

CAPITAL OUTLAY & INFRASTRUCTURE REPORT



California
Department
of Finance

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★ 1999 ★



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EXECUTIVE SUMMARY

This report has been prepared to project the State's potential need and funding sources for infrastructure projects for a ten-year period. The report covers 1999-00 through 2008-09. The Department of Finance (DOF) last prepared this Capital Outlay and Infrastructure Report (CO&I) in 1997. In some program areas the difference in reported needs between the 1997 report and this one are significant because of program changes or because departments have become more sophisticated in their ability to report their needs. A reconciliation of the major differences in reported need between the 1997 report and this one is provided in Appendix 1.

This report explores:

- ◆ Why the State invests in infrastructure
- ◆ What the infrastructure needs are for the next decade as reported by state departments
- ◆ Sources for financing ten-year infrastructure needs
- ◆ Matching resources to needs
- ◆ Alternatives to address the imbalance between identified needs and available resources

Caveats: The report assumes current statutes and policies. Information on needs is based on survey responses from departments with no audit of the data by the Department of Finance. In some instances, departments identified possible funding sources and in other instances did not. In some cases, departments submitted infrastructure requests categorized as state-funded local infrastructure; these have been included. Needs do not include rebuilding following natural disasters or needs that are met through self-liquidating financing (e.g. the State Water Project). The potentially significant needs of Calfed¹, high speed rail², and trial and appellate court facilities³ have not been included in this report. In these cases, the actual needs and funding responsibilities have not yet been determined.

1. CALFED is a state-federal partnership charged with developing various alternatives to addressing water supply and water quality problems in the Sacramento-San Joaquin Delta. This report does not include the costs related to CALFED because the "preferred alternative" and funding responsibilities will not be determined until early 2000.

2. The High Speed Rail Authority is currently developing a proposal for a high speed rail network in California, including preparing a plan for the finance, construction, and operation of the rail network in California. This report does not include the costs related to the rail network because the Authority's recommendations will not be available before 2000.

3. The Task Force on Court Facilities is charged with documenting the needs and costs for new or modified court facilities in the state. The Task Force is also charged with making recommendations on funding mechanisms and responsibilities. This report does not include the costs related to the Task Force's recommendations because they will not be available before 2000.

REPORT HIGHLIGHTS

The State's investment in infrastructure is guided both by a policy framework reflecting program priorities (i.e., what types of infrastructure the State should fund) and by practical cost factors.

The policy framework has historically included:

- ◆ Education
- ◆ Public safety
- ◆ Environmental quality and resource stewardship
- ◆ Transportation
- ◆ Other infrastructure supporting critical program operations

The cost factors include:

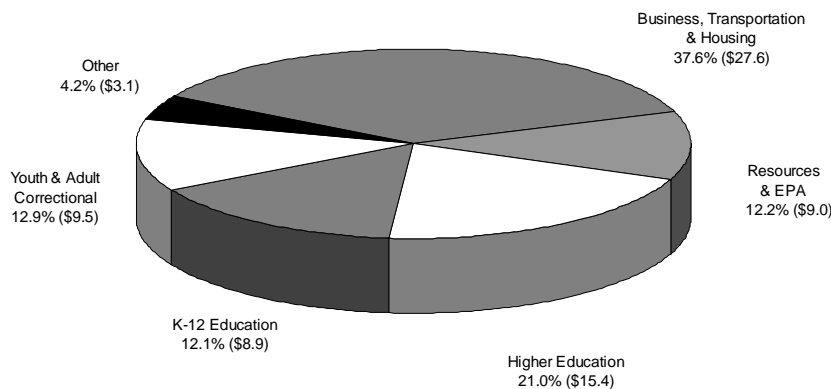
- ◆ Population growth
- ◆ Infrastructure safety
- ◆ The costs/benefits of owning and updating facilities
- ◆ Technology

In total, departments estimated infrastructure needs of \$82.2 billion over the course of the ten-year period covered by this report. \$8.7 billion in existing bond resources are

available to meet this need, leaving a net new need of \$73.5 billion consisting of \$53.3 billion for state capital outlay and \$20.2 billion for state-funded local infrastructure (typically budgeted as local assistance). These needs are reported in current dollars and not adjusted for inflation. Further, to the extent that projects are debt-financed, debt service and interest costs are not included. Figure 1-1 shows the distribution of new funding needs for infrastructure by agency.

FIGURE 1-1

DISTRIBUTION OF TEN-YEAR
NEW FUNDING NEEDS, BY AGENCY
(DOLLARS IN BILLIONS)



The State employs two approaches to funding infrastructure needs: direct appropriations ("pay-as-you-go" funding) and long-term financing through either the sale of bonds or leasing with a pur-

chase option or installment purchase (capitalized leases). Pay-as-you-go capital expenditures totaled \$17.1 billion over the last ten years, excluding capitalized leases which are funded as ongoing state operations costs rather than capital outlay costs. Federal funds contributed the most in direct appropriations—primarily for highway construction—with special funds contributing next in magnitude, and the General Fund contributing the least.

Initial expenditures (not including interest and other financing costs) for long-term financed projects (excluding leases) totaled \$11.2 billion over the last decade. The General Fund is the major source of repayment for borrowing costs. In 1998-99 these costs are estimated to be \$1.9 billion (principal and interest). In general, pay-as-you-go funding is less costly than long-term financing of projects, and general obligation bonds are the least costly of the long-term financing options.

Over the next ten years, the amount estimated as available from federal, special, and other non-General Fund pay-as-you-go sources is \$33.1 billion. Assuming this availability, there is an unfunded balance of \$40.4 billion in infrastructure needs. Survey responses indicate that of this unfunded balance, \$22.2 billion is requested for state capital outlay and \$18.2 billion is proposed as state-funded local infrastructure. The future availability of federal, special, and other non-General Fund pay-as-you-go resources have been projected using recent funding experience as well as departments' forecasts.

If the State were to fund this balance of \$40.4 billion, the most likely source would be the General Fund, either on a pay-as-you-go basis or through long-term debt. It is improbable that the General Fund will be able to support this entire amount over ten years through direct appropriations. Therefore, it is expected the future will follow the pattern of the past decade, that is, some combination of long-term debt and pay-as-you-go funding.

What constitutes a "prudent" or "reasonable" debt position is relative. Both the bond market and the bond rating agencies consider a number of factors when reaching a conclusion about the reasonableness of a state's debt position. For example, even though bond rating agencies examine a state's debt burden and debt per capita, they also consider trends in financial operations and the state's economy as well as management practices. Thus, the same level of debt may be considered either reasonable or imprudent depending upon a state's performance over a range of factors.

This report does not recommend any specific level of bonded indebtedness. However, if a six percent level of debt is assumed as reasonable for the next ten years, the State has a capacity for additional debt of \$32.5 billion. Considering the history of voter willingness to support investment in infrastructure, this amount does not seem unattainable. California voters have approved \$38.4 billion of general obligation bonds since 1972 (excluding self-liquidating bonds) or 71 percent of all proposed general obligation bonds. Past voting behavior suggests voters will support somewhere between \$13.5 billion and \$25 billion of bonds during the next decade. While past voting behavior is not a guarantee of future voting behavior, it does suggest the range of possibilities. The \$32.5 billion

estimate is based on issuing only general obligation bonds and assumes that all proceeds would be used for infrastructure. Subtracting this \$32.5 billion of long-term funding from the \$40.4 billion of unfunded ten-year needs leaves a \$7.9 billion balance. The burden of paying this balance likely would fall to General Fund pay-as-you-go appropriations, if all identified needs were to be funded.

The report does not recommend any specific General Fund amount for pay-as-you-go infrastructure over the next ten years. Past policy has been to use the General Fund sparingly for pay-as-you-go capital outlay expenditures, usually when no other fund source was practical and the needs were critical. **However, if one assumed annual General Fund expenditures of \$150 million per year for pay-as-you-go infrastructure, then \$1.5 billion would be available to meet needs over the next ten years.**

FIGURE 1-2

MATCHING FUNDING SOURCES TO NEED (DOLLARS IN BILLIONS)		TOTAL
Gross needs reported by departments		\$82.2
<i>Less existing bond funding</i>		-8.7
Net new funding needs		\$73.5
<i>Less available federal, special, and other non-General Fund pay-as-you-go funds</i>		-33.1
Balance left for bonds or General Fund pay-as-you-go		\$40.4
<i>Less assumed GO bond availability</i>		-32.5
Balance left for General Fund pay-as-you-go		\$7.9
<i>Less assumed \$1.5 billion General Fund pay-as-you-go</i>		-1.5
UNFUNDED BALANCE		\$6.4

Considering all these *possible* funding sources and levels of commitment, the conclusion is that there is still a net balance of at least \$6.4 billion in unfunded infrastructure demand, as displayed in Figure 1-2. How should the State address those needs?

The State will likely have to live with some level of imbalance. The possibility that some needs cannot be funded should increase attention on setting priorities, and will heighten competition for limited resources. The significant imbalance between infrastructure demand and available resources will place considerable pressure on the General Fund to meet the most critical program requirements (either through long-term financing or pay-as-you-go strategies).

This report identifies some alternatives to address the imbalance:

- ◆ Increase the ability of local school districts to raise construction revenues by establishing a simple majority vote requirement for local school bonds and requiring districts to match state funds for school construction
- ◆ Reduce or eliminate state support for other primarily local responsibility infrastructure
- ◆ Develop methods of program delivery that reduce the need for capital outlay and infrastructure (e.g., telecommuting, increased used of year-round schools and universities)

- ◆ Commit a higher level of General Fund to pay-as-you-go infrastructure
- ◆ Expand the use of long-term financing strategies for infrastructure
- ◆ Expand use of privatization
- ◆ Commit a fixed portion of revenue for infrastructure

Each of the above approaches involves significant policy choices:

- ◆ Reducing state support for local infrastructure places more pressure on local governments to finance their own projects and may mean some needs will not be addressed. Further, public infrastructure may be unevenly developed among communities because communities are not equally able to support funding infrastructure.
- ◆ Program and policy changes intended to reduce facility needs may not be readily accepted. For example, more intense use of higher education facilities through a year-round program would result in reduced demand for additional facilities, but students and faculty may object to year-round schedules, and more intense use of facilities may increase operating costs and maintenance.
- ◆ Expanding the use of the General Fund for pay-as-you-go capital projects reduces resources available for other priorities and program operations.
- ◆ Increasing bond debt to higher levels ultimately increases the commitment of the General Fund through debt service payments and could affect the state's credit rating.
- ◆ Privatization is not always less expensive than public operation, and there is significant controversy over the public policy merit of privatizing certain functions.
- ◆ Committing a fixed amount of resources to infrastructure needs limits flexibility in a budget process that is already severely constrained by constitutional and statutory limitations.

WHY DOES THE STATE INVEST IN INFRASTRUCTURE?

An investment in infrastructure is an investment in California's future. The state's schools, highways, bridges, water systems, public safety facilities, and natural resources are the framework for individual and collective quality of life. Without a strong framework, both the private and public sectors of the economy will falter. Additionally, there is a significant indirect benefit from the influx of construction dollars to both state and regional economies from state-funded infrastructure projects.

Investment in infrastructure must be guided by a sense of where the greatest social and economic returns are achieved. The state's investment principles are shaped both by a *policy framework*, reflecting program priorities, as well as by practical *cost factors* in maintaining existing infrastructure to meet program needs.


THE POLICY FRAMEWORK

Education: The state's system of public instruction encompasses an estimated 7,900 K-12 public schools as well as 9 campuses for the University of California, 22 campuses for the California State University, the Hastings College of Law, and 71 community college districts with 161 primary and satellite campuses.

Universal access to a free primary and secondary education is elemental to an informed democratic society. Ensuring adequate schools for California's children has been, and likely always will be, among the highest priorities for funding of public infrastructure.

An educated citizenry built on the foundation of primary and secondary education promotes both economic advancement and general social well-being. Projected enrollment growth of an average of 50,000 students per year creates pressure for facilities. These needs are for both new facilities and for renovation and renewal of existing facilities. Even though the provisions of Proposition 13 were modified in 1986 to reestablish the authority for tax levies for school construction with a two-thirds voter approval, some school districts have found it difficult to pass local bonds. As a result, districts continue to seek state-funded grants for school construction. The fundamental expectation on the part of taxpayers that the state provide adequate infrastructure for schools has resulted in the state providing funds for local education infrastructure.

For decades, California's higher education programs of instruction, research, and public service have been an important factor in both the society and economy of the state. These programs provide men and women from all segments of society with educational opportunities and prepare them for leadership in our communities, commerce and industry, and science. Well-prepared graduates are essential to sustaining California's economy.



The state's capital program for higher education must respond to several types of infrastructure needs. One of these is obsolescence. As commerce, industry and science evolve in response to new knowledge and opportunities, so must the academic programs that prepare graduates to enter those fields. Unless academic facilities are renovated and updated to meet changing program needs, these facilities can become constraints for both students and the business communities that require graduates trained in new evolving programs as well as traditional academic skills.

Other factors affecting postsecondary institutions include wear and decline associated with facility aging and intensive use. Many older buildings were designed to meet building, fire, safety, and accessibility codes that have changed dramatically in subsequent decades. Structural deficiencies related to seismic safety also must be addressed.

Public Safety: Out of a desire to increase public safety, numerous laws have been enacted in recent years which establish new crimes or lengthen sentences. Coupled with general population growth, one result of these new policies is that more criminals are now being sentenced to state and local correctional institutions, and for longer periods of time.

California has invested significantly in new prison facilities over the last 15 years, completing additional housing capacity for more than 114,000 felons with capacity for an additional 1,900 felons recently authorized. The designs of these facilities are durable, allowing operation at higher levels of occupancy and lower staff-to-inmate ratios than in other states.

However, this expanded capacity will be insufficient by the year 2000. Without new prisons, a reprioritization of who is incarcerated or additional alternatives to incarceration, extreme levels of crowding will exist, challenging the Department of Corrections' ability to manage the institutions in an effective and safe manner for both inmates and staff. The most excessive situations could result in federal courts intervening to release felons early to keep conditions in the prisons tolerable.

Transportation: Long-term economic growth is linked to adequate transportation systems that maintain California's competitiveness as a center of commerce and industry. To accommodate an expanding work force and to sustain and promote California's growing economy, it is necessary to maintain existing highway and fixed rail systems, as well as add to the transportation infrastructure now in place.

During the decades of the 1950s, 1960s, and 1970s, the State invested heavily in the development and expansion of its highway and mass transit systems. During the 1980s and 1990s, the emphasis on transportation spending has shifted primarily to maintenance of the system and improving its weaker links. Congestion, disasters, and wear all drive expenditures to maintain the safety and reliability of the system. These needs, although they vary from year to year, are expected to increase over the next ten years due in part to the aging of the construction completed in past decades. The administration of the program has also undergone significant changes with the passage in 1997 of Senate Bill 45. The new law consolidated several programs in the State Transportation Improvement Program and increased the programming and project management responsibilities of the locals.

In recent years, significant safety-related capital costs have been incurred to retrofit highway bridges for seismic problems identified following the Loma Prieta and Northridge earthquakes. The first phase of this effort was largely completed by the end of 1995-96. The second phase of highway bridge retrofit, which is expected to continue for several years, is projected to cost \$1.35 billion for design and construction. Caltrans is also undertaking a study to determine the seismic status of its inventory of highway-related facilities. It is reasonable to assume that this study will indicate a need for funds to retrofit some portion of those facilities. These costs have not been included in this report.

The cost of the retrofit of the state's toll bridges is \$2.6 billion dollars. The retrofit strategy includes replacement of the east span of the San Francisco-Oakland Bay Bridge. The funding for the toll bridge seismic retrofit program is comprised of bond proceeds from the passage of Proposition 192, state funds, toll revenues and local funds in the form of a temporary one dollar toll surcharge for the Bay Area bridges.

Environmental Quality and Resource Stewardship: California enjoys diversity of natural resources elemental to the quality of life in the State. By investing in programs that protect environmental quality and preserve natural resources, California realizes several significant benefits:

- ◆ The public is safeguarded from fire, floods, environmental contaminants, and other hazards.
- ◆ The State conserves its land, wildlife, minerals, and areas of natural beauty for current and future generations.
- ◆ The public is assured access to coastal beaches, lakes, and mountain areas.
- ◆ A positive business environment is fostered by offering a desirable quality of life—an important factor for businesses in deciding where to site their operations—and by fostering tourism.

Forest fire facilities, flood control systems, and safe drinking water treatment facilities protect the public. Land acquisitions and restoration projects support conservation of wildlife habitats and other sensitive lands. Acquisition of easements protect public access to the California coastline. Park development provides recreational and tourism-related business opportunities.

Other Government Infrastructure: In other policy areas, the primary infrastructure need is for state facilities which house program operations, such as:

- ◆ State hospitals and developmental centers
- ◆ Crime laboratories
- ◆ Laboratories for testing the safety of water, air, and food
- ◆ Agriculture inspection stations
- ◆ Veterans' homes
- ◆ Field offices for various programs providing statewide services
- ◆ State office buildings



COST FACTORS

Within this general policy framework, infrastructure decisions are based on several cost factors and practical considerations.

The population the State serves continues to grow. State infrastructure is serving an expanding population on highways, in schools, and in other public facilities. Since 1990, California's overall population has grown by 12 percent. As of January 1998, California's population was 33 million. California's population will continue to grow because of the State's good economic climate, its lure as a destination of opportunity, and its large population of young Californians becoming adults and starting families. Current estimates indicate that state population will grow to 40 million people by 2009, an increase of 7 million. To accommodate these new Californians, the capacity of the State's infrastructure also will have to grow.

State infrastructure must be safe. The state's capital outlay policies have historically given high priority to correcting safety problems in state infrastructure. Every day, millions of Californians travel on California's highways and bridges; conduct business in state office buildings; visit state parks; rely on levees for flood protection; and spend time in schools, community colleges, and universities. In addition, thousands of state employees depend on the State of California as their employer to provide a safe working environment.

Typical safety projects correct seismic structural problems, falling hazards, faulty electrical configurations, and lack of adequate fume hoods in laboratories or fire sprinklers in high-occupancy facilities. Security issues are a significant concern for departments such as Corrections, Justice, Youth Authority, Mental Health, and Developmental Services. The State also addresses facility deficiencies such as inconsistencies with the Americans with Disabilities Act and violations of the California Building and Health and Safety Codes, in conjunction with other projects. Maintaining facilities is also a means of cost avoidance since unsafe facilities create circumstances that result in liabilities.

Owning and updating facilities can reduce future costs. The State is a major tenant in metropolitan areas around California. Consolidating various agencies in state-owned facilities in high-density areas can often result in significant long-term savings when compared to leasing. Even in more remote areas, opportunities arise to purchase facilities at savings over long-term lease rates. In addition, ownership is often a cost-effective option for specialized facilities. The State also realizes savings by updating state-owned facilities to extend their useful life and adapt them to changing program needs. In some instances it may be more cost-effective to construct new facilities than to perform extensive renovations, especially when the renovations include significant seismic and asbestos components.

Capital investment in technology provides opportunities to better serve. Investments in infrastructure provide an opportunity to improve state services. For example, telecommunications infrastructure in higher education facilities is becoming essential for modern

institutions of higher learning, expanding access to information and providing the ability to deliver instruction to multiple campus sites simultaneously. Technological improvements in facilities can assist state departments in providing enhanced services in an efficient, cost-effective manner to the public.

WHAT ARE THE TEN-YEAR INFRASTRUCTURE NEEDS?

The Department of Finance surveyed state departments in June 1998 to identify infrastructure needs in total, by fiscal year, and by fund source. The 1998 survey asked departments to report capital outlay separately from state-funded local infrastructure. Except where noted, the data have not been edited or prioritized.

Not all departments have facility experts on staff; therefore, the methodology and accuracy of estimates probably vary. However, the organizations that represent the largest need (e.g., Department of Corrections, the California State University, the University of California, Caltrans, the Department of General Services) all have professional planning staff. Consequently, in the aggregate these figures represent reasonably sound estimates of future capital outlay needs. Unless noted otherwise, the estimates assume program operations will continue to be guided by existing law and policies.

In total, departments estimated infrastructure needs of \$82.2 billion. Departments reported \$8.7 billion of existing bond authorization available to fund future projects.

The need for new funding authority, therefore, is \$73.5 billion, consisting of \$53.3 billion for state capital outlay and \$20.2 billion for state-funded local infrastructure (typically budgeted as local assistance, not capital outlay).

Figure 3-1 summarizes gross needs for each year through 2008-09. Annual needs peak in 1999-00 and 2000-01 with a gradual downward trend beginning 2003-04 and substantially leveling after 2004-05. The downward trend might be spurious: the longer the projection, the more difficult it is to anticipate needs.

