patrol (CHP) conducts incident scene management and other public safety services (e.g., pacing traffic in fog and snow) on the state highways, communication and coordination between Caltrans' Traffic Operations staff and CHP staff is critical. In some cases, CHP staffs (officers, dispatchers, and public information officers) are co-located within the TMCs. Additionally, in some locations, a local or regional Emergency Operations Center may be operated within the TMC due to the coordination and media capabilities they possess.

Infrastructure Description

Caltrans maintains 265,685 square feet of TMC operating space, as shown in the table below. Typical TMCs may include security, communication, and dispatch areas; press coverage and briefing rooms; staff offices; restrooms; and locker areas.

Transportation-Related Facilities
Transportation Management Centers (TMCs) Inventory

District		Address	City	Year Built	Square Feet
1	Eureka	1656 Union Street	Eureka	1953	230
2	Redding	1657 Riverside Drive	Redding	1953	830
3	Marysville	3165 Gold Valley Drive	Rancho Cordova	1999	34,200
3	Marysville	51121 Donner Pass Road [1/]	Kingvale	N/A	1,760
4	Oakland	111 Grand Avenue	Oakland	1992	10,200
5	San Luis Obispo	50 Higuera Street	San Luis Obispo	1955	1,500
6	Fresno	1352 West Olive	Fresno	1958	3,065
7	Los Angeles	2901 West Broadway	Los Angeles	2008	82,300
8	San Bernardino	13970 Victoria Street	Fontana	2011	43,000
9	Bishop	500 South Main Street	Bishop	1954	400
10	Stockton	1976 East Dr. Martin Luther King Jr. Blvd.	Stockton	1957	2,200
11	San Diego	7183 Opportunity Road	San Diego	1996	42,000
12	Irvine	6681 Marine Way	Irvine	2001	44,000
				Total	**265,685**

[1/] Winter operation at the Kingvale Maintenance Station

District 12 – TMC Video Wall

District 3 – Changeable Message Sign/Ramp Meter

Projects

The 2015 FIP includes no TMC projects that are programmed in the 2014 SHOPP[4] and no projects identified as unprogrammed needs, which are candidate projects for future SHOPP funding.

Transportation Management Centers	2014 SHOPP Fiscal Years						
PROGRAMMED IN 2014 SHOPP		2015 Facilities Infrastructure Plan Fiscal Years					
Location/Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	$0	$0	$0	$0	$0	$0	$0

UNPROGRAMMED NEEDS	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2015 FIP Total
Location/Description							
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	$0	$0	$0	$0	$0	$0	$0

Note:
Support is estimated at 32% of capital costs for projects not programmed in the 2014 SHOPP.

[4/] The Facilities Infrastructure Plan reflects the last three years of the 2014 SHOPP, Fiscal Years 2015-16 through 2017-18.

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CHAPTER 4

RESOURCE CONSERVATION

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RESOURCE CONSERVATION EFFORTS

The California Department of Transportation's (Caltrans) resource conservation policies, practices, and planning efforts are consistent with Governor Edmund G. Brown Jr.'s Drought State of Emergency, proclaimed on January 17, 2014; the Executive Order B-16-12, signed on March 23, 2012; and the Executive Order B-18-12, signed on April 25, 2012;

Policy

Drought State of Emergency

On January 17, 2014, Governor Edmund G. Brown Jr. proclaimed a drought State of Emergency and directed state officials to take all necessary actions to prepare for California's drought conditions. Furthermore, the Governor directed State agencies to use less water and initiate a greatly expanded water conservation public awareness campaign. In his declaration, the Governor called for a 20 percent statewide water usage reduction.

Executive Order B-16-12

The Executive Order B-16-12 moves the state toward the integration of zero-emission vehicles (ZEVs) into the mainstream. It directs the state toward establishing an infrastructure that can support increased public and private ZEVs. Per the Executive Order, state agencies are to increase the number of its ZEVs through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020.