FIGURE 3-1

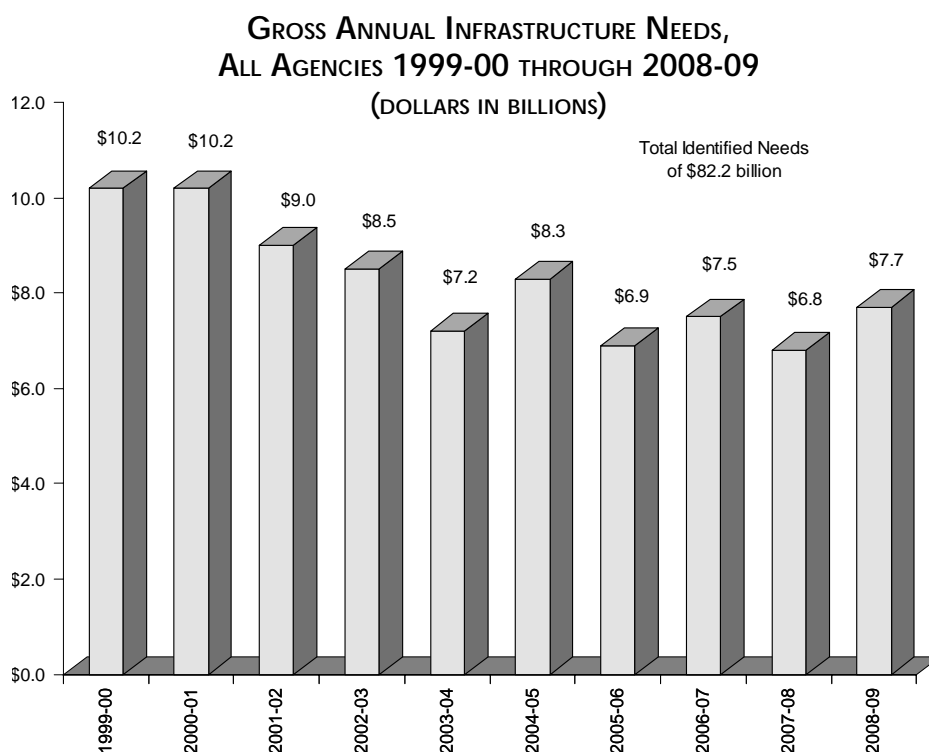
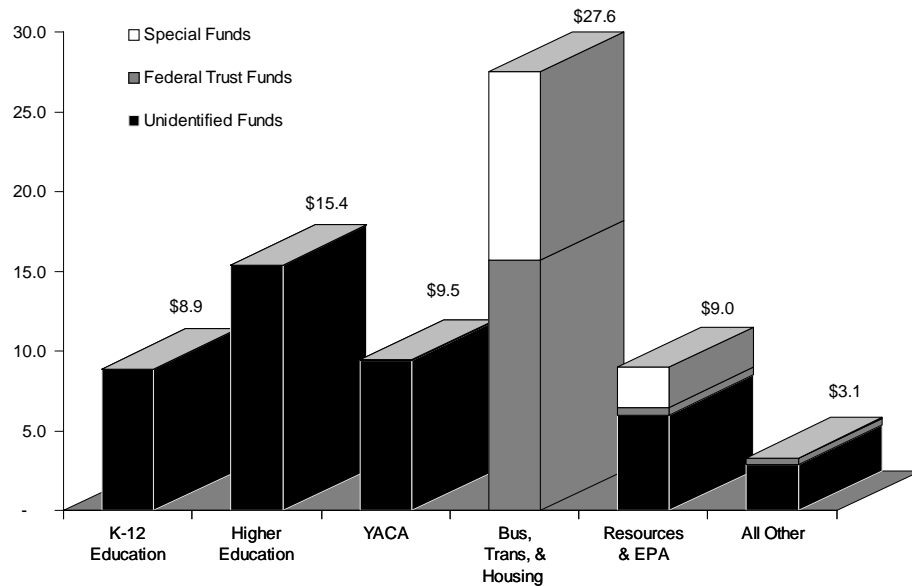


Figure 3-2 summarizes new funding needs by agency and fund source. The majority of identified needs is in two policy areas: education (K-12 and higher education) and transportation.

FIGURE 3-2

**NEW FUNDING NEEDS BY AGENCY AND FUND SOURCE
AS IDENTIFIED BY AGENCIES, 1999-00 THROUGH 2008-09
(DOLLARS IN BILLIONS)**



K-12 EDUCATION

K-12 infrastructure needs are reported in three areas: new school facilities, modernization, and deferred maintenance. The ten-year infrastructure need for primary and secondary schools is estimated at \$14.1 billion. Of the \$14.1 billion, existing bond authority will cover \$5.2 billion, leaving a net new funding need of \$8.9 billion (see Figure 3-3).

FIGURE 3-3

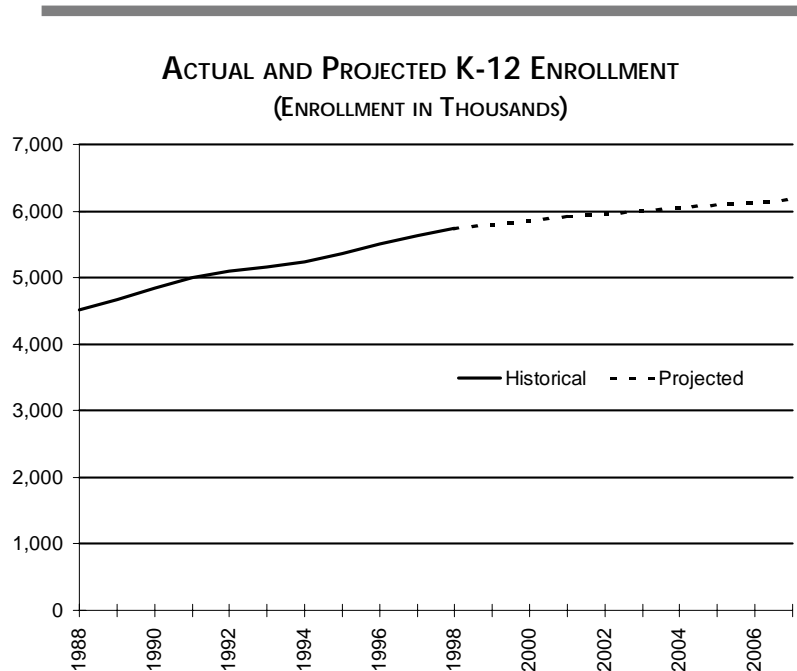
**TEN-YEAR NEW FUNDING NEEDS
REPORTED BY EDUCATION SEGMENTS
(DOLLARS IN MILLIONS)**


SEGMENT	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
K-12	—	\$ 8,744.6	\$ 8,744.6
State Special Schools & Services	96.3	—	96.3
California State Library	15.8	—	15.8
TOTAL	\$ 112.1	\$ 8,744.6	\$ 8,856.7

The demand for new school construction rises with the increase in school-age enrollment projected over the next ten years. The Department of Finance Demographics Research Unit (DRU) projects an increase in enrollment from 5.7 million students in 1998 to 6.2 million student in 2007. This equates to an average of 50,000 students per year (see Figure 3-4). In addition, the needs for remodeling and rehabilitating existing school sites will increase as school facilities continue to age and instructional techniques change due to technology and curriculum reform, including class size reduction.

From 1982 through 1998, voters have authorized nearly \$19 billion in state general obligation bonds, including the K-12 share of the \$9.2 billion bond

FIGURE 3-4





approved on the November 1998 ballot. Funds from the 1998 bond will be allocated over a four-year period. The bond will provide \$6.7 billion for K-12 facilities, including \$2.9 billion for new construction, \$2.1 billion for modernization, \$1 billion for hardships, and \$700 million for new K-3 Class Size Reduction facilities.

School Construction Reforms. Proposition 1A, on the November 1998 ballot also included significant reforms in the state school building program which should have the effect of reducing the cost of meeting K-12 facilities needs. For example, while the previous school building program required 64 steps and five to seven years to complete a project, the new program will streamline the project approval process significantly, which should mitigate the impact of inflation on the costs of delayed projects. The new program also contains school district eligibility requirements which ensure districts maintain their facilities and increase their local contribution for deferred maintenance, measures that should result in reduced need for rehabilitation and deferred maintenance expenditures in the future. The program also contains accountability provisions to ensure state facility funds are expended in an appropriate and timely manner. While these measures should reduce the cost of meeting future K-12 infrastructure needs, it is not possible, at this time, to quantify those savings.

Finally, the new building program establishes a new process for determining the amount of fees that developers may be charged to mitigate the impact of development on school facilities. This reform establishes a statutory cap on fees, allowing school districts to exceed this cap only under specified conditions. Fees in excess of the cap are allowable only up to the amount of funds which the district would be eligible to receive from the State under the new grant program. This feature will reduce the cost to developers and homebuyers of constructing K-12 facilities, however, it will increase the share of funding for which the State and school districts are responsible.

Impact of Class Size Reduction on School Facilities: In 1996 California established the Class Size Reduction Program. The program provides incentive funding to reduce class size in grades kindergarten through 3 to no more than 20 pupils per teacher in each class. The Class Size Reduction Facilities Funding Program was also established in 1996. It is designed to assist school districts with facilities related costs associated with the reduction in average class size from 30 to 20 pupils. The new school facilities bond provides \$700 million for up to 17,500 additional grants of \$40,000 per new classroom for the program. In addition to fully funding the kindergarten through grade 3 Class Size Reduction Program, California has expanded the level of funding provided for its high school Class Size Reduction Program. This program provides incentive funding to reduce class size from 30 to 20 students per teacher in two classes of the 9th grade curriculum; one class must be English and the other apply towards graduation requirements. This increased level of participation could increase high school facilities needs by up to 6 percent and K-3 needs by up to 40 percent. This reported need for K-12 includes these assumptions.

Department of Education—State Special Schools: The State Special Schools and Services Division (Division) provides diverse and specialized services and resources to individuals with exceptional needs, their families and service/care providers. The

Division provides technical assistance, assessment services, educational resources and educational programs which prepare students for transition to adulthood, and promote their independence, cultural awareness and personal growth. The Division has six facilities under its jurisdiction, three schools and three diagnostic centers. The facilities include schools for the deaf, in Fremont and Riverside, and a school for the blind, in Fremont. The diagnostic centers are located in Fresno, Fremont and Los Angeles. These facilities, which comprise 949,000 gsf on 176 acres, serve a student population of nearly 3,000. The Division currently has 1,045 employees, located in Sacramento, Fresno, Los Angeles, Fremont and Riverside.

The Division estimates that it will have capital outlay needs exceeding \$96.3 million over the next ten years. Fulfilling these reported needs would assist the Division by providing renovation and/or replacement projects to address the following conditions: aging facilities; seismic deficiencies; technological obsolescence; code compliance and criteria of the Americans with Disabilities Act.

Department of Education—California State Library: The California State Library provides assistance to individuals, governments and public libraries in meeting their knowledge and information needs. The State Library, with a staff of 208, provides library services to a variety of users both directly and indirectly, through other libraries. The State Library maintains the following facilities: Office Building 1 and the Library and Courts Annex Building, both in Sacramento; and, the Sutro Library in San Francisco.

The State Library estimates that it will have capital outlay needs of \$15.8 million over the next ten years. Fulfilling these reported needs would address renovation or replacement of the Sutro Library.

POSTSECONDARY EDUCATION

Higher education segments reported ten year needs of \$17.3 billion consisting primarily of capital outlay. Of the \$17.3 billion, existing bond authority will cover \$1.9 billion, leaving \$15.4 billion in net new funding needs (see Figure 3-5).

FIGURE 3-5

**TEN-YEAR NEW FUNDING NEEDS REPORTED BY HIGHER EDUCATION SEGMENTS
(DOLLARS IN MILLIONS)**

SEGMENT	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
Community Colleges	\$4,703.3	\$1,744.7	\$6,448.0
University of California	4,703.1	—	4,703.1
California State University	4,264.9	—	4,264.9
Hastings College of Law	7.2	—	7.2
TOTAL	\$13,678.5	\$1,744.7	\$15,423.2

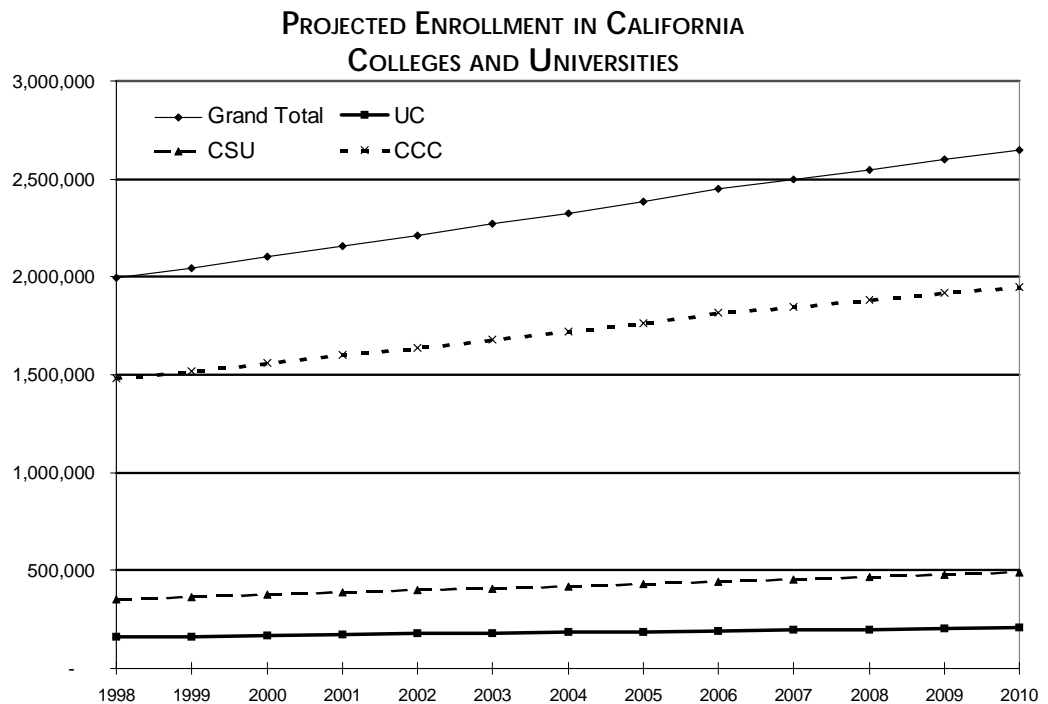


To retain their excellence, California's institutions of higher education need capital improvements to address:

- ◆ A significant surge in enrollments over the next ten years caused by population growth (see Figure 3-6)
- ◆ Technological or functional obsolescence of existing space
- ◆ Deteriorating facilities
- ◆ Code requirements, including seismic safety and the Americans with Disabilities Act
- ◆ Emerging new program areas
- ◆ Changes in instructional technique

Proposition 1A, the Public Education Facilities Bond Act of 1998 authorized \$2.5 billion in capital outlay funding for the higher education segments, of which \$1.9 billion is available for future projects. These funds will meet 10.7 percent of the \$17.3 billion ten-year needs reported by the higher education segments.

FIGURE 3-6



The infrastructure needs of the three segments reflect not only differing enrollments, but also differing costs per square foot for construction which vary because of differences in mission among the segments (i.e., curriculum and research needs). In addition, each segment has varying access to non-state funds (e.g. private contributions and federal grants) to assist in financing its needs.

California Community Colleges (CCC): CCCs form the largest post-secondary educational system in the world, currently serving over 1.5 million students (917,000 full-time equivalents) through both vocational and academic program offerings. The system estimates that the number of students will increase to nearly 1.9 million by the year 2007. (1,125,000 full-time equivalents).

The system's infrastructure consists of 71 community college districts with 107 full service campuses, 54 approved off-campus centers, and 20 district offices. Assets include approximately 20,489 acres of land, 4,094 buildings, and 35.7 million assignable square feet of space (50.8 million gross square feet). In addition, the system has over 2,000 off-campus outreach centers at various leased facilities.

CCCs' capital outlay project priorities are health and safety, infrastructure correction, equipment to complete previously approved construction projects, renovation/expansion needs of instructional and library areas, and projects needed to complete masterplans of existing campuses.

Funding for CCC capital projects over the past ten years totaled \$1.7 billion, fluctuating from a high of \$424 million in fiscal year 1993 to a low of \$77 million in fiscal year 1995.

CCC Board of Governors has identified district needs of \$7.1 billion in state-funded infrastructure over the next ten years. The \$7.1 billion is composed of \$5.3 billion in traditional capital outlay projects and \$1.8 billion in state-assisted local infrastructure projects (scheduled maintenance, hazardous substance abatement, access requirements, etc.). Of the \$7.1 billion reported; \$612 million in existing bond funds is available for projects, leaving a net new need of \$6.5 billion. Capital needs through 2003-04 are based on the colleges' five-year plans; the needs for the remaining five years are extrapolated from those plans and also include anticipated growth.

University of California (UC): Currently, UC's facilities include approximately 5,015 buildings on nine separate campuses and related facilities, with a total assignable area of approximately 53 million square feet. In addition, UC owns and maintains nearly 28,000 acres of land.

In 1998-99 the University's existing general campuses have a budgeted enrollment of approximately 147,000 full-time equivalent (FTE) students. While the present facility capacity is about 95 percent of what should be available for those students, facility capacity relative to enrollment will continue to decline through 2002-03. Even with the new facilities that are expected to be completed by that time, UC reports that facility capacity university-wide will be about 90 percent of need, based on UC's estimate of

expected enrollment of 159,700 general campus FTE students. UC anticipates having to expand facilities to accommodate over 45,000 new students by the year 2010.

For the ten years ending June 30, 1999, the State has provided UC with over \$1.7 billion in funds for capital outlay purposes. Since 1995-96, the State has provided \$150 million per year for capital outlay, consistent with a funding and performance compact between the State and higher education. During the term of the four-year compact, the University of California funded projects for construction which, when completed, will add 11 new buildings and an estimated 517,000 square feet of new assignable area to UC's campuses and related facilities, in addition to implementing seismic and life-safety corrections and renovating existing facilities.

For the past several years, UC's primary emphasis has been on seismic corrections, renovations to address critical fire and life-safety deficiencies, renewal of aging facilities, and improving and replacing the University's physical infrastructure, including water, sewer, utility, and mechanical and electrical systems. For the future, UC is planning to address seismic and life-safety corrections and building renewal and infrastructure needs.

Increasingly, however, UC expects the emphasis to shift to enrollment projects. Current demographic projections indicate a steady increase in student enrollment through 2010. To accommodate the expected enrollment growth, capital funding will be needed for new facilities on existing campuses and to help build a new campus in Merced. UC anticipates that, over the next four years, about one-half of total future capital funding will be devoted to projects related to enrollment growth.

This report reflects ten-year needs for UC of \$5.3 billion. Of this \$5.3 billion, \$600 million of existing bond authority is available to address the needs, leaving a net new need of \$4.7 billion. These funds would address urgent seismic and other life-safety corrections, essential building renewal and infrastructure deficiencies, and enrollment growth needs. One approach UC is utilizing to address the shortfall for state-supportable programs is to vigorously pursue funds from the private sector wherever there is an opportunity. However, these sources have practical limits. UC will also rely heavily upon the provision of special Federal Emergency Management Agency funding and private support to address the special seismic problems at Los Angeles, but notes that the availability and/or sufficiency of resources is uncertain.

California State University (CSU): The California State University system is comprised of 22 full-service campuses (including the Maritime Academy), with physical plant assets of approximately 16,000 acres of real property and over 22.5 million assignable square feet of space (34 million gross square feet). The CSU system also includes seven off-campus teaching centers and 25 special program off-campus facilities such as biological study preserves and marine laboratories.

During the ten-year period 1989-90 to 1998-99, the State provided CSU with over \$1.7 billion in capital funding. Consistent with the higher education compact, the State provided CSU with capital funding of \$150 million per year during the four-year period ending 1998-99. During this four year period CSU's priorities included seismic safety,

infrastructure and building renovation, and limited growth. Consistent with this, the State funded 37 seismic retrofit projects, 75 infrastructure and building renovation/replacement projects and 5 growth projects, during the compact period.

CSU has identified state-funded infrastructure requirements of \$4.9 billion over the next ten years. Of the \$4.9 billion, \$600 million represents existing bond funds, leaving a net new funding need of \$4.3 billion. Although CSU did not provide an estimate of the amount of non-state funds available for capital outlay projects, this funding source has traditionally provided approximately 20 percent of CSU's total capital outlay program expenditures.