Executive Order B-18-12

The Executive Order B-18-12 directs agencies and departments to take steps to green the state's buildings, reduce greenhouse gas emissions, and improve energy efficiency. Per the Executive Order, state agencies and departments are to:

- Achieve the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) "Silver" certification or higher and to incorporate clean, on-site power generation (such as photovoltaic, solar thermal, wind power generation, and clean back-up power supplies) for new or renovated state buildings larger than 10,000 square feet;
- Set a target of zero net energy consumption for 50 percent of the square footage of existing state-owned buildings by 2025 and zero net energy consumption from all new or renovated state buildings design after 2025;

- Reduce their grid-based energy purchases and other non-building grid-based retail energy purchases by 20 percent by 2018; as compared to a 2003 baseline;
- Reduce overall water use by 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline; and
- Reduce greenhouse gas emissions by 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline.

Caltrans continues to work towards reaching the goals articulated in the Drought State of Emergency Proclamation, the Executive Order B-16-12, and the Executive Order B-18-12 to support the state's renewable power statutes, "green power" electric grid demand, energy and water conservation, LEED, climate change mandates, and the zero-emission vehicles mandates.

Practice and Planning

Water Efficiency and Conservation

Caltrans continues to build on existing efforts to conserve water, address fundamental changes in its approach to water resource management, and prepare for the changes the future holds. Caltrans water conservation measures include:

Office Facilities

- Immediately reduce water usage by 20 percent.
- Survey all facilities to expedite water efficiency retrofits of interior water fixtures, landscape irrigation and planting, and other water-using equipment of facilities.
- Install water flow restrictors to reduce interior water usage.
- Check automatic sensors on faucets, toilets, and urinals to ensure they are operating properly and avoid unnecessary water use.
- Plumbing fixtures that must be replaced, should be replaced with low-volume models.
- Shut off the water supply to equipment and areas that are not utilized.
- Cease building interior and exterior window washing.
- Cease powerwashing unless required for health or safety issues.
- Post "Reduce Water Use" signage.
- Implement energy-efficiency measures to reduce the need for building and equipment cooling and heating, which will reduce the amount of water required by these systems.
- Cease watering turf or annuals.

- Investigate the availability of reclaimed water for irrigation and other approved uses.
- Cease the use of water features (i.e., fountains, etc.)
- Cease state vehicle washing unless for health and safety issues.
- Design water-smart landscapes.

Transportation-Related Facilities

- Immediately implement actions to reduce irrigation use by 50 percent.
- Evaluate and repair existing irrigation systems to efficiently supply water.
- Cease landscape irrigation and highway planting work in severe water shortage areas as defined by the California Department of Public Health.
- Revise irrigation controller schedules to occur during the night, where possible.
- Replace inefficient irrigation and plumbing components with water-efficient components.
- Use non-potable water for field operations, where feasible and install signage to identify areas irrigated with non-potable water.
- Replace inefficient irrigation and plumbing components with water efficient components.
- Apply mulch and reduce pruning of trees and shrubs (except when addressing safety issues) to reduce water loss through evaporation from the soil.
- Cease state vehicle washing unless for health and safety issues.

Clean Renewable Energy Bonds

Caltrans 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 mid-January 2013, all 70 projects were completed and generating electricity. The 2.4 megawatts of solar power that Caltrans' 70 sites are expected to produce can power approximately 500 homes per year.

Leadership in Energy and Environmental Design

In the past eight years, Caltrans 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 Green Building Rating of Silver or better. The District 7 Headquarters office building was originally certified as LEED Green Building Rating of Silver, but it achieved LEED Green Building Rating of Gold in 2011 after a series of additional changes. The changes included adjusting the thermostat to further reduce heating and cooling loads, committing to the purchase of recycled products, and adopting more sustainable custodial practices. 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.

In 2011, the construction of the Inland Empire Transportation Management Center, located in Fontana, was completed and a LEED Green Building Rating of Gold was achieved, which is the first essential services facility in the nation to achieve this certification.

In fall 2012, the construction of the Phillip S. Raine Rest Area on Highway 99 near Tipton in Tulare County (District 6) that features solar panels, recycled materials, pervious paving, low-flow plumbing, drought-tolerant plants, and an efficient irrigation system was completed and a LEED Platinum certification, (the highest rating available) was achieved. It is the first LEED-certified rest area in California.

The San Francisco – Oakland Bay Bridge Maintenance Complex project is designed to meet or exceed the Governor's Executive Order S-18-12, which requires buildings over 10,000 square feet to be designed as LEED – New Construction Silver certification.

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Other Energy-Efficiency Projects

- In the fall of 2012, the Division of Maintenance purchased energy-efficient Light-Emitting Diode (LED) luminaries for many of the maintenance stations statewide. This ongoing effort will replace the maintenance yard exterior lights, specifically the cobra head street lighting and wall pack light fixtures that have inefficient lighting units. The anticipated savings in energy costs will be approximately 35 to 40 percent from the current energy usage cost.
- The Sacramento Headquarters Division of Equipment (DOE) office building is currently being retrofitted with a modernized HVAC (heating, ventilation, and air conditioning) system. The anticipated date of completion is spring 2014.
- The District 8 Transportation Management Center and the Southern Regional Lab campus is installing a 19-acre solar farm under a Public Private Partnership to provide lower cost electricity to these facilities.
- Caltrans is to install 26 electric vehicle (EV) charging stations at state and district headquarters office buildings statewide. The EV charging stations will be purchased and installed by the end of Fiscal Year 2013-14.
- In Fiscal Year 2012-13, the DOE purchased one battery-electric vehicle and 35 plug-in hybrid electric vehicles. The DOE developed a 3-year plan for zero-emission vehicle purchases to meet the short-term requirement of Executive Order B-16-12. Furthermore, the DOE anticipates replacing 495 light-duty vehicles (subject to available funding and vehicle replacement priorities) to meet the mandates of Executive Order B-16-12.
- Caltrans is exploring the feasibility of the installation of LED luminaries at the Sacramento Headquarters office building and at other District Offices. Quantities and costs are being calculated using various scenarios to project the return-on-investment. In addition, the California Lighting Technology Center at the University of California Davis (a not-for-profit research, development and design facility dedicating to advancing energy-efficient lighting and day lighting technologies) is analyzing the LED luminaries to confirm if the light actually performs as advertised.

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Reconciliation to Previous Facilities Infrastructure Plan

(2015 FIP reconcile to 2014 FIP)

Programmed in 2014 SHOPP (Fiscal Years 2015-16, 2016-17 and 2017-18)

District	Facility	Project	Reconciliation	2014 FIP	2015 FIP
		There are No Facility Projects Programmed in the 2014 SHOPP		$0	$0
				$0	$0