The first five years of the ten-year projection includes the Trustees' five-year capital improvement program and estimated capital outlay needs for the last five years. These estimates were based on the five-year capital improvement program and include a component for enrollment growth.

The ten-year projection includes cost estimates for projects to address the following:

- ◆ Improvement of campus telecommunications infrastructure to meet the current technology requirements of educational program delivery
- ◆ Continuing the seismic retrofit of the initial 117 buildings identified in the CSU's Seismic Safety Action Plan
- ◆ Upgrade of deteriorating utility and physical plant infrastructure systems
- ◆ Compliance with ADA requirements for access
- ◆ Implementation of mandated code changes related to health and safety issues
- ◆ Capital projects needed to meet projected future enrollment growth

Considering the capacity provided by all capital projects completed by June 30, 1998, CSU believes the system capacity is sufficient to address the estimated 1998-99 target enrollment of 268,320 full-time equivalent students (FTEs). However, CSU estimates that enrollment demand will increase by as much as 75,945 FTEs over the next decade, with estimated 1999-00 target enrollment of 275,875 exceeding systemwide capacity by nearly 6,000 FTEs. While CSU's primary focus over the next few years will continue to be seismic, fire/life-safety, and vital infrastructure projects, CSU notes that the projected increase in enrollment demand will require a shift in priorities to projects supporting enrollment growth.

Hastings College of Law: Hastings, founded in 1878, is an independent affiliate of the University of California. Hastings maintains an enrollment of approximately 1,200 students for its full-time three-year juris doctor degree. Hastings is an urban campus located in San Francisco's Civic Center area and operating from three state owned buildings. These buildings total over 580,000 square feet.

Hastings identified \$7.2 million in facility needs over ten years for its relatively small campus.

YOUTH AND ADULT CORRECTIONAL AGENCY

The Youth and Adult Correctional Agency provides coordination and budget and policy direction for those departments who provide for the incarceration of the state's adult and youthful offenders. Youth and Adult Correctional Agency departments report a ten-year need of \$9.5 billion, of which \$6.1 billion is capital outlay and \$3.4 billion is local assistance (see Figure 3-7).

FIGURE 3-7

**TEN-YEAR NEW FUNDING NEEDS
REPORTED BY CORRECTIONAL DEPARTMENTS
(DOLLARS IN MILLIONS)**

DEPARTMENT	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
Department of Corrections	\$5,538.3	—	\$5,538.3
Youth Authority	577.0	—	577.0
Board of Corrections	—	\$3,370.8	3,370.8
TOTAL	\$6,115.3	\$3,370.8	\$9,486.1

The primary state infrastructure need for the Youth and Adult Correctional Agency is housing capacity for incarceration of adult and juvenile offenders. In addition, counties look to the State for assistance in funding their adult and juvenile detention facilities. The factors affecting the number of new cells/beds needed include:

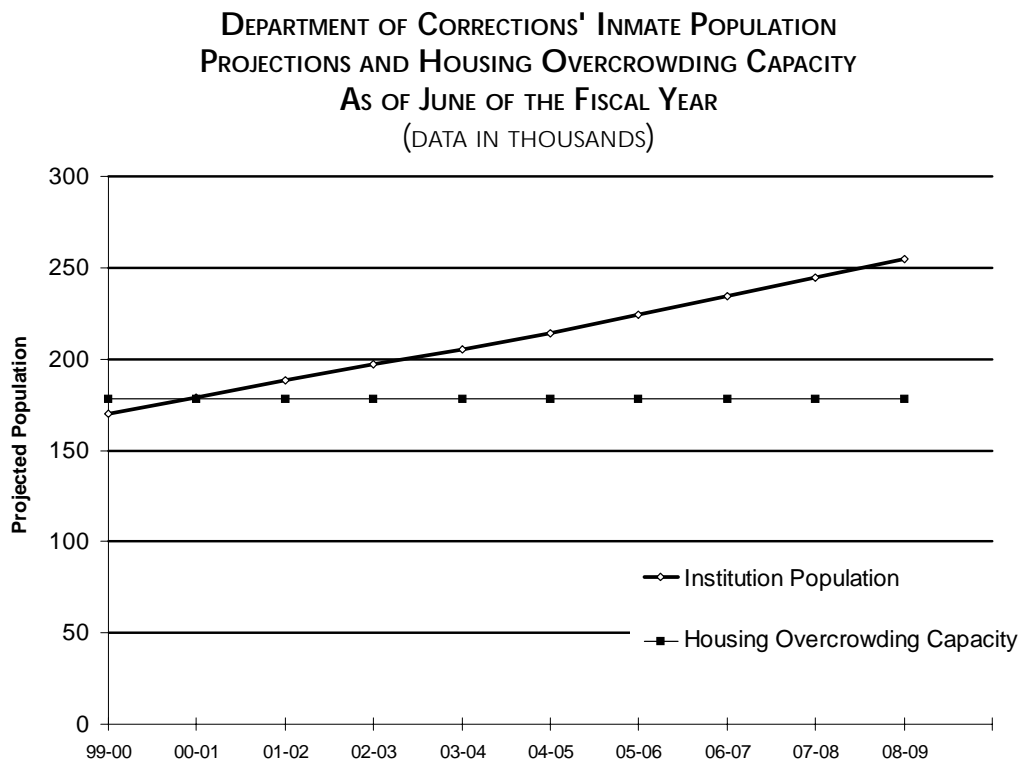
- ◆ Population growth
- ◆ Crime rates
- ◆ Creation of new criminal penalties
- ◆ Statutory increases in sentences
- ◆ Crowding policies
- ◆ Statutory policies on work/behavior credits
- ◆ Availability of existing, unused cell/bed space
- ◆ Effectiveness of law enforcement and prosecutors
- ◆ Criminal alien felons incarcerated in state prisons instead of federal prisons
- ◆ Alternatives to incarceration
- ◆ Programs that reduce recidivism

The factors which affect the cost of cells/beds include:

- ◆ Security classification systems, which place some prisoners in more secure but costly facilities, and other prisoners in less costly lower-level security facilities. In turn, these classification systems are affected by trends in prisoner behavior—particularly violence.
- ◆ Facility design, which affects the number of staff needed as well as annual operational costs.
- ◆ New program services or facility renovations required by court orders stemming from lawsuits—e.g., renovation of housing and support structures at older prisons, mental health and drug treatment program facilities for inmates, and Americans with Disabilities Act requirements.

California Department of Corrections (CDC): The CDC is responsible for the control, care and treatment of men and women who have been convicted of serious crimes, or those admitted to the civil narcotic program. CDC currently incarcerates 159,000 adult felons in 33 prisons and 38 conservation camps located in 18 counties. Also included in the incarceration number are 10,000 felons housed at public and private community correctional facilities. The state prison system has permanent, temporary and emergency housing capacity for approximately 178,000 inmates (see Figure 3-8). Although Califor-

FIGURE 3-8



nia has engaged in an aggressive prison construction program for the past 15 years, housing capacity lags behind projected prison population growth. Many of these beds (including triple bunks in gymnasiums and double bunks on the dayroom floors of medium-security cell blocks) present a high level of risk for staff and inmates and have been considered temporary until appropriate housing can be constructed. However, even these strategies are insufficient. By mid-2001, CDC will be out of bed capacity, including all temporary and emergency accommodations. By June 2007, CDC estimates that the prison system will need space for an additional 87,000 felons.

Over the past ten years CDC has spent approximately \$3.2 billion on building new facilities as well as remodeling and updating its existing facilities.

CDC estimates needs of \$5.5 billion over the next ten years to further renovate and expand the prison system to handle the projected growth. These needs have not been adjusted for the future impact of recently enacted legislation requiring more drug treatment beds and changes to the parole system. Administrative office needs for the department are included in totals for the Office Building Program.

California Department of Youth Authority (CYA): CYA is responsible for the incarceration, education and treatment of the State's youthful offenders. The current population of 8,000 is housed in 11 institutions, 6 conservation camps and various contract facilities which have a total design capacity of 6,672 beds. By June 2007, CYA estimates it will be housing 2,000 more youthful offenders than its system was designed to handle. (see Figure 3-9).

Over the last ten years, approximately \$103.6 million has been spent on constructing new facilities and upgrading existing facilities.

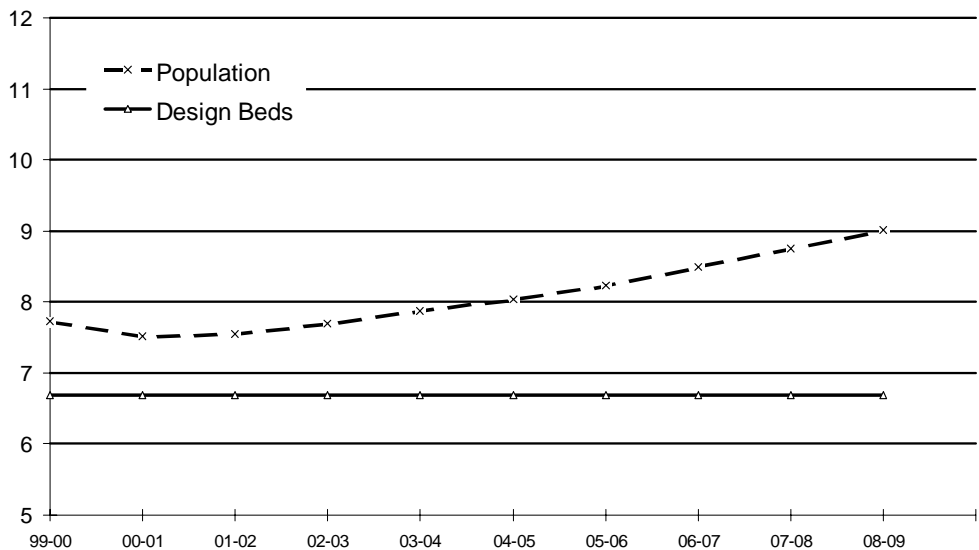
CYA estimates it would need \$577 million to expand and renovate juvenile facilities over the next ten years to meet its needs. Over the shorter term, it proposes 300 new secure single-room violent offender program units by 2003. This estimate of need assumes:

- ◆ An initial population reduction (resulting from Chapter 195, Statutes of 1996, which transfers "M-Cases"—individuals who were sentenced to CDC, but were serving time at CYA—from CYA to CDC when the wards reach age 18), followed by a net increase in population beginning in 2001.
- ◆ Operating facilities at crowded levels to recognize projection uncertainties (i.e., to avoid overbuilding).
- ◆ Adequate deferred maintenance funding to avoid accelerated infrastructure deterioration.

This estimate of need also recognizes the changing population within the Youth Authority due to the increasing level of violent offenders committed to the Department. This increase is partially a result of legislative change which resulted in counties being charged higher fees to send their less violent youthful offenders to the state system and lower fees to send their more violent offenders to the Youth Authority.

FIGURE 3-9

DEPARTMENT OF THE YOUTH AUTHORITY POPULATION PROJECTIONS AND INSTITUTION DESIGN CAPACITY AS OF JUNE 1 OF THE FISCAL YEAR
(DATA IN THOUSANDS)



NOTE: "Beds" represent the institutional design capacity of authorized institutions and camps as of June 30 for each fiscal year. Projected population reflects all approved "bed-saving" alternative programs.

Board of Corrections (BOC): BOC helps counties fund their jail construction by setting standards for local jails and juvenile detention facilities and allocating state funds for construction. Currently there are 456 county jails with a capacity of nearly 71,000 adult beds. There are 57 juvenile halls and 59 juvenile camps statewide which have a total capacity of 11,488 beds.

Since the program's inception in 1980, \$1.5 billion has been authorized from general obligation bonds, along with both General Fund and Federal Crime Bill funds. All funds have now been allocated, but adult and juvenile detention populations continue to outpace the current local capacity.

BOC anticipates the need for \$3.4 billion for adult jail construction housing over the next ten years to avoid a bed shortfall of over 55,000 statewide by 2009. This estimate does not consider the need to replace or expand existing facilities because of age, dilapidation, health and safety issues, site limitations prohibiting facility expansion, seismic-related damage, or court orders limiting maximum occupancy. The projection also does not include the inmates (more than 275,000) who are released annually on pretrial, inmates who are released early from local jails due to capacity limitations, or the over 2.7 million



warrants, of which 251,567 are for felonies, that go unserved partially because of insufficient local capacity to book and house the suspects.

The local juvenile justice system faces similar housing shortages as nearly \$329 million is needed for new bed construction by 2001. This does not include funds to renovate juvenile halls, camps, or ranches. A nine-county profile (Los Angeles, San Diego, San Bernardino, Riverside, Santa Clara, Alameda, Orange, El Dorado and Merced) conducted in 1997 revealed that juvenile facilities in each of the counties operated above design capacity, ranging from 5 to 140 percent. Moreover, the number of persons between the ages of 11 and 17—the primary risk group for juveniles—is projected to increase by 33 percent during the next decade. With local juvenile facilities operating near or above design capacity, there is no room in the system to absorb projected growth.

Recognizing the stress on local correctional facilities, grant funds from the Federal Crime Bill will be allocated toward the expansion of local adult and juvenile detention facilities (over \$270 million). Any required local matching funds would be above the nearly \$3.4 billion reported by the board (over \$3 billion adult and nearly \$329 million juvenile).

BUSINESS, TRANSPORTATION AND HOUSING AGENCY

The Business Transportation and Housing Agency (BTH) oversees departments with responsibility for maintaining the strength of California's infrastructure and the efficiencies of its financial markets. Specifically, the Departments of Transportation, Motor Vehicle and the California Highway Patrol are responsible for maintaining the State's transportation networks to help ensure safe, efficient flow of commerce. **BTH departments reported ten year needs of \$29 billion, reflecting primarily capital outlay needs. This does not include any capital outlay needs for the California High Speed Rail Authority. Of the \$29 billion, existing bonds comprise \$1.4 billion, leaving \$27.6 billion in net new funding needs (see Figure 3-10).**

FIGURE 3-10

TEN-YEAR NEW FUNDING NEEDS REPORTED BY BT&H DEPARTMENTS (DOLLARS IN MILLIONS)			
DEPARTMENT	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
Department of Transportation	\$27,188.7	\$ —	\$27,188.7
Housing & Community Development	—	30.1	30.1
California Highway Patrol	107.8	—	107.8
Department of Motor Vehicles	190.3	—	190.3
Teale Data Center	43.0	—	43.0
TOTAL	\$27,529.8	\$ 30.1	\$27,559.9


The Department of Transportation (Caltrans): Caltrans is responsible, in cooperation with local governmental and regional governmental agencies, for the statewide transportation system including highways and rail transit systems. Caltrans' capital projects include construction of new highway facilities, seismic retrofit of bridges, repair and reconstruction of existing highway facilities, and acquisition and construction of rail transit facilities (inter-city, commuter, and urban rail). Caltrans builds, maintains and operates more than 50,000 lane-miles and 9 toll bridges in California. Built over the last century, the State Highway System is estimated to be worth \$300 billion; its use is estimated to increase from 146 billion annual vehicle miles traveled (VMT) in 1995 to 196 billion VMT in 2005. Caltrans also owns over 7.4 million gross square feet of facilities (ranging from toll booths to office buildings) in addition to approximately 6,000 acres of real estate holdings, exclusive of highway right of way.

Over the ten-year period from 1989-90 through 1998-99 Caltrans expenditures for capital outlay were \$23.7 billion from all sources. Of this amount, \$16.1 billion was for state projects with the remaining \$7.6 billion for state-funded local infrastructure.

Although attempts have been made to identify and quantify state transportation needs, there is no widely recognized, existing methodology for surveying needs and making objective judgments about them in a statewide context without reference to funding availability. Transportation demands for state funding are best represented in the State Transportation Improvement Program (STIP) and the State Highway Operation and Protection Program. These documents identify projects based on a six-year fund estimate, last adopted by the California Transportation Commission (CTC) in January 1998. Pursuant to Chapter 622, Statutes of 1997 (SB 45), the STIP cycle is transitioning into a four-year term. The year 2000 STIP will cover four years.

SB 45 has resulted in significant changes in the formula for funding state and local transportation work. Under SB 45, 75 percent of the STIP funds available for new programming are allocated to the regional improvement program and are subsequently allocated by county. A percentage of the county share is available to regional agencies and county transportation commissions for project planning, programming, and monitoring. For agencies that receive Federal planning funds, the maximum is one-half percent and for the remainder the maximum is two percent. The remaining 25 percent of the STIP funds are allocated to the interregional improvement program, for which projects are nominated by Caltrans with the requirement that 2.25 percent must be programmed for inter-city rail.

The 1998 STIP Fund Estimate was developed prior to adoption of the new six-year Federal transportation act, the Transportation Equity Act for the Twenty-first Century (TEA 21). TEA 21 provides additional Federal funds to California. Caltrans is currently analyzing the impact of TEA 21 and revising the 1998 STIP Fund Estimate and project programming to reflect these increased Federal resources. An analysis of the actual ten-year infrastructure needs of Caltrans has not been undertaken; historically, the reported needs has been based on projecting available resources and matching needs to resources. This report continues that practice. Projecting the resources in the 1998 STIP Fund Estimate, including TEA 21, over the ten-year period of this report, Caltrans anticipates \$27.6 bil-



lion to be available for transportation purposes. The primary components of these resources are motor vehicle taxes and weight fees of \$11.5 billion and Federal Highway Trust funds of \$15.7 billion.

Caltrans' seismic retrofit program is well underway. Proposition 192 of 1996 provided \$2 billion in resources from general obligation bonds for this program. Of that amount, \$1.210 billion is for the retrofit of State highway bridge structures and \$790 million is dedicated for the State's toll bridge retrofit program. An additional \$875 million of State funds that would otherwise be available for other transportation purposes are earmarked to fund the bulk of the remainder of the toll bridge seismic retrofit program along with \$955 million of local resources.

At the time this report was prepared, significant damage to state roads and highways had occurred due to the El Nino-driven storms of 1998. Although some storm-related repairs occur every year and funds are included in Caltrans' annual maintenance budget for cleanup and minor repairs, 1998 storm damage has already exceeded typical annual amounts, resulting in state and federal declarations of emergency. Under these circumstances, federal law provides emergency relief funding over the normal allocations of federal funds which have been included in the STIP Fund Estimate. Under the statutory formula, the federal share of costs is 100 percent for the work done in the first 180 days following the onset of the emergency and approximately 88.5 percent thereafter. Estimates of costs to reopen and repair state highways eligible for emergency relief funding total \$400 million and may grow. The estimated federal share is \$378 million. However, annual federal budget appropriations for emergency relief have recently been limited to \$100 million and there is also a limit of \$100 million in emergency relief funding for each disaster. Any funds over these limits require supplemental appropriations by Congress and thus are not certain to be received. The 1997-98 Budget Act appropriated \$40 million in enhanced funding for emergencies relating to a state of emergency declared by the Governor. Absent additional federal appropriations, the State will either have to absorb the total costs of the projects out of funds otherwise available for new construction, or will delay some or all of the repairs. Due to these uncertainties, no adjustment for emergency work has been made to the estimates of total funds available or needs.

Department of Housing and Community Development (HCD): The HCD administers housing finance, economic development and rehabilitation programs with emphasis on meeting the needs of low-income and other disadvantaged groups. It also analyses and implements building codes and enforces construction standards for manufactured homes. The HCD provides safe, and affordable seasonal housing for migrant farmworker families during the peak harvest season through its Office of Migrant Services program.

Over the past ten years HCD has received funding in excess of \$38.1 million with the Federal government and State bonds providing a significant portion of those resources. State contributions accounted for approximately fifteen percent of the departments local infrastructure program funding.

HCD has identified \$30.1 million in local infrastructure needs over the next ten years. These funds would support the rehabilitation and reconstruction of the Office of Migrant

Services Centers (OMSC), which provide seasonal housing at 26 migrant communities throughout California's agricultural regions. The migrant communities provide approximately 11,000 farm workers and family members with temporary housing during the six months that the communities are open. The department's identified needs reflect the funding necessary to complete the rehabilitation and reconstruction of the OMSCs, scheduled to be completed in fiscal year 2004-05.

California Highway Patrol (CHP): The CHP ensures the safe, convenient and efficient transportation of people and goods across the State Highway System. CHP's capital assets include 130 division and area offices, the CHP Academy in West Sacramento, and the CHP headquarters in Sacramento and West Sacramento. The area offices house enforcement staff and communications equipment and are replaced or remodeled as they become outmoded, unsafe, or inadequate for assigned staffing.


Funding for CHP capital outlay projects between fiscal years 1989-90 and 1998-99 totaled \$81.4 million with annual funding varying from \$140,000 in 1998-99 to \$20.9 million in 1993-94.