Unprogrammed Projects

District	Facility	Project	Reconciliation	2014 FIP	2015 FIP
1	Equipment	Ukiah Sub-Shop Retrofit	No Changes	$2,500,000	$2,500,000
1	Equipment	Clearlake Oaks Resident Mechanic Facility Replacement	No Changes	$1,800,000	$1,800,000
1	Equipment	Garberville Resident Mechanic Facility Replacement	No Changes	$1,900,000	$1,900,000
3	Equipment	South Lake Tahoe Sub-Shop Facility Expansion	New Proposed Need (FY 2016-17)	$0	$3,000,000
4	Equipment	Fairfield Sub-Shop Facility Relocation	New Proposed Need (FY 2016-17)	$0	$6,500,000
4	Equipment	San Leandro Equipment Shop C Facility Renovation	New Proposed Need (FY 2017-18)	$0	$3,500,000
6	Equipment	Fresno Equipment Shop Replacement	No Changes	$25,463,000	$25,463,000
7	Equipment	Commerce Sub-Shop Replacement	No Changes	$10,000,000	$10,000,000
8	Equipment	Indio Resident Mechanics Facility Replacement	No Changes	$2,500,000	$2,500,000
11	Equipment	El Centro Sub-Shop Renovation	New Proposed Need (FY 2015-16)	$0	$5,000,000
12	Equipment	Irvine Equipment Facility Replacement	No Changes	$21,000,000	$21,000,000
HQ	Equipment	Division of Equipment HQ Facility Replacement	New Proposed Need (FY 2016-17)	$0	$60,000,000
1	Maintenance	Idlewild Maintenance Facility Replacement	New Proposed Need (FY 2015-16)	$0	$1,500,000
2	Maintenance	Adin Maintenance Facility - Major Rehabilitation	No Changes	$3,600,000	$3,600,000
3	Maintenance	Auburn Maintenance Facility - Major Rehabilitation	No Changes	$2,000,000	$2,000,000
3	Maintenance	Roseville Maintenance Facility - Major Rehabilitation	No Changes	$1,500,000	$1,500,000
4	Maintenance	Petaluma Maintenance Facility - Major Rehabilitation	No Changes	$1,500,000	$1,500,000
4	Maintenance	Queens Street Maintenance Facility - Major Rehabilitation	No Changes	$1,800,000	$1,800,000
5	Maintenance	San Luis Obispo Lab Relocation	No Changes	$26,900,000	$26,900,000
7	Maintenance	Ojai Maintenance Facility Replacement	Dropped Off 2015 FIP (Using Minor Funds)	$3,300,000	$0
7	Maintenance	Camarillo Maintenance Facility Replacement	New Proposed Need (FY 2017-18)	$0	$6,000,000
7	Maintenance	Doran New Maintenance Facility	New Proposed Need (FY 2016-17)	$0	$4,400,000
7	Maintenance	Florence Maintenance Facility Replacement	No Changes	$1,600,000	$1,600,000
8	Maintenance	Banning Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,400,000	$0
8	Maintenance	Barstow Maintenance Facility Replacement	Dropped Off 2015 FIP	$2,100,000	$0
8	Maintenance	Beechers Corner Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,800,000	$0
8	Maintenance	Blythe Maintenance Facility Replacement	No Changes	$2,300,000	$2,300,000
8	Maintenance	Burnt Mill Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,500,000	$0
8	Maintenance	Cajon Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,700,000	$0
8	Maintenance	Camp Angelus Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,500,000	$0
8	Maintenance	Corona Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,200,000	$0
8	Maintenance	Dry Creek Maintenance Facility Replacement	No Changes	$2,500,000	$2,500,000
8	Maintenance	Elsinore Maintenance Facility Replacement	Dropped Off 2015 FIP	$2,500,000	$0
8	Maintenance	Fawnskin Maintenance Facility Replacement	Dropped Off 2015 FIP	$2,200,000	$0
8	Maintenance	Indio Maintenance Facility Replacement	Dropped Off 2015 FIP	$2,700,000	$0
8	Maintenance	Mountain Pass Maintenance Facility Replacement	No Changes	$2,500,000	$2,500,000
8	Maintenance	Needles Maintenance Facility Replacement	Dropped Off 2015 FIP	$2,500,000	$0
8	Maintenance	Ontario Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,700,000	$0
8	Maintenance	Riverside Maintenance Facility Replacement	Revised Estimate	$2,700,000	$15,000,000
8	Maintenance	San Bernardino Maintenance Facility Replacement	Dropped Off 2015 FIP	$3,500,000	$0
8	Maintenance	Victorville Maintenance Facility Replacement	Dropped Off 2015 FIP	$2,000,000	$0
8	Maintenance	Vidal Junction Maintenance Facility Replacement	Dropped Off 2015 FIP	$1,500,000	$0
11	Maintenance	Boulevard Maintenance Facility - Major Rehabilitation	No Changes	$2,800,000	$2,800,000
11	Maintenance	Lake Henshaw Maintenance Facility - Major Rehabilitation	No Changes	$2,000,000	$2,000,000
12	Maintenance	Stanton Maintenance Facility Relocation	No Changes	$12,000,000	$12,000,000
				$163,963,000	$233,063,000
			Total Construction Costs:	$163,963,000 (pg vii 2014 FIP)	$233,063,000 (pg vii 2015 FIP)

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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 Caltrans.

Facility Studies

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

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Calculation of "Net Need"

Caltrans projects a "net need" for office space totaling approximately 43,000 square feet (less than 2% of the statewide total).

A significant amount of Caltrans state-owned office space inventory will exceed 50 years of age during the 2015 Facilities Infrastructure Plan time-period. These facilities will require renovation or replacement. Additionally, in some geographic areas a significant[1] number of Caltrans' employees are housed in leased office space.

STATEWIDE SUMMARY OFFICE FACILITIES "NET NEED"					
	Facilities Infrastructure Plan Years				
	Year 1 FY 2015-16	Year 2 FY 2016-17	Year 3 FY 2017-18	Year 4 FY 2018-19	Year 5 FY 2019-20
New Office Building Construction[1] (location of new office building)	-	-	-	-	-
Number of Buildings Vacated[2] (due to new office building construction)	-	-	-	-	-
Number of Leases Eliminated[3] (due to new office building construction)	-	-	-	-	-
Office Space "Supply"[4] (net square feet of owned and leased space)	3,033,740	3,033,740	3,033,740	3,033,740	3,033,740
Office Space "Demand"[5] (220 net square feet per person)	3,076,260	3,076,260	3,076,260	3,076,260	3,076,260
Office Space "Net Need"[6] (supply less demand - in square feet)	*(42,520)*	*(42,520)*	*(42,520)*	*(42,520)*	*(42,520)*
Office Space "Net Need"[7] (supply less demand - as a percentage)	*(1.40)%*	*(1.40)%*	*(1.40)%*	*(1.40)%*	*(1.40)%*

Chart Footnotes:
1) Actual and proposed construction of office facilities by location and fiscal year.
2) The number of office buildings vacated due to the actual or proposed new office facilities.
3) The number of leases terminated due to the actual or proposed new facilities.
4) The amount of office space statewide, stated in net square feet (nsf), based upon the actual inventory of space.
5) 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.
6) The surplus or shortage of office space statewide, stated in net square feet (nsf), based upon the actual inventory and the amount needed.
7) The surplus or shortage of office space statewide, stated as a percentage.

[1]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."

Office Facilities "Net Need"

Fiscal Years 2015-16 through 2019-20

District	Address		Owned (O) Leased (L)	Owned Gross	Owned Net	Leased	District Total "gross space" *(Owned Gross & Leased)*	District Total "net space" *(Owned Net & Leased)*	*Other*
District Office Facilities									
D 1	1656 Union Street	Eureka	O	80,800	56,560				
	TMC, 1656 Union Street	Eureka	O		*(230)*				
	1656 Union Street (Modular)	Eureka	O	4,176	2,923				
	1835 6th Street (Modular)	Eureka	O	6,480	4,536				
	District Totals:			**91,456**	**63,789**	**0**	**91,456**	**63,789**	***0***
D 2	1657 Riverside Drive	Redding	O	55,581	38,907				
	TMC, 1657 Riverside Drive	Redding	O		*(830)*				
	1031 Butte Street	Redding	L			47,027			
	District Totals:			**55,581**	**38,077**	**47,027**	**102,608**	**85,104**	***0***
D 3	703 B Street	Marysville	O	211,734	160,444				
	2379 Gateway Oaks Drive	Sacramento	L			6,260			
	District Totals:			**211,734**	**160,444**	**6,260**	**217,994**	**166,704**	***0***
D 4	111 Grand Avenue	Oakland	O	525,000	473,774				
	TMC, 111 Grand Avenue	Oakland	O		*(10,200)*				
	1007 Knox Avenue	San Jose		14,742	10,319				
	595 Market Street Suites 800 and 1700	San Francisco	L			16,850			*140*
	District Totals:			**539,742**	**473,893**	**16,850**	**556,592**	**490,743**	***140***
D 5	50 Higuera Street	San Luis Obispo	O	41,700	29,190				
	TMC, 50 Higuera Street	San Luis Obispo	O		*(1,500)*				
	20 Higuera Street (Vacant)	San Luis Obispo	O						*7,500*
	1150 Laurel Lane (Or equivalent)	San Luis Obispo	L			44,459			
	3232 S. Higuera Street	San Luis Obispo	L			8,224			
	District Totals:			**41,700**	**27,690**	**52,683**	**94,383**	**80,373**	***7,500***
D 6	1352 W. Olive Street	Fresno	O	78,000	60,000				
	TMC, 1352 W. Olive Street	Fresno	O		*(3,065)*				
	2015 E. Shields Avenue	Fresno	L			98,575			
	855 M Street	Fresno	L			50,773			
	District Totals:			**78,000**	**56,935**	**149,348**	**227,348**	**206,283**	***0***
D 7	100 S. Main Street	Los Angeles	O	716,200	598,370				
	Space adjustment: 100 S. Main Street 11th floor	Los Angeles	O		*(47,000)*				
	Space adjustment: 100 S. Main Street LADOT	Los Angeles	O		*(98,000)*				
	950 County Square Drive	Ventura	L			2,500			
	District Totals:			**716,200**	**453,370**	**2,500**	**718,700**	**455,870**	***0***
D 8	464 W. 4th Street	San Bernardino	O	235,714	165,000				
	District Totals:			**235,714**	**165,000**	**0**	**235,714**	**165,000**	***0***
D 9	500 S. Main Street	Bishop	O	20,250	14,175				
	TMC, 500 S. Main Street	Bishop	O		*(400)*				
	500 S. Main Street (Modular Traffic Ops.)	Bishop	O	4,986	3,490				
	500 S. Main Street (Modular Design)	Bishop	O	5,040	3,528				
	500 S. Main Street (Modular IT)	Bishop	O	2,894	2,026				
	500 S. Main Street (Modular Mtce. Engineering)	Bishop	O	4,326	3,028				
	District Totals:			**37,496**	**25,847**	**0**	**37,496**	**25,847**	***0***