The CHP has identified approximately \$107.8 million in capital outlay needs over the next ten years to be funded from the Motor Vehicle Account (MVA) which has historically been the source of funding for CHP capital projects. This report assumes MVA resources will not be available for CHP capital outlay needs after 2000-01 based on current fund resource projections which assume current statutes and programs. Historically, CHP's capital outlay needs have been met through a combination of capital outlay construction and build-to-suit lease-purchase agreements. CHP plans to exercise, on average, one purchase option or to complete one building renovation per year over the next ten years.

CHP expects that future space needs for its headquarters operations will be met with a combination of leasing, capital outlay construction, and build-to-suit lease-purchase agreements.

Department of Motor Vehicles (DMV): The DMV is charged with protecting the public interest through licensing and regulating vehicle operators and owners and by promoting highway safety and financial responsibility. Currently, DMV's capital assets consist of two headquarters complexes in Sacramento, 90 field offices statewide, and a warehouse facility, together totaling approximately 1.8 million square feet. The Department pursues ownership of a facility when it projects a long-term need for a presence in a community and ownership is cost-beneficial.

Over the past ten years capital outlay funding for DMV has totaled approximately \$58 million, varying from a low of \$350,000 in fiscal year 1997-98 to a high in fiscal year 1998-99 of \$12.5 million. Historically, all capital projects have been funded from the MVA. This report assumes MVA resources will not be available for DMV capital outlay needs after 2000-01 based on current fund resource projections which assume current statutes and programs.



DMV identified \$190.3 million in capital outlay needs for 56 projects over the next ten years, primarily for the exercise of purchase options on leases. The projection also includes the renovation of existing facilities to accommodate program growth and provide for renovations to address physical deficiencies and seismic concerns in older existing facilities.

Stephen P. Teale Data Center (Teale): Teale provides information technology services for various state agencies. The department has had no capital outlay expenditures over the last ten years as it has been located in leased space.

Teale has identified future needs of \$43 million for the purchase of its new data center which is currently under construction. At this time the department has contracted for a long term lease. However, analysis indicates that it will be more economical to purchase the building shortly after occupancy.

TRADE AND COMMERCE AGENCY

The mission of the Trade and Commerce Agency (TCA) is to promote business development and job retention efforts in California. The Agency also develops and oversees international trade policy and marketing through the foreign trade, export and investment functions. **The Agency has identified the need for \$1.1 billion to continue and expand funding for local infrastructure projects over ten years. State-funded local infrastructure for the TCA totals approximately \$86.3 million since 1989, with \$56 million appropriated in the 1998 Budget Act. This significant funding increase for 1998-99 reflects a \$50 million General Fund appropriation intended to partially capitalize the California Infrastructure and Economic Development Bank.**

Chapter 94, Statutes of 1994 and Chapter 749, Statutes of 1995 identified a need to facilitate adequate private and public investments in infrastructure and established the California Infrastructure and Economic Development Bank to operate much like an investment or merchant bank, creating pooled bond programs, utilizing the State's often superior access to credit markets, arranging private bond insurance to back some issues, and seeking private capital when appropriate. When fully capitalized, the bank will also assist local governments and businesses in the financing of roadways, sewers, water mains, defense conversion projects and other critical infrastructure needs.

The TCA also oversees the Rural Economic Development Infrastructure Program (REDIP). Established in 1986, REDIP provides funding to rural counties, cities and special districts in California to encourage the creation of permanent private sector jobs through the retention, expansion and location of businesses by improvement of existing public infrastructure. At the time of this publication, the program has created/retained 6,600 jobs in rural communities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

The Resource Agency administers the state's natural resource departments and helps formulate policies and programs which govern the acquisition, development, protection,

and use of the state's natural resources. The California Environmental Protection Agency provides policy guidance and direction over those departments which manage the state's environmental protection programs. **Resource Agency and California Environmental Protection Agency departments report a need in the next decade of approximately \$9.1 billion in infrastructure for resource stewardship and environmental protection programs (exclusive of the potentially significant costs of Calfed). Of the \$9.1 billion, \$148.3 million in existing bond authority is available, leaving a net new need of \$9 billion (see Figure 3-11).** Many of these programs benefit public health and safety (forest fire stations, flood control levee systems, wastewater treatment facilities). Others foster a quality of life that attracts businesses and tourism to the State (parks, conservancies, coastal access). All programs help preserve the environment and a wealth of resources for California's future.

State Water Resources Control Board (Water Board): The Water Board preserves and enhances the quality of water for the benefit of present and future generations by formulating and updating water quality control plans and policies that set standards for the waters of the State.

The Water Board administers various loan programs for local communities to provide funds for the construction and expansion of wastewater treatment plants, local water reclamation projects, undertaking estuary enhancements and correcting nonpoint source and storm water drainage pollution problems.

Over the last ten years, the Water Board has provided over \$1.2 billion in local assistance funding to communities for waste water treatment and related programs.

The Water Board estimates a gross

FIGURE 3-11

TEN-YEAR NEW FUNDING NEEDS REPORTED BY RESOURCES AND CAL-EPA DEPARTMENTS (DOLLARS IN MILLIONS)			
DEPARTMENT	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
State Water Resources Control Board	—	\$ 2,802.7	\$ 2,802.7
Air Resources Board	\$2.6	—	2.6
Department of Forestry and Fire Protection	450.5	40.8	491.3
Department of Water Resources	124.5	708.8	833.3
Department of Parks and Recreation	1,112.6	840.0	1,952.6
State Coastal Conservancy	579.0	—	579.0
Wildlife Conservation Board	573.8	—	573.8
California Tahoe Conservancy	245.0	205.0	450.0
Santa Monica Mountains Conservancy	300.0	—	300.0
Coachella Valley Conservancy	55.0	—	55.0
San Joaquin River Conservancy	47.9	—	47.9
Department of Boating and Waterways	118.1	700.0	818.1
Department of Fish and Game	26.8	—	26.8
California Conservation Corps	47.5	—	47.5
TOTAL	\$3,683.3	\$ 5,297.3	\$8,980.6

need of \$2.9 billion to continue to support state-funded local infrastructure programs over the next ten years. Of this \$2.9 billion, \$100 million in existing bond authority is available, leaving a net new need of \$2.8 billion.

The component of this need estimated for nonpoint source and stormwater pollution is based on incomplete estimates from U. S. Environmental Protection Agency modeling and only includes activities eligible for federal assistance. Over the next several years the modeling will be replaced by documented projects and implementation costs for meeting water quality standards in specific watersheds. As this occurs, it is expected that the reported needs will increase significantly.

California Department of Forestry and Fire Protection (CDF): CDF provides fire protection for 51 million acres of private and state-owned watershed lands known as State Responsibility Area (SRA). In addition, the department provides forest, range and watershed management services on private lands. Currently, CDF operates over 530 facilities including 238 forest fire stations, 105 tower and vault telecommunications sites, 42 conservation camps, 14 air attack bases, 14 helitack bases, 9 state forests, nurseries, and a training academy. CDF owns 273 parcels, representing approximately 75,600 acres.

Over the last ten years approximately \$51.6 million has been spent on replacing and renovating facilities.

Over the next ten years, the Department estimates its needs to be \$491.3 million of which \$450.5 million is for capital outlay funding and \$40.8 million is for local infrastructure for contracted fire protection to address the following concerns:

- ◆ Forest fire stations and other facilities built in the 1930s and 1940s require replacement.
- ◆ Many stations are located on leased land for which the leases are expiring.
- ◆ Stations encircled by recent development need relocation.
- ◆ Counties under contract to provide fire protection to state responsibility areas are statutorily eligible for state funded infrastructure allocations.

CDF estimates that of the \$450.5 million, \$308.2 million is needed by 2008 to replace forest fire stations and administration buildings over 50 years old, and helitack and air attack bases over 30 years old. Other program needs for capital outlay include communications towers and Vaults (\$62.2 million), conservation camps (\$61.1 million) and resource management (\$19 million).

Department of Water Resources (DWR): DWR protects, conserves and manages the state's water. The department is responsible for the operation, maintenance and repair of 140 miles of levees, 6 overflow weirs, 3 major pumping plants, 20 bridges and 50 miles of drainage ditches and 390 miles of overflow and bypass channels of the Sacramento River Flood Control Project. In addition, the department is responsible for semiannually inspecting the maintenance of another 1,619 miles of flood control project levees and 1,215 miles of designated floodways which are the responsibility of local agencies. The department also administers state financial assistance to local agencies cooperating in the

construction of federal flood control projects as well as maintenance and rehabilitation of the Sacramento Delta levees. In conjunction with the Department of Health Services, the department manages the Safe Drinking Water Program, which provides loans to communities to help them finance facilities for treating drinking water.

A major function of the department is to oversee operation of the State Water Project (SWP). The SWP is a water storage and delivery system serving approximately 70 percent of the state's residents which consists of 19 principal dams and reservoirs, 29 power and pumping plants and nearly 660 miles of aqueduct. In addition to being a water delivery system, the SWP was also designed and built to help control floods, generate power, and provide recreational opportunities as well as enhance habitats for fish and wildlife. The SWP reports needs of \$221 million. However, these needs are not reflected in this report because all SWP costs are paid by the water contractors who are supplied from the SWP.

The department also provides staffing for the state-federal partnership of the CALFED Bay-Delta Program. CALFED is in the process of developing long-term solutions to problems in the Sacramento-San Joaquin Delta related to fish and wildlife, water supply reliability, vulnerability to natural disasters and water quality. The CALFED program is managed by an interdisciplinary, interagency team, assisted by technical experts from other state and federal agencies. The goal of the program is to develop a comprehensive and balanced plan which addresses all of the resource problems. Since the program is in the process of determining potentially significant needs which could be in the billions of dollars, the funding responsibilities and funding resources for those needs are not included in this report.

Over the past ten years \$130 million has been spent for state flood control projects and \$145.1 million for local flood control projects.

Over the next ten years, DWR forecasts a need for \$833 million in infrastructure. Most of the need is anticipated for flood control, including levee construction, redesign, erosion control projects, and land and easement acquisitions. Federal agencies provide a 50 percent to 75 percent match for most federally authorized flood control projects. (Since the federal funds are not received directly by the State, they are not included in the needs estimates.)

Of the \$833 million, \$124 million is identified for state-sponsored federal flood control projects, budgeted as capital outlay. The remaining costs are for DWR's local assistance programs which include: periodic reimbursement to local governments for the State's share of locally sponsored federal flood control projects; the Urban Streams Restoration Program (a flood control-related project); and the Water Conservation and the Safe Drinking Water Programs.

Department of Parks and Recreation (DPR): DPR is responsible for helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources and creating opportunities for high-quality recreation. The 263 parks in the State's park system provide 3,000 miles of trails; 282 miles of coastline; 823 miles of lake, reservoir, and river frontage; and nearly 18,000 campsites.

Over the last ten years \$317 million has been spent to support the department's infrastructure.

DPR anticipates needs over the next ten years of \$1.9 billion, of which \$1.1 billion is new capital outlay needs and \$840 million in new state-funded local assistance. A variety of State special funds and federal funds are expected to be available to cover about \$305 million of this need.

Two primary capital outlay programs are expected over the next ten years:

- ◆ **State Park Capital Improvement Program**—Most state park system facilities are 35 to 40 years old. As a result, water and sewage systems are inadequate for today's volume of visitors. Many roads, campgrounds, picnic areas, interpretive exhibits, and other natural and cultural resources need to be upgraded and repaired. The backlog of facility rehabilitation, visitor enhancement, resources stewardship and new facility development continues to grow.
- ◆ **State Park System Acquisition Program**—DPR also anticipates acquisitions to achieve the following goals:
 - Preserving the State's biological diversity by buying critical habitat that might otherwise be destroyed.
 - Creating opportunities for high-quality outdoor recreation by making lands accessible to the public.

State Conservancies and the Wildlife Conservation Board: The five state conservancies and the Wildlife Conservation Board acquire and preserve land for the protection, enhancement, preservation, and restoration of sensitive landscapes, wildlife and habitat areas, and for public recreation areas. These agencies identified a total of \$2.0 billion over the next decade in infrastructure needs, primarily for acquisitions and enhancements.

- ◆ The **State Coastal Conservancy** works with landowners, local governments, private industry, and non-profit conservation organizations to implement the State's Coastal Management Program through non-regulatory means. Through its coastal resource enhancement and development programs, the conservancy provides project grant funds and technical assistance, and acquires both land and easements. Current holdings include 1,600 acres owned in fee and 4,500 acres in easement interests. The conservancy reports a new funding requirement of \$579 million needed for public access; enhancement of wetlands, watersheds and riparian areas; coastal agricultural preservation, coastal restoration; urban waterfronts, and assistance to nonprofit agencies. Approximately \$75 million of known State special funds are expected to be available to help fund this need.
- ◆ The **Wildlife Conservation Board** administers six programs for wildlife conservation and related public recreation: the Land Acquisition Program; the Public Access Program; the Habitat Enhancement and Restoration Program; the Inland Wetland Conservation Program (IWCP); the California Riparian Habitat Conservation Program (CRHCP); and the Natural Community Conservation Planning (NCCP) Land Acquisition Program. The Board anticipates \$573.8 million in capital needs over the next ten years to acquire and improve lands that are the most essential and suitable for

enhancement, preservation, and compatible recreational development. Approximately \$217 million of known State special funds are expected to be available to help fund this need.

- ◆ The **California Tahoe Conservancy** estimates \$450 million in new funding is needed to protect Lake Tahoe's water quality and to conserve wildlife habitat, watershed areas, and public access on the California side of the Tahoe Basin. This amount includes the \$207 million in needs identified in the Lake Tahoe Environmental Improvement Program (EIP). The EIP is a plan, prepared by the Tahoe Regional Planning Agency, to improve environmental conditions in the Tahoe Basin. The state and federal government have agreed to a cost share arrangement to ensure the goals of the plan are met. The Conservancy's plans, together with the EIP, include acquiring up to 2,000 parcels of environmentally valuable lands; restoring up to 750 acres; constructing up to 400 miles of roadside erosion improvements for water quality protection; restoring 77 miles of in-stream fisheries habitat; increasing public access by 150 acres including adding 4,000 feet of lakefront to public ownership and enhancing access and recreation to over 1,000 acres including 100 miles of trails; and enhancing up to 6,500 acres of wildlife habitat.
- ◆ The **Santa Monica Mountains Conservancy** identified ten-year needs of \$300 million in acquisition and restoration projects. The Conservancy indicates this level of funding is needed for the following goals: implementation of the Santa Monica Mountains Comprehensive Plan; implementation of the Rim of the Valley Trails Corridor Master Plan; implementation of the Los Angeles County River Master Plan; and cooperation with local governments in the region to secure open space and parkland.
- ◆ The **Coachella Valley Mountains Conservancy** acquires and holds in trust open space in the mountainous lands surrounding the Coachella Valley for the public's enjoyment and for use consistent with the protection of cultural, scientific, scenic, and wildlife resources. The Coachella Valley Mountains Conservancy estimates \$55 million in acquisition needs over the next ten years.
- ◆ The **San Joaquin River Conservancy** develops, operates, and maintains the San Joaquin River Parkway which encompasses lands on both sides of the San Joaquin River from Friant Dam to Highway 99. The San Joaquin River Conservancy anticipates \$47.9 in acquisition needs for recreational and educational programs.

Other Resource Agency Departments:

- ◆ **Department of Boating and Waterways (DBW):** develops and improves boating facilities throughout the state, promotes safety of vessels, and promotes uniformity of boating laws. In addition, the department conducts a beach erosion control program in cooperation with the federal and local governments. The department plans and provides funding for the construction of boating facilities for the State Park System and State Water Project reservoirs. Currently, there are 45 boat launching and marina locations on 13 major State Water Project reservoirs and 34 boat launching and marina sites in 33 State Parks. In addition, the department has various grant and loan programs which provide financial assistance to other public

and private marina owners. Over the past ten years \$161 million has been spent on the department's infrastructure programs.

Capital outlay funding has increased within the past five years, from \$2.8 million in 1994-95 to \$6.1 million in 1998-99. Historically, the number of registered boats within California has increased on average about two percent per year. In future years, the DBW's capital outlay program will primarily involve the rehabilitation of existing sites to enhance boating access and safety.

DBW estimates ten year needs of \$818 million of which \$118 million is for capital outlay needs over ten years to construct and renovate boating facilities on stewardship properties, reservoirs, and state parks. The Department anticipates an additional \$700 million in state-funded local infrastructure needs for: loans to public agencies and private businesses for small craft harbor projects and recreational marina facilities, and grants to public agencies to construct boat launching facilities and beach erosion control measures. The funding source available for these needs is the Harbors and Watercraft Revolving Fund.

- ◆ **Department of Fish and Game (DFG):** DFG manages California's fish, wildlife and plant resources for their ecological value and for public enjoyment. DFG has historically funded the majority of its capital outlay programs through the Fish and Game Preservation Fund. In the past five years, the funding has fluctuated from year to year. The Department's capital outlay program has been predominantly comprised of minor projects.

DFG reports infrastructure needs of \$26.8 million primarily to build and restore fishery facilities, construct and improve wildlife areas, improve and centralize analytical laboratories, and enhance ecological reserve and interpretive service facilities. The primary funding source identified to meet these needs is the Fish and Game Preservation Fund.

- ◆ **California Conservation Corps (CCC):** CCC assists various entities in conserving and improving California's natural resources, while providing employment, training, and educational opportunities for young men and women. CCC has had few capital outlay projects funded in the past ten years. The Department has recently been assessing its long-range facility needs in order to address its infrastructure needs over the next ten years. This assessment has significantly increased CCC's projected capital outlay needs. CCC reports a need for \$47.5 million in General Fund capital outlay for improvements at both residential and non-residential facilities. This anticipated increase is due to the CCC's commitment to creating a safe and home-like environment within its facilities and is a result of Minimum Facility Standard (MFS) evaluations which were recently conducted at all CCC facilities.

Many of CCC's facilities are over 30 years in age, and do not meet the CCC's recently developed MFS. Projects will include dormitory renovation/expansion, kitchen upgrades, new construction, and alterations designed to bring all facilities into compliance with the CCC's MFS and fire/life-safety codes and regulations.

OTHER GOVERNMENT INFRASTRUCTURE

Other state programs have infrastructure needs such as facility renovation, office space, and specialized facilities (e.g., laboratories and 24-hour care facilities). Funding for this

infrastructure has come from a variety of sources, including general obligation and lease-revenue bonds, the General Fund, special funds, and federal funds. **Other State departments and agencies reported ten year needs of \$2.2 billion (exclusive of trial and appellate court funding needs) with \$30 million in bond funds available to meet these needs (see Figure 3-12).** Major program needs are described below:

FIGURE 3-12

TEN-YEAR NEW FUNDING NEEDS REPORTED BY OTHER DEPARTMENTS
(DOLLARS IN MILLIONS)

DEPARTMENT	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
Department of Mental Health	\$ 459.3	\$ —	\$ 459.3
Department of Developmental Service	53.2	—	53.2
Department of Veterans Affairs	89.8	—	89.8
Department of Justice	58.5	—	58.5
Department of Health Services	63.0	—	63.0
Department of General Services	862.4	—	862.4
Office of Emergency Services	9.5	—	9.5
Military Department	407.4	—	407.4
Employment Development Department	61.0	—	61.0
Department of Food and Agriculture	67.3	—	67.3
Health & Welfare Data Center	14.4	—	14.4
Judicial Council	14.6	—	14.6
Franchise Tax Board	1.3	—	1.3
TOTAL	\$2,161.7	\$ —	\$2,161.7

Institutional Facilities: The State provides living facilities in various institutional settings such as developmental centers, mental hospitals, and veterans' homes. These institutions have an ongoing need for upgrading, rehabilitating and modifying existing facilities or adding new facilities to meet program changes:

- ◆ **Department of Mental Health (DMH):** DMH ensures the availability of effective and efficient treatment programs to address the needs of patients with psychiatric disabilities. DMH currently operates four facilities which house approximately 3,800 patients. The facilities contain over 4 million square feet and occupy 2,300 acres.

The DMH has received approximately \$120 million in funding over the past ten years for projects primarily relating to fire/life/safety renovations.

The DMH anticipates a total need of \$459.3 million for the ten-year reporting period. This need is being driven primarily by the estimated \$298 million cost to design and construct a new mental health facility for the treatment and rehabilitation of a new classification of patient, the Sexually Violent Predator.

Also included in the reported need is \$161.3 million to complete renovations at the four state mental hospitals under its jurisdiction. The renovations are required to address seismic and fire/life/safety issues, and to address the space and security needs of a growing and changing patient population.