Office Facilities "Net Need"

Fiscal Years 2015-16 through 2019-20

District	Address		Owned (O) Leased (L)	Owned Gross	Owned Net	Leased	District Total "gross space" *(Owned Gross & Leased)*	District Total "net space" *(Owned Net & Leased)*	*Other*
District Office Facilities (continued)									
D 10	1976 E. Dr. Martin Luther King Jr. Blvd.	Stockton	O	64,574	45,202				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. R/W)	Stockton	O	5,760	4,032				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. Plan/LA)	Stockton	O	5,760	4,032				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. Permits)	Stockton	O	2,880	2,016				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. Safety)	Stockton	O	960	672				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. Admin)	Stockton	O	3,520	3,002				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. TMC)	Stockton	O		*(2,200)*				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. Surveys I)	Stockton	O	2,880	2,016				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. Surveys II)	Stockton	O	2,880	2,016				
	1976 E. Dr. Martin Luther King Jr. Blvd. (Mod. Video Conf.)	Stockton	O	960	672				
	District Totals:			**90,174**	**61,460**	**0**	**90,174**	**61,460**	***0***
D 11	4050 Taylor Street	San Diego	O	298,424	221,447				*15,428*
	4024 Taylor Street (Vacant Arch. Build.)	San Diego	O						*2,345*
	District Totals:			**298,424**	**221,447**	**0**	**298,424**	**221,447**	***17,773***
D 12	3337-3347 Michelson Drive	Irvine	L			151,453			
	District Totals:			**0**	**0**	**151,453**	**151,453**	**151,453**	***0***
	Geographical District Totals:			**2,396,221**	**1,747,952**	**426,121**	**2,822,342**	**2,174,073**	***25,413***
Regional Office Facilities									
D8	21073 Pathfinder Road Suite 200 (Lab)	Diamond Bar	L			8,950		8,950	
	Regional Totals:			**0**	**0**	**8,950**	**8,950**	**8,950**	***0***
State Headquarters Facilities									
HQ	1120 N Street	Sacramento	O	462,392	323,674				
	1120 N Street (CTC leased space)	Sacramento	O		*(4,628)*				
	5900 Folsom Boulevard (Lab)	Sacramento	O	15,146	10,602				
	5900 Folsom Boulevard (Lab; quad I)	Sacramento	O	6,480	4,536				
	5900 Folsom Boulevard (Lab; quad II)	Sacramento	O	6,480	4,536				
	5900 Folsom Boulevard (Lab; quad III)	Sacramento	O	6,480	4,536				
	1900 Royal Oaks Drive (Office space only)	Sacramento	O	9,757	6,830				
	1801 30th Street (FM1)	Sacramento	L			160,900			
	1727 30th Street (FM3)	Sacramento	L			123,736			
	1820 Alhambra Boulevard (FM2)	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 River Park Drive Suite 210	Sacramento	L			6,642			
	3390 Lanatt Street	Sacramento	L			3,769			*26,146*
	1115 P Street	Sacramento	L			2,315			
	State Headquarters Totals:			**506,735**	**350,087**	**500,630**	**1,007,365**	**850,717**	***27,609***
	Grand Totals:			**2,902,956**	**2,098,039**	**935,701**	**3,838,657**	**3,033,740**	***53,022***