- ◆ **Department of Developmental Services (DDS):** DDS provides treatment programs for approximately 4,000 developmentally disabled clients. DDS currently operates five facilities containing close to 6 million square feet on approximately 3,200 acres. The primary objective of the capital outlay program for DDS is to provide appropriate and adequate facilities to accommodate medical, physical, social, vocational, and intellectual needs of the client population.

DDS has received \$21 million to meet capital outlay needs over the past ten years primarily for fire-life safety projects.

The DDS has identified needs of \$53.2 million over the next ten years. This amount is primarily driven by two factors: infrastructure deficiencies and the heightened security needs of the forensic and severe behavior populations. The Department is currently completing an update of its infrastructure needs through the development of a facilities masterplan.

- ◆ **Department of Veterans Affairs (DVA):** DVA operates veterans' homes in Yountville and Barstow. The second home in Southern California, located in Chula Vista, is currently under construction. The Yountville facility, situated on 550 acres, houses approximately 1,125 residents and is comprised of 119 structures with a total of 1.2 million square feet. Yountville also manages 1,900 acres of watershed land around the Rector Reservoir, as well as a water treatment plant used for water supply from the reservoir. The Barstow home is located on 22 acres and has five single-story buildings with more than 192,000 square feet, housing 400 residents. The Barstow home will serve as a model for future homes, including the Chula Vista home.

The DVA has received approximately \$124 million in funding over the past ten years for renovation projects at Yountville and for the construction of the Barstow and Chula Vista homes.

Over the next ten years, the DVA forecasts a need for \$89.8 million for additional veterans' homes and the renovation of existing facilities at Yountville. DVA also anticipates the need for two additional homes in Southern California within the next decade. The Department anticipates receiving \$54.7 million from federal funds to meet these needs.

Laboratory Facilities: Several departments operate laboratories, many of which are antiquated and undersized. The following reflects the capital outlay need for these facilities:

- ◆ **Department of Justice (DOJ):** DOJ's Bureau of Forensic Services assists the criminal justice system through the timely collection and scientific examination of physical

evidence and the clear and objective interpretation of analytical findings. DOJ operates 11 criminalistic laboratories statewide.

DOJ has received \$26 million in capital outlay funding since the 1996 Budget Act for the consolidation of seven existing laboratories into six new facilities.

The Department has identified a need of \$58.5 million over the next ten years to continue these laboratory replacements and to purchase one laboratory which is currently leased. Many of DOJ's labs are severely undersized and outdated, compromising their ability to perform efficient and effective laboratory practices.

- ◆ **Department of Health Services (DHS):** DHS's laboratories provide analytical, diagnostic, and consultative services related to the protection and promotion of public health. DHS currently operates laboratories in Berkeley and Los Angeles containing a total of 241,000 square feet.

DHS has received funding of \$172.8 million over the past ten years to address the need for facility renovations and replacement of the Berkeley laboratory. Currently, Phase I of the new Richmond laboratory project, totaling 160,000 square feet is under construction, while Phase II, totaling 332,000 square feet, will begin construction in early 1999.

DHS estimates a ten-year need of \$63 million. DHS estimates that \$60.4 million of this amount will be required to fund Phase III and IV of the Richmond Lab project. DHS Also anticipates the need for \$2.6 million to renovate the Southern California Laboratory facility for fire/life/safety deficiencies.


State Office Space (managed by the Department of General Services (DGS): DGS acquires, constructs, or leases state office space on behalf of most departments. (Office space generally does not include institutional space or the field offices of various departments.) Currently, DGS manages 22.2 million net square feet of leased and owned office space. About one-third of this is state-owned and the balance is leased. This report excludes the costs and related resources in department budgets for leases in non-state owned office space.

DGS has completed regional facility plans for five of its twelve regions. DGS expects to complete the Long Beach, Sacramento Valley (Redding and Chico) and Orange County regional plans by the end of 1998. All regional plans are expected to be completed by July of 2002. Figure 3-13 shows total state office space, both leased and state-owned, by region:

DGS annually develops a *Statewide Facility Plan*, which is a comprehensive strategy for acquiring and

FIGURE 3-13

OWNED AND LEASED STATE OFFICE SPACE	
REGION	NET SQUARE FEET
Sacramento	12,039,484
Los Angeles	2,753,766
San Francisco Bay Area	2,283,734
San Bernardino/Riverside	578,543
Orange County	708,044
San Diego/Imperial	802,138
Long Beach	204,807
Santa Clara/Contra Costa/East Alameda	701,850
San Joaquin Valley	889,615
Upper Sacramento Valley	213,295
South Central Coast	496,855
North Coast	235,245
Balance of State	327,294
TOTAL	22,234,670



maintaining state-owned space and for housing agencies in leased facilities. Of the leased space, DGS believes about half could be consolidated into larger groupings—either state-owned or leased facilities—to achieve long-term rent savings. However, DGS recommends consolidating to a lesser degree to maintain a measure of flexibility for program needs.

DGS projects that \$862.4 million in new funding is needed to construct or acquire state-owned office space over the next ten years. DGS has developed its Capital Area Plan and recently enacted legislation authorizes DGS to develop approximately 1.5 million gross square feet of office space at the east end of Capitol Park in Sacramento for the Department of Education, DHS, and DGS. The legislation authorized \$392 million for this first phase of the Capitol Area Plan. The 950,000 square foot \$170 million State of California - Cal-EPA Building also is currently under construction in downtown Sacramento and is expected to be completed in August 2000. In addition, recently enacted legislation would authorize DGS to construct a \$160 million headquarters building in the Sacramento area for the California Department of Corrections.

Seismic Retrofit of State Facilities: In June 1990, the voters approved a \$300 million general obligation bond measure (Proposition 122) to retrofit or replace state and local government buildings which are seismically unsafe. Of this amount, \$250 million was reserved for state facilities, and DGS conducted a study to identify those at greatest risk. Based on preliminary reviews, more than 16,000 state facilities were narrowed to nearly 7,000 for further survey. The bond funds have only provided funding to retrofit facilities deemed to be of the highest priority based on seismic risk level, occupancy levels, usage and location. Cost estimates of additional need are believed to be in the range of \$600-800 million. However, until a more refined, comprehensive approach to determining retrofit needs and options is developed, these statewide needs have been excluded from this report.

Office of Emergency Services (OES): Under the authority of the Emergency Services Act and other legislation, OES mitigates, plans and prepares for, responds to, and aids in recovery from the effects of emergencies that threaten lives, property, and the environment.

OES has identified total needs of \$9.5 million for the completion of its new headquarters and state operations center in Sacramento which was funded for construction in the 1998 Budget Act. The facility will contain 111,673 square feet and will replace approximately 64,000 square feet of both state-owned and leased space currently utilized by the department. The stated funding need also includes funding for the fire/life-safety renovation of the California Specialized Training Institute at Camp San Luis Obispo.

Military Department: The Military Department is responsible for the command, leadership and management of the California Army and Air National Guard in order to provide military service supporting the state and the nation. The Military Department operates 127 armories and ten air bases and stations totaling 5.7 million gross square feet of facilities space. The Department has identified future capital outlay needs of \$407.4 million. The department anticipates receipt of \$304.8 million of federal funds to meet these needs. The largest component of the Military Department's capital outlay program is the

construction of ten new armories to replace those which will be lost due to the expiration of long-term leases.

The capital outlay program also includes alterations to existing armories. The average age of an armory in California is approximately 40 years. Older armories have insufficient space to train and store their equipment and may require expansion or replacement. Many of the older armories require upgrades to mechanical, electrical, and plumbing systems. Additionally, older facilities lack security lighting and other safety features necessary to provide adequate security at the armories. The department is developing an armory facilities master plan which will serve as a basis to forecast program needs in the future.

Employment Development Department (EDD): EDD provides a labor exchange for job seekers and employers, maintains benefit payment programs for unemployed and disabled workers, and collects payroll taxes. These programs are delivered by field office operations located throughout the State.

Over the past ten years, the EDD has received over \$52 million for facility renovations.

Based on studies of its properties, EDD has been addressing deficiencies related to facility age and structural integrity, the presence of asbestos, and approaching end of life cycle periods for electrical and mechanical support systems. In order to continue addressing these issues, EDD has identified future capital needs of \$61 million. These needs will be met through a combination of federal and special funds. Additionally, EDD intends to pursue capital outlay projects that facilitate changes in program delivery.

Department of Food and Agriculture (CDFA): CDFA's facility inventory includes approximately 304,300 assignable square feet for inspection facilities, employee residences, laboratories, greenhouses, warehouses, veterinary laboratories, and headquarters office facilities.

The CDFA has identified capital outlay needs of \$67.3 million over the next ten years. Of this amount, \$11.2 million would be funded from special funds. Projects include relocation, replacement, or major upgrades to several of the department's 16 border inspection stations; relocation and construction of new Fresno and Turlock veterinary laboratories; relocation of the Biological Control Program at the Meadowview Road Complex and the dairy microbiology laboratory from the Sacramento headquarters office building to CDFA's Meadowview Road complex; and upgrades to the headquarters office in Sacramento.

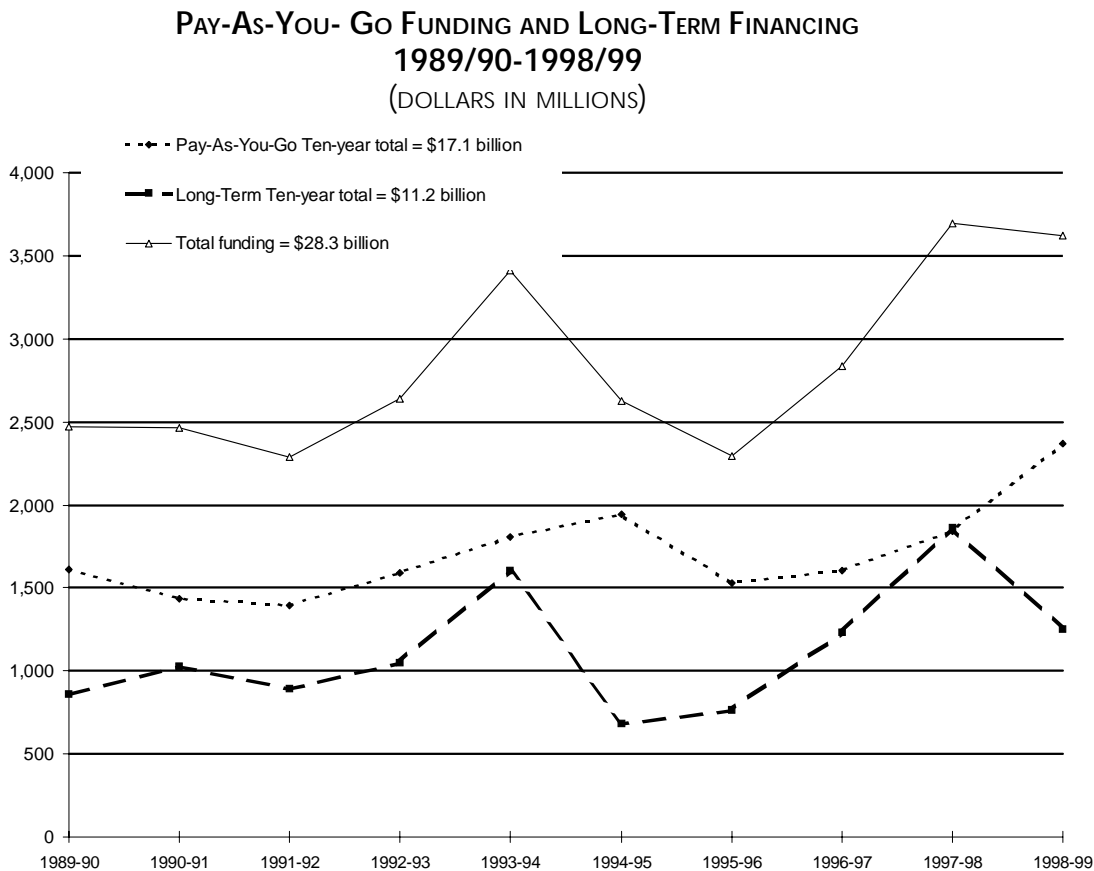
Health and Welfare Data Center (HWDC): HWDC provides cost effective large scale computer processing and telecommunication services to the departments within the Health & Welfare Agency. HWDC currently leases two facilities in Sacramento, both of which contain purchase options. HWDC has identified a need of \$14.4 million to exercise these purchase options for its two data center facilities.

FINANCING SOURCES

The State employs two approaches to funding infrastructure: direct appropriations, also called “pay-as-you-go” funding, and long-term financing through either the sale of bonds or leasing with a purchase option or installment purchase agreement. The General Fund, special funds, and federal funds all support infrastructure either as the source of direct appropriation or—for long-term financing—by paying debt service or lease costs.

Figure 4-1 compares capital outlay expenditures for pay-as-you-go and long-term financing approaches to acquisition for 1989-90 through 1998-99 (state-funded local infrastructure costs are excluded). The data for financed projects are based on initial expenditures from bond funds, i.e., they exclude repayment of borrowing costs. However, repayment expenses are a significant cost, as described later in this chapter under “Long-Term Financing”.

FIGURE 4-1



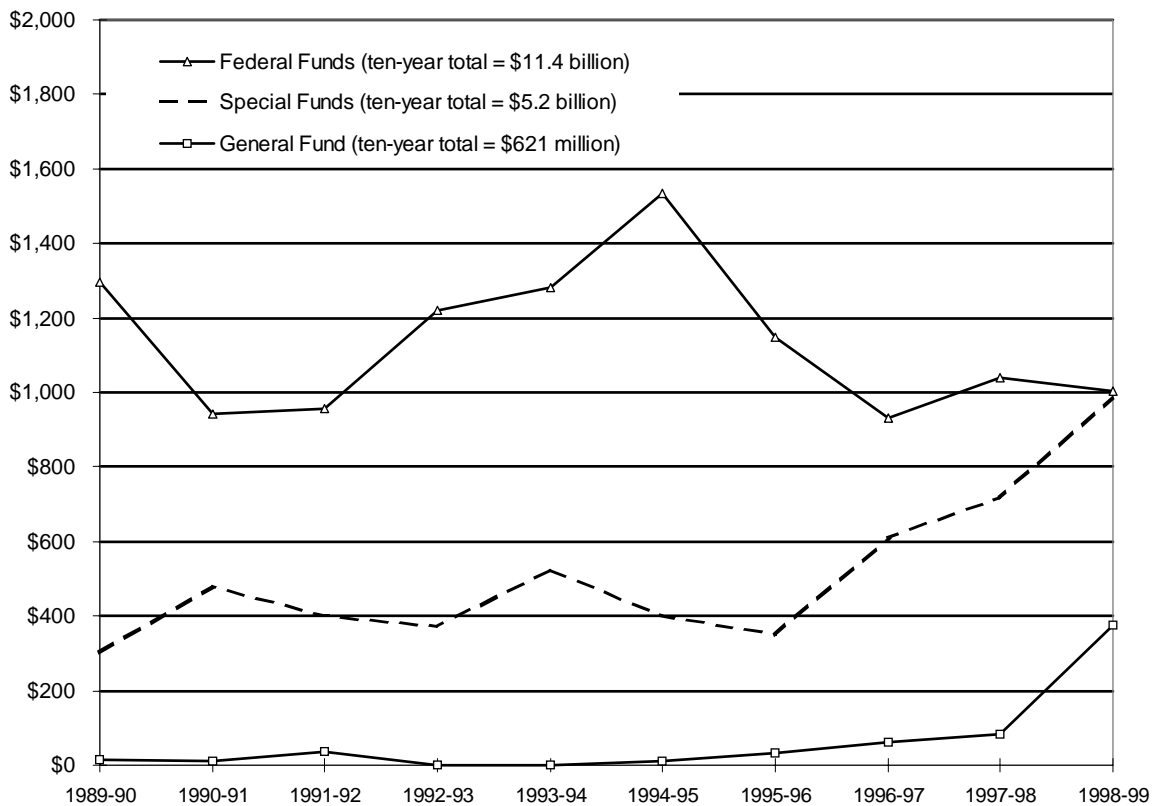
PAY-AS-YOU-GO FUNDING

Figure 4-1 shows that there has been approximately \$28.3 billion in initial capital outlay expenditures over the last ten years. About two-thirds has been funded with pay-as-you-go resources. Figure 4-2 displays these pay-as-you-go, capital outlay expenditures by fund source for the past ten years. State-funded local-infrastructure expenditures have not been included because of the difficulty in obtaining accurate historical information.

Federal Funds: Over the last decade, federal trust funds contributed the most heavily to pay-as-you-go capital outlay projects, but their use is usually restricted to specific programs. Four major areas receive federal funds for state capital projects: highway construction, flood control, veterans' homes, and national guard armories with highway related construction receiving the overwhelming majority of federal funds. The State Highway Construction Program is the primary recipient, averaging \$362 million annually over the last ten years. Many federally funded projects require a state matching contribution which in most cases is

FIGURE 4-2

**PAY-AS-YOU-GO EXPENDITURES FOR CAPITAL OUTLAY BY FUND SOURCE
1989/90-1998/99
(DOLLARS IN MILLIONS)**



based on federally established ratios. Future receipt of federal funds is difficult to predict, given the federal government's current efforts to restructure the allocation of its revenues and budgeting methodologies.

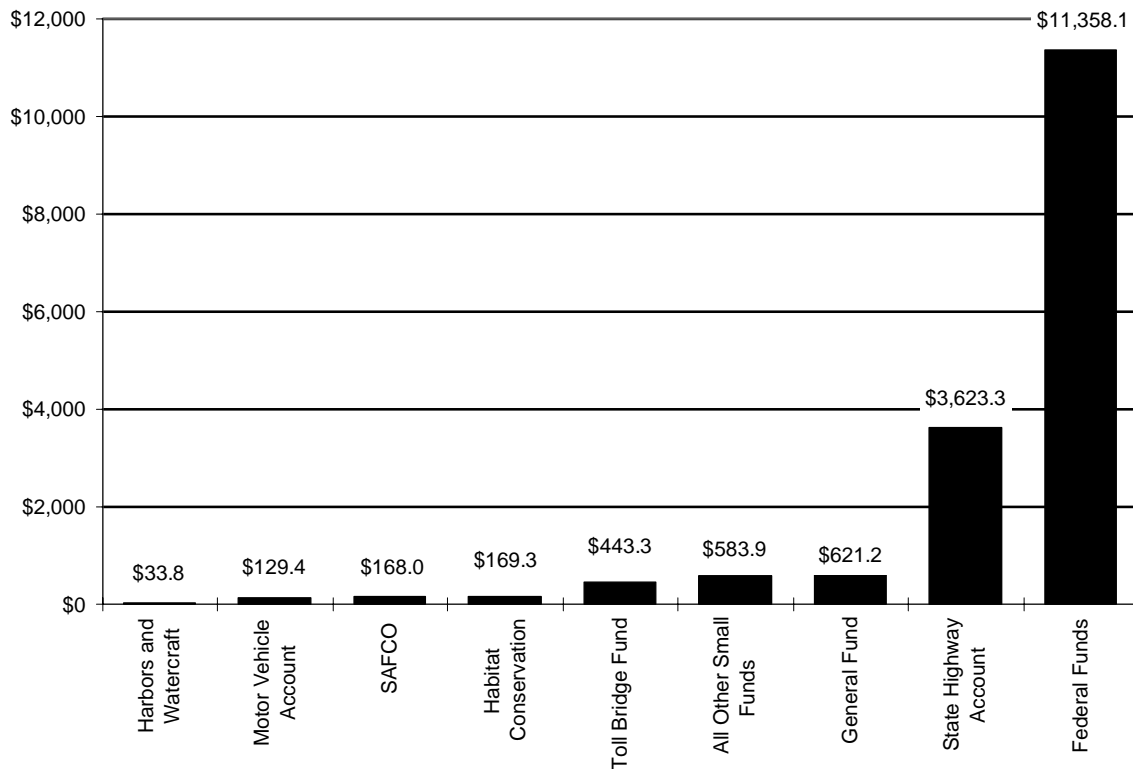
Special Funds: Figure 4-2 shows that state special funds were the second largest funding source for pay-as-you-go capital outlay over the past ten years. Total appropriations have been relatively stable in amount, averaging \$515 million annually.

Figure 4-3 shows the relative contributions specific special funds have made to the pay-as-you-go component of the State's capital outlay program over the past ten years.

As with federal funds, special funds are usually limited to specific programs and not available to fund general infrastructure needs. For example, the largest source of special-funded capital outlay, the State Highway Account, can be used only for transportation purposes. This fund source, along with the Toll Bridge Fund, accounts for 78.9 percent of

FIGURE 4-3

**TEN-YEAR PAY-AS-YOU-GO CAPITAL OUTLAY EXPENDITURES
1989/90-1998/99
(DOLLARS IN MILLIONS)**



special-funded capital outlay, or a total of \$4.1 billion over the past decade. Other special funds that have made significant contributions to infrastructure funding include: the Harbors and Watercraft Revolving Fund which can only be used for boating related projects, and the Motor Vehicle Account, which is restricted to CHP and DMV projects.

Other special fund sources are smaller in total contribution, but most are limited to use for specific programmatic purposes. While the existence of these special funds has provided the opportunity to address capital outlay needs which may or may not otherwise have been considered, they also limit flexibility in use of resources. For example, the Off Highway Vehicle Trust Fund has enabled the State to acquire significant off-road recreational resources while the Fish and Game Preservation Fund has provided resources to enhance opportunities for fishing and hunting. In both cases, it is unlikely that these needs would have been met to the extent that they have been if they had been required to compete with more critical infrastructure projects for limited General Fund and bond resources. However, the limited uses to which these special funds can be applied also restricts the State's ability to address other critical infrastructure needs.

General Fund: The General Fund contributed only minor funding to pay-as-you-go projects in the last decade. (On the other hand, the General Fund is the primary source of debt service redemption and lease payments for long-term financing, as discussed under "Long-Term Financing" below.) For the last ten years, direct appropriations from the General Fund averaged less than \$62.1 million annually. In 1998-99 \$375.9 million has been appropriated from the General Fund for capital outlay projects. While this reflects a significant increase over the average annual General Fund contribution toward meeting capital outlay needs, it should be noted that \$245.5 million of the total is for acquisition of the Headwaters Forest and other old growth forests.

LONG-TERM FINANCING

The objective of long-term financing is to spread major costs over many years, resulting in a more manageable expense. It also serves to spread the cost of a long-term capital investment across the generations who benefit from it. While total costs of long-term financing are higher, the annual impact on the State's budget is offset somewhat over the life of the repayment program through inflation and growth in state revenues. Long-term financing includes traditional bond financing as well as capital acquisition through lease-purchase or capitalized purchase-option agreements.

Over the past ten years a total of \$11.2 billion has been expended in long-term financing to meet capital needs. This reflects initial expenditures from bond funds rather than debt service or lease payments made to retire the bonds.

When projects are financed through bonds, final costs are significantly higher than the initial expenditures charged to the bond funds. The bonds or leases must be paid off through debt service or lease-revenue payments, which include interest and other financing expenses that increase final repayment. Capital acquisition through leasing also results in financing and other development costs that increase final infrastructure expenses in comparison with pay-as-you-go funding.

Figure 4-4 summarizes key differences between the different funding options, while Figure 4-5 compares the varying costs of these funding options.

FIGURE 4-4

COMPARISON OF DIFFERENT FUNDING OPTIONS

OPTION	ADVANTAGES	DISADVANTAGES
Pay-as-you-go	<ul style="list-style-type: none"> • Least total cost--no financing or long-term debt commitment • Suitable for all projects • Fiscal tasks fewer than for long-term financing 	<ul style="list-style-type: none"> • Large initial outlay can displace funding for other critical programs • Resources for this approach are scarce
GO Bonds	<ul style="list-style-type: none"> • Lowest debt financing costs of all long-term options • Suitable for most projects 	<ul style="list-style-type: none"> • More expensive than pay-as-you-go • Results in long-term debt • Project approval waits for a general election; delay can affect costs and programs operations • Cash impact of debt service begins earlier than for lease revenue bonds • Interim financing may be needed
Lease Revenue	<ul style="list-style-type: none"> • Faster authorization meets program needs and avoids cost increases • Lesser initial impact on cash flow than GO bonds • Suitable for some projects 	<ul style="list-style-type: none"> • Slightly more costly than GO bonds, on a net present value basis • Not suitable for certain projects • Results in long-term debt • Interim financing needed
Lease-Purchase or Purchase Option	<ul style="list-style-type: none"> • Private development may reduce construction time and costs • Minor initial appropriations or cash outlay • Fewer process controls allow faster completion • Some flexibility in when and whether to purchase 	<ul style="list-style-type: none"> • Total costs may be higher than other financing options • The highest financing costs (taxable rates and developers' profits) • Leases are initially higher than status quo rents • Fewer process controls means less oversight • Commits the State to future payments, which in some cases count as long-term debt • Lease costs do not always count fully towards purchase options

FIGURE 4-5

COST COMPARISONS OF FUNDING METHODS FOR A \$100 MILLION PROJECT
(DOLLARS IN MILLIONS)

FUNDING METHOD	NOMINAL DOLLARS	INFLATION-ADJUSTED DOLLARS
Pay-as-you-go	\$100	\$100
General obligation bonds	\$167	\$118
Lease revenue bonds	\$190	\$125

Assumptions: general obligation true interest cost of 5.05 percent. Lease-revenue true interest costs of 5.19 percent. 20-year inflation at 3.3 percent (average annual change in the Consumer Price Index, June 1990 - June 1998).

For both scenarios: the model uses 25-year serial bonds (current practice). General obligation bonds are sized approximately 1 percent higher than project needs to meet financing and bond administration costs. Lease revenue bonds are sized 23 to 33 percent higher to cover capitalized interest costs, the funding of a reserve requirement, as well as other financing and bond administration costs.

MATCHING RESOURCES TO NEED

Any forecast of future availability of infrastructure funding faces uncertainties, since budget policies and program priorities at both the state and federal level evolve in ways often not predictable. The following estimates of future funding are projected from recent experience or departments' forecasts.

PAY-AS-YOU-GO RESOURCES: NON-GENERAL FUND

Federal Funds: Figure 5-1 shows that \$16.2 billion in federal funds is expected to be available for infrastructure over the next ten years of which \$16.1 billion is for capital outlay and \$73 million is for local assistance. This forecast relies primarily on departments' assumptions regarding federal receipts.

Special Funds: Figure 5-2 shows \$13.3 billion in special funds projected as available for capital outlay over the next decade of which \$12.1 billion is for capital outlay and \$1.3 billion is for local assistance. Estimates assume that special funds resources for capital outlay remain relatively constant through 2008-09.

Other Funds: Departments have estimated \$3.6 billion in "other" revenue, primarily consisting of reimbursements from non-state agencies, local matching funds that flow through the state treasury system, and funds from private nonprofit organizations to meet future needs. Of this amount, \$2.9 billion is for capital outlay and \$690 million is for local assistance, with the largest share being \$2.4 billion in private and corporate donations anticipated by the University of California for its capital outlay needs over the next ten years. Another significant component is anticipated funds from many environmental and resource related organizations that help to fund habitat and recreational acquisitions included in needs estimates of the conservancies and other Resource Agency departments.

After federal, special, and other available non-General Fund resources of \$33.1 billion are subtracted from net

FIGURE 5-1

ESTIMATES OF TEN-YEAR FEDERAL TRUST FUND AVAILABILITY FOR INFRASTRUCTURE, BY DEPARTMENT (DOLLARS IN MILLIONS)

PROGRAM NAME	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
Department of Transportation	\$15,708.8	\$ —	\$15,708.8
Military Department	304.8	—	304.8
Board of Corrections	—	58.6	58.6
Veterans' Affairs	54.7	—	54.7
Employment Development Department	49.4	—	49.4
State Coastal Conservancy	15.0	—	15.0
Housing & Community Development	—	14.1	14.1
Department of Parks & Recreation	6.0	—	6.0
Department of Mental Health	3.3	—	3.3
Department of Fish & Game	.3	—	.3
TOTAL	\$16,142.3	\$72.7	\$16,215.0

FIGURE 5-2

**ESTIMATES OF TEN-YEAR AVAILABILITY FOR
INFRASTRUCTURE, BY SPECIAL FUND**
(DOLLARS IN MILLIONS)

FUND NAME	CAPITAL OUTLAY	LOCAL ASSISTANCE	TOTAL
State Highway Account	\$11,296.0	\$ —	\$11,296.0
Habitat Conservation Fund	276.5	20.0	296.5
Water Pollution Control Fund	—	1,134.1	1,134.1
Seismic Retrofit Bond Fund	183.9	—	183.9
All Other	302.4	150.3	452.7
TOTAL	\$12,058.8	\$1,304.4	\$13,363.2

new funding needs of \$73.5 billion, there remains a balance of \$40.4 billion in infrastructure requests which are unmatched to a fund source. If the State were to fund this remaining balance, the probable source would be the General Fund either on a pay-as-you-go basis or through long-term debt.

It is unlikely that the General Fund will be able to support this entire balance over ten years. To achieve that level of direct appropriations it would require average annual appropriations of \$4.0 billion

from the General Fund, which represents nearly 15 percent of the total non-Proposition 98 General Fund appropriations included in the 1998 Budget Act. Therefore, it is expected that the future will follow the pattern of the past decade, i.e., some combination of long-term debt, pay-as-you-go and some reported needs remaining unfunded.

BOND RESOURCES

Chapter 4 discusses several long-term financing strategies. Of these, general obligation (GO) bonds are the least costly and for purposes of this report, are used in making estimates of long-term financing capacity.

Key factors which affect the State's total general obligation debt capacity include:

- ◆ Policies on prudent levels of debt
- ◆ Interest rates
- ◆ Repayment structure for issues, including the length of repayment
- ◆ General Fund revenues

What constitutes a "prudent" or "reasonable" debt position is relative. Both the bond market and the bond rating agencies consider a number of factors when reaching a conclusion about the reasonableness of a state's debt position. The same level of debt may be considered either reasonable or imprudent depending upon the State's performance over a range of factors.

Figure 5-3 provides three different perspectives on California's current debt position relative to other populous states.

FIGURE 5-3

**STATE LONG-TERM DEBT
CALIFORNIA VERSUS THE TOP TEN POPULOUS STATES**

STATE ^a	PERCENT OF GENERAL FUND REVENUE ^d	PERCENT OF PERSONAL INCOME ^c		DEBT PER CAPITA ^c	
		1990	1996	1990	1997
National Average	4.1	2.2	2.9	\$ 364	\$ 719
New York	9.4	5.6	6.5	\$1,229	\$1,914
Florida	5.2	2.2	3.4	\$ 401	\$ 798
Ohio	4.5	2.4	2.5	\$ 413	\$ 591
Illinois	4.4	2.7	2.7	\$ 537	\$ 728
California (50 state rank)	4.4 Not Available	2.0 (28 th) ^b	2.6 (20 th) ^b	\$ 405 (23 rd) ^b	\$ 652 (15 th) ^b
New Jersey	3.8	2.2	5.1	\$ 555	\$1,576
Georgia	3.5	2.5	2.9	\$ 411	\$ 647
Pennsylvania	2.8	2.7	2.0	\$ 494	\$ 501
Michigan	2.1	1.2	1.6	\$ 216	\$ 381
Texas	1.5	1.2	1.4	\$ 200	\$ 300

a. These states are the ten largest in terms of total population.

b. Numerical rank among all 50 states.

c. Source: 1992 Moody's Selected Indicators of Municipal Debt and 1998 Moody's State Debt Medians.

d. Source: California State Treasurer's Office 1998 Debt Affordability Report.

In comparison with the ten most populous states using debt service as a percent of General Fund revenue, California ranks fifth in terms of overall debt. In comparison with all 50 states, California ranks 15th in terms of debt per capita and 20th in terms of debt as percent of personal income.

A common debt measurement is the ratio of net tax-support debt to General Fund revenues. Figure 5-4 shows the State's varying debt ratio over the last ten years. Figure 5-5 depicts the state's increased reliance on debt as part of its overall approach to meeting its capital outlay requirements. The magnitude of this reliance, however, is accentuated by the interrelation of the numerator and denominator in the debt ratio equation. Prior to 1988-89, the marginal rate of increase in both debt and General Fund revenue was fairly constant. Beginning in 1988-89 through the mid-1990s, debt was increasing at a more significant rate than revenues, even though revenues continued to increase. Subsequently, revenues increased at a more dramatic rate than debt, resulting in a decline in the debt to revenue ratio. Using this debt-to-revenue measure, DOF calculated the State's debt burden in 1998-99 as 4.4 percent. If no other bond authorizations were

FIGURE 5-4

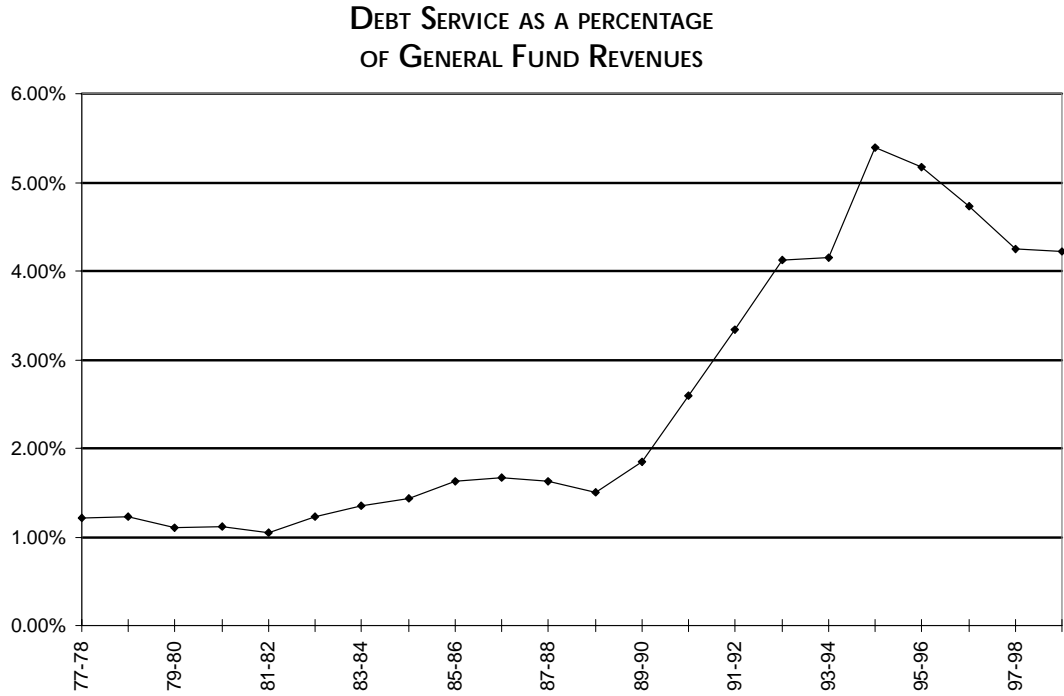
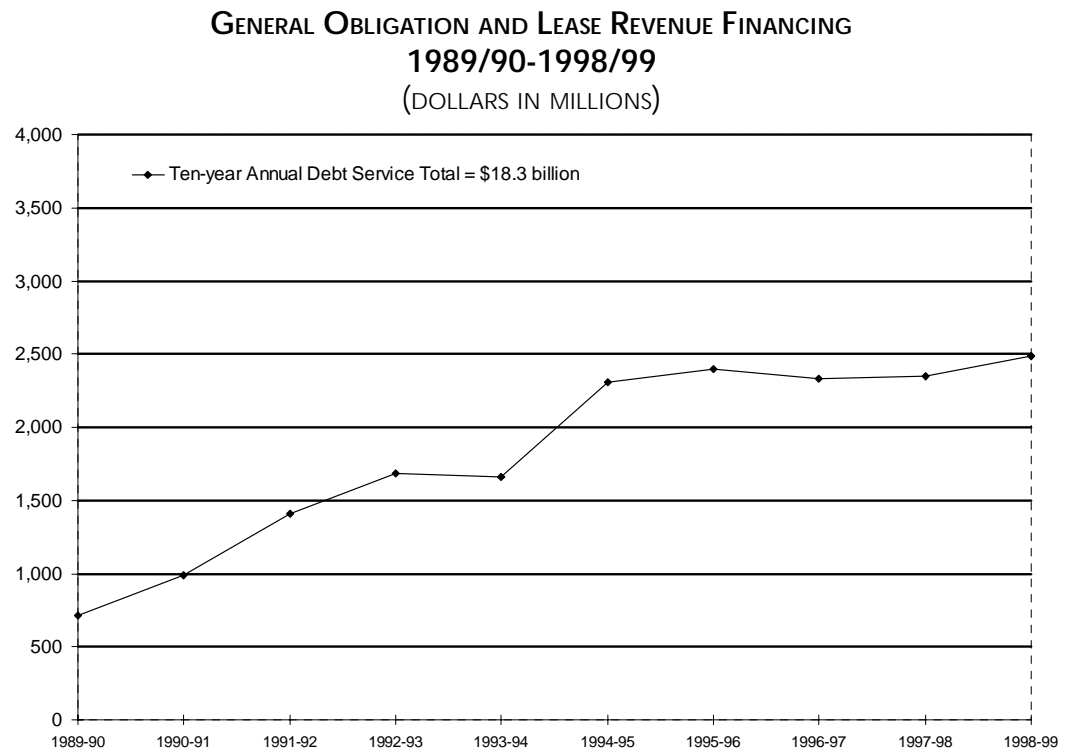


FIGURE 5-5



provided, debt in relation to General Fund revenues will peak in 2001-02, declining to 3.0 percent by 2008-09.

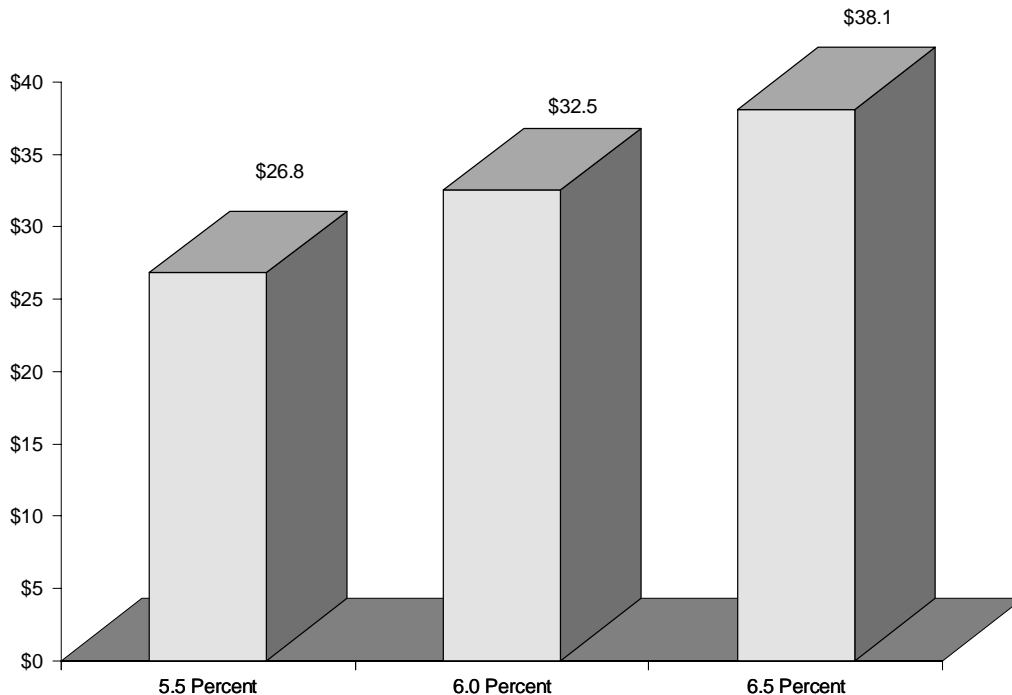
GO bond capacity at different debt service ratios: Figure 5-6 presents new bond capacity over ten years at different hypothetical debt service ratios: 5.5 percent, 6.0 percent, and 6.5 percent. Projections use the following assumptions:


- ◆ Current general obligation repayment structures
- ◆ True interest costs at 5.5 percent for 1998-99 and 1999-2000 and 6.0 percent thereafter
- ◆ Current tax laws

This report does not recommend any specific level of bonded indebtedness. However, if one assumes that a six-percent level of debt is reasonable for a ten-year period, the State has a capacity for additional debt of \$32.5 billion. As noted earlier, this estimate is based on issuing only GO bonds, which is the most economical way to finance. To the extent

FIGURE 5-6

NEW DEBT CAPACITY AT DIFFERENT DEBT SERVICE RATIOS
(DOLLARS IN BILLIONS)





other long-term financing options are used in-lieu of GO bonds, debt capacity diminishes somewhat.

GENERAL FUND PAY-AS-YOU-GO RESOURCES

Past policy has been to use the General Fund sparingly for pay-as-you-go capital outlay; usually only when a project was critical and no other fund source was practical. In years when General Fund resources have been unusually constrained, capital outlay needs generally have not fared well in competition with other programs.

For purposes of this report, it is assumed that the General Fund will contribute on average \$150 million per year for pay-as-you-go infrastructure for the most critical projects which have no other source of funding. This would provide \$1.5 billion to meet needs over the next ten years.