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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.

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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"[3].

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 California 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"[4].

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.

[2] DOF and Caltrans staff met February 23, 2005 to review Caltrans' drivers. The result of that and previous meetings is the agreement that Caltrans' drivers are appropriate for the Existing Infrastructure classification.
[3] Source: State Fire Marshal, Title 19. Public Safety, Division 1, Chapter 1, Subchapter 1, Article 1.
[4] Source: State Administrative Manual; Section 6839.

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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 California Department of Transportation (Caltrans) 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 Caltrans' project delivery efforts.

Alternate Work Schedules/Telework/Hoteling

Caltrans 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, Caltrans' needs, or services to the public.

Caltrans 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

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

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EQUIPMENT SERVICE CENTER FACILITY DESIGN GUIDELINES[1]

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 appropriates.

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 personal 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

[1] In concurrence: A.D. Wells, Director Equipment Service Center; Randell 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/e., 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/LHEM. 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 mill 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.

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 PYs Expended
1984 Hrs/PY

Total PYs Expended – Subshop Mechanics – PYs Expended in Field = District Shop PYs.

District Shop PYs 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 PYs Expected

Total PYs 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 super visors 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 PYs Expected

Total PYs Expended = PYs Expended at field Location
2

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

Tab #22

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Proposed
2015 Facilities Infrastructure Plan

Presentation to the
California Transportation Commission
June 2014

2015 Facilities Infrastructure Plan

Presentation

- **Introduction**
- **Facilities Infrastructure Plan Defined**
- **Facilities Infrastructure Plan Process**
- **Facilities Infrastructure Plan Overview**

2015 Facilities Infrastructure Plan

Requirements

- The Governor is required to annually submit a Five-Year Capital Outlay Infrastructure Plan with the Governor's Budget
- Assembly Bill 1473 (Chapter 606, Statutes of 1999)
- All State entities to provide Facilities Infrastructure Plans to the California Department of Finance

2015 Facilities Infrastructure Plan

What is it?

2015
Facilities Infrastructure Plan

Ten-Year SHOPP Plan
2013
Facilities Planning Information

Four-Year SHOPP Plan
2014
Facilities Programming Information

Five-Year Capital Outlay Infrastructure Plan
(Budget Letter 14-05)
All Requirements

2015 Facilities Infrastructure Plan

Fiscal Year Relationship of SHOPP and FIP

Chronology and Fiscal Year Relationships: Facilities Infrastructure Plan and SHOPP

		Fiscal Years											
	Approximate Due Date	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*	*2019-20*	*2020-21*	*2021-22*	*2022-23*	*2023-24*	*2024-25*	*2025-26*
2013 Ten-Year SHOPP Plan	Jan 2013					10-Year Plan							
2014 Facilities Infrastructure Plan	Jul 2013		5-Year Plan										
2014 Four-Year SHOPP	Jan 2014		4-Year Plan										
2015 Facilities Infrastructure Plan	Jul 2014			5-Year Plan									

2015 Facilities Infrastructure Plan

Overview

Facilities Infrastructure Plan consists of:

- ✓Executive Summary
- ✓Ch. 1 - Department Overview
- ✓Ch. 2 - Office Facilities
- ✓Ch. 3 - Transportation-Related Facilities
- ✓Ch. 4 - Energy Conservation

2015 Facilities Infrastructure Plan

Executive Summary

Projected Facilities Infrasructure Needs Construction, Land, Capital, and Support