ADDRESSING THE IMBALANCE BETWEEN IDENTIFIED NEEDS AND AVAILABLE RESOURCES

Figure 6-1 below compares the total funding needs projected by departments to available funding resources reflecting an unfunded need of \$6.4 billion.


How pressing is the imbalance between infrastructure needs and resources? After all, not all infrastructure needs are of equal priority. Moreover, it is possible that some needs will be deferred or go unaddressed altogether based on programmatic rather than funding concerns. One possible conclusion is that the State can tolerate some degree of imbalance between needs identified by departments and available resources, since some past identified needs have never been funded.

However, the imbalance of at least \$6.4 billion is significant since, as indicated earlier, the gross needs reported by departments does not include the costs related to CALFED, the High Speed Rail Authority and the Task Force on Court Facilities. These costs and funding responsibilities will not be available before 2000. Further, this report reflects transportation needs based on available resources rather than reported need since there is no accepted methodology for making objective judgments about transportation needs without reference to funding availability. Even if some needs are ignored, it is apparent that the State is not likely to be able to fund all of the high priority and desirable needs that have been identified. State and local agencies undoubtedly will place considerable pressure on the General Fund to meet the most critical program requirements, either through long-term financing or pay-as-you-go strategies. As infrastructure continues to age over the next decade, these pressures will mount.

Therefore, this report identifies various approaches to deal with these needs:

FIGURE 6-1

MATCHING FUNDING SOURCES TO NEEDS (DOLLARS IN BILLIONS)		TOTAL
Gross needs reported by departments		\$82.2
<i>Less existing bond funding</i>		-8.7
Net new funding needs		\$73.5
<i>Less available federal, special, and other non-General Fund pay-as-you-go funds</i>		-33.1
Balance left for bonds or General Fund pay-as-you-go		\$40.4
<i>Less assumed GO bond availability</i>		-32.5
Balance left for General Fund pay-as-you-go		\$7.9
<i>Less assumed \$1.5 billion General Fund pay-as-you-go</i>		-1.5
UNFUNDED BALANCE		\$6.4

- 
- ◆ Recognize that school construction will require a greater local funding responsibility. To facilitate this, the vote threshold for local school bonds could be reduced to a simple majority, which is now the threshold for statewide school bonds.
 - ◆ Reduce the State's participation in funding local capital outlay projects. Of the needs included in this report, \$32.1 billion is for projects that would be owned and operated by local government. This includes \$14.1 billion for K-12 school districts, \$6.4 billion for community college districts, \$365.8 million for local flood control projects, \$840 million for local parks, \$3.1 billion for local waste water and drinking water treatment facilities, and \$3.4 billion for local jails.
 - ◆ Develop methods of program delivery that reduce the need for capital outlay and infrastructure. One example of this is reducing the need for office space and transportation infrastructure through telecommuting. Other examples include on-line personal computer applications for the public to access governmental services and reducing the need for higher education facilities through distance learning.
 - ◆ Institute programs such as year-round access to higher education that result in more intense facility use and reduce the needs for additional space.
 - ◆ Commit a higher level of General Fund to pay-as-you-go infrastructure. Over time, this approach would reduce total infrastructure costs because it minimizes financing expenses.
 - ◆ Fund more infrastructure through debt. For example, at a 6.5 percent debt service ratio, an additional \$5.6 billion in general obligation bonds could be issued over the next ten years, in comparison with issuance capacity at a 6.0 percent debt service ratio.

Each of these approaches would involve significant policy choices:

- ◆ Reducing the State's contribution to local government projects would place more pressure on local governments to finance their own projects. Their limited capacity to provide this financing could mean that many projects would not be undertaken. Further, public infrastructure may be unevenly developed among communities because communities are not equally able to support funding infrastructure. However, it is just as evident that the State is not likely to be able to finance all infrastructure needs.
- ◆ Expanding the use of the General Fund for pay-as-you-go infrastructure funding would reduce resources otherwise available for program operations. Program service levels might have to be reduced to accommodate increased capital expenditures.
- ◆ Increasing bond debt to ever-higher levels ultimately also increases the commitment of the General Fund through debt service payments. In addition, bonds are more costly than pay-as-you-go funding, reducing total project capacity and—at extreme levels—adversely affect bond ratings.
- ◆ Instituting year-round access to higher education would require changes to traditional school calendars and modes of operation.

APPENDIX-1

DIFFERENCES IN REPORTED NEED BETWEEN THE 1997 & 1998 REPORTS

Reported needs in some instances may vary substantially from year to year in any given program area. These changes may be the result of significant program or policy changes, or the result of increased sophistication in the determination of needs or distinction of program categories between support, local assistance and capital outlay costs. A reconciliation of major differences in reported need between the 1997 report and this one is provided below.

K-12 Education: This report reflects an average increase in enrollment from 1998-2008 at 50,000 students per year based on the Department of Finance Demographic Research Unit (DRU) projections. This projection is a significant reduction to a comparative average increase of 99,000 students per year reported in 1997. DRU reports the rate of increase to be lower than previously estimated. There are several factors influencing this reduced rate of increase. First, birthrates in California have been decreasing since 1992, and this decrease has resulted in a corresponding decrease in the demand for future school facilities. Additionally, this lower birthrate has resulted in fewer than anticipated children starting school each year, resulting in a lower school facility growth rate. Finally, the depopulation California experienced in the early part of the decade, because of the recession, has resulted in fewer than anticipated K-3 students entering public schools. When combined, these factors have reduced the estimated growth rate more significantly than previously projected.

This report reflects state funding share for K-12 ten-year infrastructure need for primary and secondary schools of \$14.1 billion. This compares to \$22 billion identified for K-12 in the 1997 report and reflects the new sharing ratios established in Prop 1A, on the November 1998 ballot. The total projected cost for **new** school facilities for the next ten years is estimated to be up to \$ 4.0 billion, given current trends and building practices. This estimate is based on DOF annual enrollment growth projections and the Office of Public School Construction (OPSC) calculation of the average cost per student, based on historical cost estimates. OPSC's estimates have been adjusted by DOF to \$15,415 per student. DOF's adjustments are based on the assumption that all K-3 growth will be accommodated in class sizes of 20 pupils, and that a portion of the growth in the 9th grade will be accommodated in class sizes of 20 pupils for part of the school day. Unlike previous year estimates, these estimates do not assume that growth will be accommodated in year-round facilities, since Chapter 827, Statutes of 1998 (Senate Bill 50) did not include mandatory year-round schools to accommodate growth as it previously was assumed it would.

The projected state cost of modernization is estimated by OPSC as approximately \$6.0 billion over the ten-year period. The projected state cost of deferred maintenance is estimated to be at least \$4 billion over the ten-year period. This is based on the statutory formula that reserves an amount for deferred maintenance equal to one percent of districts' General Fund budgets. The costs for deferred maintenance are shared equally between state and local resources.

State Special Schools: The 1998 reported ten-year needs of \$96.3 million is nearly double that of the \$58.3 million reported in 1997. Prior to 1997, the Division did not report capital outlay needs since the completion of the Fremont campus in the late 1970s. The division has recently reviewed its capital outlay needs and reports the \$96.3 million more accurately reflect its ten-year needs.

California State Library: The Library's reported needs of \$15.8 million is significantly less than the \$1.8 billion reported in 1997 (\$366 million in capital outlay, \$1.5 billion in local assistance). This difference is attributable to the 1997 reported needs reflecting two federally funded local assistance programs that are no longer active programs.

University of California: In response to the 1998 survey, UC resubmitted its 1997 survey. The 1997 survey reported needs consistent with previous compact agreements. After discussion with UC, the 1997 survey was adjusted marginally for years 1999-00 to 2001-02 to reflect a net increase of \$145 million over the 1997 survey; an additional adjustment of \$400 million was also included to reflect the costs of a tenth campus. As a result, this report reflects ten-year needs for state-funded infrastructure for UC of \$5.3 billion. Of this \$5.3 billion, \$600 million represents existing bond funds, leaving a net new funding need of \$4.7 billion (see Figure 3-5).

Caltrans: Transportation needs continue to be reported based on estimates of available resources since there is no accepted methodology for making objective judgements about transportation needs without reference to funding availability.

Housing and Community Development: In the 1997 infrastructure report, HCD reported needs significantly greater than the \$30.1 million of new needs reported in 1998. Further analysis has revealed that this over-reporting was due to the inclusion of various community development and housing programs that do not result in state-owned infrastructure. Therefore, these needs are not included in this current report.

Trade and Commerce Agency: The 1997 report did not reflect the needs of the California Infrastructure and Economic Development Bank as the program was relatively new and needs were still under review in 1997.

Calfed: This report does not reflect the potentially significant costs or any currently available resources for this program since the preferred solution and the funding responsibilities have not yet been determined.

Department of Parks and Recreation: The department currently reports ten-year needs of \$1.9 billion, of which \$1.1 billion is new capital outlay and \$840 million is new state-funded local infrastructure. This compares to \$684.4 million and \$519 million

respectively reported in 1997. We believe the significant difference is the result of increased sophistication in determining and reporting needs.

Department of Boating and Waterways: In the 1997 report, the department reported ten-year needs of \$121 million. In response to the 1998 survey, the department reported significantly higher ten-year needs of \$818 million. These needs are supported by the Harbors and Watercraft Revolving Fund for which the department reports \$229 million in available resources over the ten-year reporting period. This disparity between needs and resources in a special fund reported program somewhat inflates the overall needs analysis since it is unlikely that other resources would be provided to fund the reported funding shortfall.

Department of Fish and Game: The \$26.8 million reported ten-year needs identified in the current survey is significantly less than the \$87 million reported in 1997. The department has improved the sophistication of its reporting over the last year.

Department of Mental Health: The 1997 ten-year needs of \$190 million did not include the current anticipated need of \$298 million to design and fund a new mental health facility for the treatment and rehabilitation of a new classification of civilly committed patient, the sexually violent predator.

Military Department: The reported needs of \$407.4 million included in this report are significantly greater than the \$269.2 million reported in 1997. We believe that this difference is due to the department's improved reporting abilities. In addition, the department is currently compiling a statewide facilities master plan to help in the identification of future infrastructure needs.

APPENDIX-2

CAPITAL ACQUISITION THROUGH LONG-TERM FINANCING

General Obligation (GO) Bonds

Definitions

General obligation bonds are a form of long-term borrowing in which the State issues municipal securities and pledges its full faith and credit to their repayment. Interest rates and maturities are set in advance. Bonds are repaid over many years through periodic (semi-annual) debt service payments. The California Constitution requires that GO bonds be approved by a majority vote of the public and sets repayment of GO debt before all other obligations of the State except those for K-14 education.

Key Statutory Authorities

Article XVI of the California Constitution prohibits the Legislature from creating debt which exceeds \$300,000 without a majority vote by the people. The Legislature may reduce the amount of authorized indebtedness or repeal the law if no debt has been contracted.

Government Code, Title 2, Division 4, Part 3 (Section 16650 et seq.) sets out the statutory framework for general obligation bonds. Statutory authorization for individual bond measures is placed programmatically in the codes (e.g., prison authorizations are located in the Penal Code).

History of Use

GO bonds are used primarily for capital outlay programs, although there are other uses such as veterans' home loan programs. Where used for capital outlay, GO bonds frequently support local government programs classified as "local assistance" in the state budget process. Figures A-3.1 and A-3.2 lists GO ballot proposals and their outcome from 1972 forward and by program area. Figure A-3.3 lists outstanding and unissued GO amounts by bond measure.

Financial Notes

- ◆ GO debt is a key component considered in the overall debt load of a public entity. A commonly used measure of debt is annual debt service as a percentage of General Fund revenues.
- ◆ There is no California statutory or constitutional limit on the level or ratios for debt service.

- ◆ Self-liquidating GO bonds are backed by self-generated revenue streams and therefore are not considered in the construction of debt service ratios. An example is the veterans' home loan program whose expenditures are reimbursed through mortgage payments.
- ◆ GO debt repayment is continuously appropriated.
- ◆ GO issues pay interest at the lowest tax-exempt rates based on the market rate at the date of sale.
- ◆ True interest costs for GO issues have varied from 4.60 to 10.31 percent over the last 20 years.
- ◆ GO debt repayment is structured as level principal payments, i.e., the initial payments are the highest, decreasing as principal balances and therefore interest decline.
- ◆ The Constitution authorizes 50-year maturities, but the economics of the bond market usually dictate bonds be issued on a 20- or 25-year basis. Some bond acts also limit the maximum maturity to 20 years.
- ◆ To meet cash needs before bonds are issued, GO programs may require interim financing through either loans from the Pooled Money Investment Account or the issuance of tax-exempt commercial paper.
- ◆ Figure A-2.3 shows debt service and debt service ratios for currently authorized bonds. Sales of unissued bonds have been estimated based on departments' projections provided to the State Treasurer's Office as well as extrapolations from those projections.
- ◆ Figures A-2.4, A-2.5 and A-2.6 show new sales capacity for ten years assuming debt service ratios at percentages no greater than 5.5, 6.0 and 6.5, respectively.

Revenue and Lease-Revenue Bonds

Definitions

Revenue bonds are a form of long-term borrowing in which the debt obligation is secured by a revenue stream produced by the project. Because revenue bonds are not backed by the full faith and credit of the State, they may be enacted in statute (i.e., do not require voter approval).

Lease-revenue bonds are a variant of revenue bonds used in the State's capital outlay program. The revenue stream backing the bond is created from lease payments made by the occupying department. The entity issuing the bonds (usually the Public Works Board or a joint powers authority) retains title to the facility until the debt is retired. As with revenue bonds, lease-revenue bonds do not require voter approval. However, bond rating agencies include them in calculations of debt service ratios.

Key Statutory Authorities

The Public Buildings Construction Act (Government Code Section 15800 et seq.) sets forth the authorities and responsibilities of the Public Works Board, the primary issuer of lease-revenue bonds for the State. Similar authorities are provided for joint powers

authorities in Government Code Section 6500 et seq. (Several state office building projects have been undertaken through joint powers agreements.)

History of Use

The Public Works Board has issued approximately \$6.5 billion in lease revenue bonds, including Energy Assistance bonds whose revenue stream is contract rather than lease payments. Figure A-3.4 lists outstanding lease-revenue bonds; Figure A-3.5 lists authorized but unissued lease-revenue programs.

Financial Notes

- ◆ Annual appropriations are needed to repay debt incurred by issuing lease-revenue bonds.
- ◆ Lease-revenue issues pay interest at tax-exempt rates which are slightly higher than general obligation rates (on average over the last two years, 30 basis points).
- ◆ Lease payments are conditioned upon “beneficial occupancy.” Therefore, when the facility is not capable of being occupied, no lease payment is due. Lease-revenue bonds are sized to pay capitalized interest costs and to establish a reserve account. The capitalized interest account pays debt service during the construction period until the facility can be occupied. The reserve account is set up to pay the maximum semi-annual debt service payment in the event a facility cannot be occupied for a period of time (e.g., in the event of fire damage), and repayment of the principal and interest of bonds is required. In addition, rental abatement insurance is generally required.
- ◆ Lease-revenue debt service is structured as level debt payments (as opposed to level principal payments for GO debt service).
- ◆ Lease-revenue bonds are not appropriate for any project for which a lease cannot be created. (Without a legally enforceable lease, there is no security for the issue.)
- ◆ As with GO bonds, lease-revenue projects require interim financing. However, in contrast with GO bonds, interim financing cannot generally be arranged without substantial assurance that the project will be finished so lease payments can be made. Therefore, interim financing for pre-construction phases requires a separate form of repayment assurance, sometimes met with budget act or statutory language authorizing repayment from departments’ support appropriations if projects are not completed.
- ◆ The use of a master reserve account for PWB issues since 1994 has reduced lower gross debt service costs by reducing or eliminating the need to establish stand-alone reserves for each issue.

Leasing

Definitions

A *lease-purchase* is a contractual agreement between the State and a lessor, typically a private developer, to have a facility constructed to the State's specifications and sub-leased by DGS to one or more state departments. This agreement in substance is an installment purchase. Title to the property is transferred at a specified time, preceded by the series of lease payments made from the department's support budget (leasing by definition is not a capital outlay expenditure).

A *lease with an option to purchase* is a contractual agreement between the State and a lessor to have a facility constructed and leased to the State. Unlike a lease-purchase agreement, title is not transferred until the lessee elects to exercise the purchase option. The cost of that option and when it may be exercised are both specified in advance. The State may issue bonds or provide a direct appropriation to exercise the purchase option.

A lease agreement may be considered as an *in-substance purchase* when certain accounting criteria are met (see "impact on Debt Obligations" below). The State has utilized the purchase option in the past more frequently than the installment purchase.

Key Statutory Authorities

Government Code Section 14669 permits the Director of General Services to "hire, lease, lease-purchase, or lease with the option to purchase any real or personal property for the use of any state agency" subject to legislative authorization of any lease-purchase or purchase option agreement which has an initial purchase price of over \$2,000,000.

Government Code Section 13332.10 requires the Director of General Services to notify the Legislature before entering into a lease "with a firm lease period of five years or longer and an annual rental in excess of ten thousand dollars...."

The exercise of a lease option requires legislative approval in all instances, regardless of the option amount.

History of Use

While lease-purchase or purchase option mechanisms are well-established in the private sector, the State's use of these mechanisms for capital acquisition did not become common until the last ten years. As competition for state funding has grown, these mechanisms have provided alternatives to meet infrastructure demands. In addition, lease-purchase or purchase option agreements allow the State to react quickly to changing real estate market conditions.

Examples of Use

Programs acquiring facilities through lease-purchase or purchase option include the Department of General Services' state office building program and field offices for the

California Highway Patrol (CHP) and the Department of Motor Vehicles (DMV). For example, the Board of Equalization Sacramento headquarters, the Riverside state office building, CHP Indio field office, and the DMV Turlock field office were all acquired with these financing mechanisms.

Impact on Long-Term Liabilities and Debt Obligations

From an accounting perspective, a lease-purchase or lease with a purchase option is classified as a capital lease and therefore a long-term liability when substantially all of the risks and benefits of ownership are assumed by the lessee. For purposes of debt analysis by bond rating agencies, these leases are tracked as a direct debt obligation of the State but not a bonded debt obligation. The exception is when the lessor uses the long-term lease with the State as security for the debt issuance. In this case, bond rating agencies view the State's credit as involved, the State Treasurer is agent for sale of the debt issuance, and—depending upon the governmental fund underlying the transaction—the issue may be considered a bonded debt obligation of the General Fund. Moody's Investor Services reports that it "includes leases on the debt statement and in our calculation of debt burden and debt per capita".¹

¹ "Perspectives on Municipal Issues," Moody's Public Finance, April 15, 1993, page 3.