Fiscal Years 2015-16 through 2019-20

	2014 SHOPP Fiscal Years	2015 Facilities Infrastructure Plan Fiscal Years					
PROGRAMMED IN 2014 SHOPP							
Location/Descriptions	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2015 FIP Total**
Office Buildings	$0	$0	$0	$0	$0	$0	**$0**
Equipment Shops	$0	$0	$0	$0	$0	$0	**$0**
Maintenance Facilities	$0	$0	$0	$0	$0	$0	**$0**
Materials Laboratories	$0	$0	$0	$0	$0	$0	**$0**
TMC	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

2015 Facilities Infrastructure Plan

Chapter 2: Office Facilities

- **Inventory**
  - ✓ **Office Space – Approximately 3.0 million net square feet**
- **Projects**
  - ✓ **Two Office Facility Projects**

- District 1 (Eureka) - Critical Infrastructure Deficiencies
  - Fire, Life Safety corrections and infrastructure upgrade to an 80,800 gsf office building
    - Original Budget: $10,098,000
    - Current Overage: $867,195

- District 4 (Oakland) - Replace Fire Alarm System
  - Fire, Life Safety correction to a 525,000 gsf office building
    - Budget: $7,400,000

2015 Facilities Infrastructure Plan

Chapter 3: Transportation-Related Facilities

Projected Facilities Infrasructure Needs Construction, Land, Capital, and Support

Fiscal Years 2015-16 through 2019-20

	2014 SHOPP Fiscal Years	2015 Facilities Infrastructure Plan Fiscal Years					
PROGRAMMED IN 2014 SHOPP							
Location/Descriptions	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2015 FIP Total**
Office Buildings	$0	$0	$0	$0	$0	$0	**$0**
Equipment Shops	$0	$0	$0	$0	$0	$0	**$0**
Maintenance Facilities	$0	$0	$0	$0	$0	$0	**$0**
Materials Laboratories	$0	$0	$0	$0	$0	$0	**$0**
TMC	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$0	$0	$0	$0	$0	**$0**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$0	$0	$0	$0	$0	**$0**
Support	$0	$0	$0	$0	$0	$0	**$0**
Grand Total	$0	$0	$0	$0	$0	$0	$0

UNPROGRAMMED NEEDS							
Location/Description	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2015 FIP Total**
Office Buildings	$0	$0	$0	$0	$0	$0	**$0**
Equipment Shops	$0	$36,000,000	$69,500,000	$28,963,000	$5,000,000	$3,700,000	**$143,163,000**
Maintenance Facilities	$0	$25,200,000	$4,400,000	$21,000,000	$3,300,000	$36,000,000	**$89,900,000**
Materials Laboratories	$0	$0	$0	$0	$0	$0	**$0**
TMC	$0	$0	$0	$0	$0	$0	**$0**
Construction Totals	$0	$61,200,000	$73,900,000	$49,963,000	$8,300,000	$39,700,000	**$233,063,000**
Land	$0	$0	$0	$0	$0	$0	**$0**
Sub-total (Capital)	$0	$61,200,000	$73,900,000	$49,963,000	$8,300,000	$39,700,000	**$233,063,000**
Support	$0	$19,584,000	$23,648,000	$15,988,160	$2,656,000	$12,704,000	**$74,580,160**
Grand Total	$0	$80,784,000	$97,548,000	$65,951,160	$10,956,000	$52,404,000	$307,643,160

Notes:

Support is estimated at 32% of capital costs for projects not programmed in the 2014 SHOPP.

The Facilities Infrastructure Plan reflects the last three years of the 2014 SHOPP. Fiscal Year 2014-15 is depicted in the table above for illustrative purposes.

2015 Facilities Infrastructure Plan

Chapter 4: Resource Conservation

- **Summary**
  - ✓ Drought State of Emergency
  - ✓ Executive Order B-16-12 (Green Building)
  - ✓ Executive Order B-18-12 (Zero-Emission Vehicles)
  - ✓ Water Efficiency and Conservation
  - ✓ Clean Renewable Energy Bonds
  - ✓ Leadership In Energy and Environmental Design
  - ✓ Other Energy-Efficiency Projects