FIGURE A-3.1

General Obligation Bond Ballot Proposals
By Date of Authorization

Date	Subject	Proposed Amount (Millions)	Self-Liquidating	Total Approved (Millions)	Statement of Vote (%)	
					For	Against
June 1972	Veterans Home Loan	\$ 250.0	\$ 250.0	\$ 250.0	65.5	34.5
	Earthquake Reconstruction & Replacement	350.0		350.0	53.8	46.2
		\$ 600.0	\$ 250.0	\$ 600.0		
November 1972	Community College Facilities	\$ 160.0		\$ 160.0	56.9	43.1
	Health Science Facilities	155.9		155.9	60.0	40.0
		\$ 315.9		\$ 315.9		
June 1974	Recreational Lands	\$ 250.0		\$ 250.0	59.9	40.14
	Clean Water	250.0		250.0	70.5	29.5
	Home Loans	350.0	\$ 350.0	350.0	72.3	27.7
		\$ 850.0	\$ 350.0	\$ 850.0		
November 1974	State School Building Aid and Earthquake Reconstruction	\$ 150.0		\$ 150.0	60.1	39.9
		\$ 150.0		\$ 150.0		
June 1976	State School Building Lease Purchase	\$ 200.0		-	47.3	52.7
	Home Loans	500.0	\$ 500.0	\$ 500.0	62.5	37.5
	Safe Drinking Water	175.0		175.0	62.6	37.4
	Community College Facilities	150.0		-	43.9	56.1
		\$ 1,025.0	\$ 500.0	\$ 675.0		
November 1976	Housing Finance	\$ 500.0		-	43.0	57.0
	State, Urban & Coastal Parks	280.0		\$ 280.0	52.0	48.0
	Residential Energy Conservation Bond Law	25.0		-	41.0	59.0
		\$ 805.0		\$ 280.0		
June 1978	State School Building Aid	\$ 350.0		-	35.0	64.0
	Clean Water and Water Conservation	375.0		\$ 375.0	53.5	46.5
		\$ 725.0		\$ 375.0		
November 1978	Home Loan	\$ 500.0	\$ 500.0	\$ 500.0	62.3	37.7
		\$ 500.0	\$ 500.0	\$ 500.0		
June 1980	Parklands and Renewable Resource Investment	\$ 495.0		-	47.0	53.0
	Veterans Home Loan	750.0	\$ 750.0	\$ 750.0	64.5	34.5
		\$ 1,245.0	\$ 750.0	\$ 750.0		
November 1980	Parklands Acquisition and Development	\$ 285.0		\$ 285.0	51.7	48.3
	Lake Tahoe Acquisition	85.0		-	48.8	51.2
		\$ 370.0		\$ 285.0		
June 1982	New Prison Construction	\$ 495.0		\$ 495.0	56.2	43.9
		\$ 495.0		\$ 495.0		
November 1982	State School Building Lease Purchase	\$ 500.0		\$ 500.0	50.5	49.5
	County Jail	280.0		280.0	54.3	45.7
	Veterans Home Loan	450.0	\$ 450.0	450.0	67.1	32.9
	Lake Tahoe Acquisition	85.0		85.0	52.9	47.1
	First-Time Home Buyers	200.0		200.0	53.8	46.2
		\$ 1,515.0	\$ 450.0	\$ 1,515.0		
June 1984	County Jails	\$ 250.0		\$ 250.0	58.7	41.3
	Prisons	300.0		300.0	57.8	42.2
	Parks and Recreation	370.0		370.0	63.2	36.8
	Fish and Wildlife	85.0		85.0	64.0	36.0
		\$ 1,005.0		\$ 1,005.0		
November 1984	Clean Water	\$ 325.0		\$ 325.0	75.9	27.1
	State School Building Lease Purchase	450.0		450.0	60.7	39.3
	Hazardous Substance Clean-up	100.0		100.0	72.0	28.0
	Safe Drinking Water	75.0		75.0	73.5	26.5
	Veterans Home Loan	650.0	\$ 650.0	650.0	66.3	33.7
	Senior Citizens' Centers	50.0		50.0	66.7	33.3
		\$ 1,650.0	\$ 650.0	\$ 1,650.0		

FIGURE A 3.1—CONTINUED

General Obligation Bond Ballot Proposals By Date of Authorization						
Date	Subject	Proposed Amount (Millions)	Self- Liquidating	Total Approved (Millions)	Statement of Vote (%)	
					For	Against
June 1986	Veterans Home Loan	\$ 850.0	\$ 850.0	\$ 850.0	75.6	24.4
	Community Parklands	100.0		100.0	67.3	32.7
	Water Conservation/Quality	150.0		150.0	74.1	25.9
	County Jails	495.0		495.0	67.2	32.8
		\$ 1,595.0	\$ 850.0	\$ 1,595.0		
November 1986	State School Building Lease-Purchase	\$ 800.0		\$ 800.0	60.7	39.3
	Prison Construction	500.0		500.0	65.3	34.7
	Safe Drinking Water	100.0		100.0	67.7	21.3
	Higher Education Facilities	400.0		400.0	59.7	40.3
		\$ 1,800.0		\$ 1,800.0		
June 1988	Earthquake Safety/Housing Rehabilitation	\$ 150.0		\$ 150.0	56.2	43.8
	State School Facilities	800.0		800.0	65.0	35.0
	Wildlife, Coastal and Park Land Conservation	776.0		776.0	65.2	34.8
	Veterans Home Loan	510.0	\$ 510.0	510.0	67.6	32.4
	Transportation	1,000.0		-	49.9	50.1
		\$ 3,236.0	\$ 510.0	\$ 2,236.0		
November 1988	Library Construction and Renovation	\$ 75.0		\$ 75.0	52.7	47.3
	Safe Drinking Water	75.0		75.0	71.7	28.3
	Clean Water and Water Reclamation	65.0		65.0	64.4	35.6
	County Correctional Facility Capital Expenditure & Youth Facility	500.0		500.0	54.7	45.3
	Higher Education Facilities	600.0		600.0	57.7	42.3
	New Prison Construction	817.0		817.0	61.1	38.9
	School Facilities	800.0		800.0	61.2	38.8
	Water Conservation	60.0		60.0	62.4	37.6
	Housing and Homeless	300.0		300.0	58.2	41.8
		\$ 3,292.0		\$ 3,292.0		
June 1990	Housing and Homeless	\$ 150.0		\$ 150.0	52.5	47.5
	Passenger Rail/Clean Air	1,000.0		1,000.0	56.3	43.7
	Rail Transportation	1,990.0		1,990.0	53.3	46.7
	New Prison Construction	450.0		450.0	56.0	44.0
	Higher Education Facilities	450.0		450.0	55.0	45.0
	Earthquake Safety & Public Rehabilitation	300.0		300.0	55.0	45.0
	New School Facilities	800.0		800.0	57.5	42.5
		\$ 5,140.0		\$ 5,140.0		
November 1990	Veteran's Home Loan	\$ 400.0	\$ 400.0	\$ 400.0	59.1	41.0
	Higher Education Facilities	450.0		-	48.8	51.2
	New Prison Construction	450.0		-	40.4	59.6
	Housing	125.0		-	44.5	55.5
	School Facilities	800.0		800.0	51.9	48.1
	County Correctional Facility Capital Expenditure and Juvenile Facility	225.0		-	37.3	62.7
	Water Resources	380.0		-	43.9	56.1
	Park, Recreation, and Wildlife Enhancement	437.0		-	47.3	52.7
	County Courthouse Facility Capital Expenditure	200.0		-	26.5	73.5
	Child Care Facilities	30.0		-	47.6	52.4
	Environment, Public Health	300.0		-	36.1	63.9
	Forest Acquisition, Timber Harvesting	742.0		-	47.2	52.8
	Drug Enforcement	740.0		-	28.3	71.7
		\$ 5,279.0	\$ 400.0	\$ 1,200.0		
	June 1992	School Facilities	\$ 1,900.0		\$ 1,900.0	52.9
Higher Education Facilities		900.0		900.0	50.8	49.2
		\$ 2,800.0		\$ 2,800.0		
November 1992	Schools Facilities	\$ 900.0		\$ 900.0	51.8	48.2
	Passenger Rail and Clean Air	1,000.0		-	48.1	51.9
		\$ 1,900.0		\$ 900.0		
November 1993	California Housing and Jobs Investment	\$ 185.0		-	42.2	57.8
		\$ 185.0		-		

FIGURE A-3.1—CONTINUED

General Obligation Bond Ballot Proposals By Date of Authorization				Statement of Vote (%)		
Date	Subject	Proposed Amount (Millions)	Self- Liquidating	Total Approved (Millions)	For	Against
June 1994	Earthquake Relief and Seismic Retrofit	\$ 2,000.0		-	45.7	54.3
	Safe Schools	1,000.0		-	49.6	54.4
	Higher Education Facilities	900.0		-	47.2	52.6
	Parklands, Historic Sites, Wildlife and Forest Conservation	2,000.0		-	43.2	54.7
		<u>\$ 5,900.0</u>		<u>-</u>		
November 1994	Passenger Rail and Clean Air	\$ 1,000.0		-	34.9	65.1
		<u>\$ 1,000.0</u>		<u>-</u>		
March 1996	Seismic Retrofit	\$ 2,000.0		\$ 2,000.0	59.9	40.1
	Public Education Facilities	3,000.0		3,000.0	61.9	38.1
		<u>\$ 5,000.0</u>		<u>\$ 5,000.0</u>		
November 1996	Safe, Clean, Reliable Water Supply	\$ 995.0		\$ 995.0	62.9	37.1
	Youthful and Adult Offender Local Facilities	700.0		-	40.6	59.4
	Veterans Home Loan	400.0	\$ 400.0	400.0	53.6	46.4
		<u>\$ 2,095.0</u>	<u>\$ 400.0</u>	<u>\$ 1,395.0</u>	62.4	37.6
November 1998	K-12, Higher Education Facilities	\$ 9,200.0		\$ 9,200.0		
		<u>\$ 9,200.0</u>		<u>\$ 9,200.0</u>		
	TOTAL	\$ 59,672.9	\$ 5,610.0	\$ 44,003.9		

FIGURE A-3.2

General Obligation Bond Ballot Proposals
By Program Area

Program	Date	Proposed Amount (Millions)	Self- Liquidating	Total Approved (Millions)	Statement of Vote (%)	
					For	Against
Public Safety						
New Prison Construction	June 1982	\$ 495.0		\$ 495.0	56.2	43.9
County Jail Capital	November 1982	280.0		280.0	54.3	45.7
County Jails	June 1984	250.0		250.0	58.7	41.3
Prisons	June 1984	300.0		300.0	57.8	42.2
County Jails	June 1986	495.0		495.0	67.2	32.8
Prison Construction	November 1986	500.0		500.0	65.3	34.7
County Correctional Facility & Youth Facility	November 1988	500.0		500.0	54.7	45.3
New Prison Construction	November 1988	817.0		817.0	61.1	38.9
New Prison Construction	June 1990	450.0		450.0	56.0	44.0
New Prison Construction	November 1990	450.0		-	40.4	59.6
County Correctional Facility and Juvenile Facility	November 1990	225.0		-	37.3	62.7
Youthful and Adult Offender Local Facilities	November 1996	700.0		-	40.6	59.4
		<u>\$ 5,462.0</u>		<u>\$ 4,087.0</u>		
Seismic						
Earthquake Reconstruction & Replacement	June 1972	\$ 350.0		\$ 350.0	53.8	46.2
Earthquake Safety/Housing Rehabilitation	June 1988	150.0		150.0	56.2	43.8
Earthquake Safety & Public Rehabilitation	June 1990	300.0		300.0	55.0	45.0
Earthquake Relief and Seismic Retrofit	June 1994	2,000.0		-	45.7	54.3
Seismic Retrofit	March 1996	2,000.0		2,000.0	59.9	40.1
		<u>\$ 4,800.0</u>		<u>\$ 2,800.0</u>		
K-12 Education						
State School Building Aid and Earthquake Reconstruction	November 1974	\$ 150.0		\$ 150.0	60.1	39.9
State School Building Lease Purchase	June 1976	200.0		-	47.3	52.7
State School Building Aid	June 1978	350.0		-	35.0	64.0
State School Building Lease Purchase	November 1982	500.0		500.0	50.5	49.5
State School Building Lease Purchase	November 1984	450.0		450.0	60.7	39.3
State School Building Lease Purchase	November 1986	800.0		800.0	60.7	39.3
State School Facilities	June 1988	800.0		800.0	65.0	35.0
School Facilities	November 1988	800.0		800.0	61.2	38.8
New School Facilities	June 1990	800.0		800.0	57.5	42.5
School Facilities	November 1990	800.0		800.0	51.9	48.1
School Facilities	June 1992	1,900.0		1,900.0	52.9	47.1
School Facilities	November 1992	900.0		900.0	51.8	48.2
Safe Schools Act of 1994	June 1994	1,000.0		-	49.6	54.4
Public Education Facilities	March 1996	3,000.0		3,000.0	61.9	38.1
Public Education	November 1998	6,700.0		6,700.0	62.4	37.6
		<u>\$ 19,150.0</u>		<u>\$ 17,600.0</u>		
Higher Education						
Community College Facilities	November 1972	\$ 160.0		\$ 160.0	56.9	43.1
Community College Facilities	June 1976	150.0		-	43.9	56.1
Higher Education Facilities	November 1986	400.0		400.0	59.7	40.3
Higher Education Facilities	November 1988	600.0		600.0	57.7	42.3
Higher Education Facilities	June 1990	450.0		450.0	55.0	45.0
Higher Education Facilities	November 1990	450.0		-	48.8	51.2
Higher Education Facilities	June 1992	900.0		900.0	50.8	49.2
Higher Education Facilities	June 1994	900.0		-	47.2	52.6
Higher Education Facilities	November 1998	2,500.0		2,500.0	62.4	37.6
		<u>\$ 6,510.0</u>		<u>\$ 5,010.0</u>		
Environmental Quality & Resources						
Recreational Lands	June 1974	\$ 250.0		\$ 250.0	59.9	40.14
Clean Water	June 1974	250.0		250.0	70.5	29.5
Safe Drinking Water	June 1976	175.0		175.0	62.6	37.4
State, Urban & Coastal Parks	November 1976	280.0		280.0	52.0	48.0
Clean Water and Water Conservation	June 1978	375.0		375.0	53.5	46.5
Parklands and Renewable Resource Investment	June 1980	495.0		-	47.0	53.0

FIGURE A-3.2—CONTINUED

General Obligation Bond Ballot Proposals By Program Area						
Program	Date	Proposed Amount (Millions)	Self- Liquidating	Total Approved (Millions)	Statement of Vote (%)	
					For	Against
Parklands Acquisition and Development	November 1980	\$ 285.0		\$ 285.0	51.7	48.3
Lake Tahoe Acquisition	November 1980	85.0		-	48.8	51.2
Lake Tahoe Acquisition	November 1982	85.0		85.0	52.9	47.1
Parks and Recreation	June 1984	370.0		370.0	63.2	36.8
Fish and Wildlife	June 1984	85.0		85.0	64.0	36.0
Clean Water (Sewer)	November 1984	325.0		325.0	75.9	27.1
Hazardous Substance Clean-up	November 1984	100.0		100.0	72.0	28.0
Safe Drinking Water	November 1984	75.0		75.0	73.5	26.5
Community Parklands	June 1986	100.0		100.0	67.3	32.7
Water Conservation/Quality	June 1986	150.0		150.0	74.1	25.9
Safe Drinking Water	November 1986	100.0		100.0	67.7	21.3
Wildlife, Coastal and Park Land Conservation	June 1988	776.0		776.0	65.2	34.8
Safe Drinking Water	November 1988	75.0		75.0	71.7	28.3
Clean Water and Water Reclamation	November 1988	65.0		65.0	64.4	35.6
Water Conservation	November 1988	60.0		60.0	62.4	37.6
Water Resources	November 1990	380.0		-	43.9	56.1
Park, Recreation, and Wildlife Enhancement	November 1990	437.0		-	47.3	52.7
Environment, Public Health	November 1990	300.0		-	36.1	63.9
Forest Acquisition, Timber Harvesting	November 1990	742.0		-	47.2	52.8
Parklands, Historic Sites, Wildlife and Forest Conservation	June 1994	2,000.0		-	43.2	56.7
Safe, Clean, Reliable Water	November 1996	995.0		995.0	62.9	37.1
		\$ 9,415.0		\$ 4,976.0		
Veterans Home Loans						
Veterans Home Loan						
Veterans Home Loan	June 1972	\$ 250.0	\$ 250.0	\$ 250.0	65.5	34.5
Veterans Home Loan	June 1972	350.0	350.0	350.0	72.3	27.7
Veterans Home Loan	June 1976	500.0	500.0	500.0	62.5	37.5
Veterans Home Loan	November 1978	500.0	500.0	500.0	62.3	37.7
Veterans Home Loan	June 1980	750.0	750.0	750.0	64.5	35.5
Veterans Home Loan	November 1982	450.0	450.0	450.0	67.1	32.9
Veterans Home Loan	November 1984	650.0	650.0	650.0	66.3	33.7
Veterans Home Loan	June 1986	850.0	850.0	850.0	75.6	24.4
Veterans Home Loan	June 1988	510.0	510.0	510.0	67.6	32.4
Veterans Home Loan	November 1990	400.0	400.0	400.0	59.1	41.0
Veterans Home Loan	November 1996	400.0	400.0	400.0	53.6	46.4
		\$ 5,610.0	\$ 5,610.0	\$ 5,610.0		
Housing						
Housing Finance						
First-Time Home Buyers	November 1976	\$ 500.0		-	43.0	57.0
Housing and Homeless	November 1982	200.0		\$ 200.0	53.8	46.2
Housing and Homeless	November 1988	300.0		300.0	58.2	41.8
Housing	June 1990	150.0		150.0	52.5	47.5
Housing	November 1990	125.0		-	44.5	55.5
California Housing and Jobs Investment	November 1993	185.0		-	42.2	57.8
		\$ 1,460.0		\$ 650.0		
Transportation						
Transportation	June 1988	\$ 1,000.0		-	49.9	50.1
Rail Transportation	June 1990	1,990.0		\$ 1,990.0	53.3	46.7
Passenger Rail and Clean Air	November 1992	1,000.0		-	48.1	51.9
Passenger Rail and Clean Air	June 1990	1,000.0		1,000.0	56.3	43.7
Passenger Rail and Clean Air	November 1994	1,000.0		-	34.9	65.1
		\$ 5,990.0		\$ 2,990.0		
Health Facilities						
Health Science Facilities						
	November 1972	\$ 155.9		\$ 155.9	60.0	40.0
		\$ 155.9		\$ 155.9		

FIGURE A-3.2—CONTINUED

General Obligation Bond Ballot Proposals
By Program Area

Program	Date	Proposed Amount (Millions)	Self- Liquidating	Total Approved (Millions)	Statement of Vote (%)	
					For	Against
Senior Centers						
Senior Citizens' Centers	November 1984	\$ 50.0		\$ 50.0	66.7	33.3
		\$ 50.0		\$ 50.0		
Libraries						
Library Construction and Renovation	November 1988	\$ 75.0		\$ 75.0	52.7	47.3
		\$ 75.0		\$ 75.0		
County Courthouses						
County Courthouse Facility Capital Expenditure	November 1990	\$ 200.0		-	26.5	73.5
		\$ 200.0		-		
Child Care Centers						
Child Care Facilities Financing	November 1990	\$ 30.0		-	47.6	52.4
		\$ 30.0		-		
Drug Enforcement						
Drug Enforcement	November 1990	\$ 740.0		-	28.3	71.7
		\$ 740.0		-		
Energy Conservation						
Residential Energy Conservation	November 1976	\$ 25.0		-	41.0	59.0
		\$ 25.0		-		
Total		\$ 59,672.9	\$ 5,610.0	\$ 44,003.9		

FIGURE A-3.3

**Authorized and Outstanding General Obligation Bonds
As of September 1, 1998
(Thousands)**

	Voter Authorization Date	Amount	Bonds Outstanding	CP Program Authorized (a)	Unissued (b)
General Fund Bonds (Non-Self Liquidating)					
California Earthquake Safety and Housing Rehabilitation Bond Act of 1988.....	6/7/88	\$ 150,000	\$ 95,515	\$ n.a.	0
California Library Construction and Renovation Bond Act of 1988.....	11/8/88	75,000	50,655	6,725	\$ 1,900
California Park and Recreational Facilities Act of 1984.....	6/5/84	370,000	215,750	n.a.	1,100
California Parklands Act of 1980.....	11/4/80	285,000	71,195	n.a.	0
California Safe Drinking Water Bond Law of 1976.....	6/8/76	175,000	71,565	n.a.	2,500
California Safe Drinking Water Bond Law of 1984.....	11/6/84	75,000	42,790	n.a.	0
California Safe Drinking Water Bond Law of 1986.....	11/4/86	100,000	71,160	n.a.	8,000
California Safe Drinking Water Bond Law of 1988.....	11/8/88	75,000	45,800	11,265	7,000
California Wildlife, Coastal, and Park Land Conservation Act of 1988.....	6/7/88	776,000	536,380	n.a.	39,980
Clean Air and Transportation Improvement Bond Act of 1990.....	6/5/90	1,990,000	983,915	241,420	544,300
Clean Water and Water Conservation Bond Law of 1978.....	6/6/78	375,000	87,455	n.a.	4,150
Clean Water and Water Reclamation Bond Law of 1988.....	11/8/88	65,000	41,800	12,505	0
Clean Water Bond Law of 1970.....	11/3/70	250,000	6,500	n.a.	0
Clean Water Bond Law of 1974.....	6/4/74	250,000	12,790	n.a.	0
Clean Water Bond Law of 1984.....	11/6/84	325,000	127,930	n.a.	0
Community Parklands Act of 1986.....	6/3/86	100,000	64,150	n.a.	0
County Correctional Facility Capital Expenditure and Youth Facility Bond Act of 1988.....	11/8/88	500,000	354,050	25,000	0
County Correctional Facility Capital Expenditure Bond Act of 1986.....	6/3/86	495,000	321,250	n.a.	2,000
County Jail Capital Expenditure Bond Act of 1981.....	11/2/82	280,000	122,525	n.a.	0
County Jail Capital Expenditure Bond Act of 1984.....	6/5/84	250,000	109,900	n.a.	0
Earthquake Safety and Public Buildings Rehabilitation Bond Act of 1990.....	6/5/90	300,000	39,500	84,000	166,000
Fish and Wildlife Habitat Enhancement Act of 1984.....	6/5/84	85,000	44,605	n.a.	3,500
Hazardous Substance Cleanup Bond Act of 1984.....	11/6/84	100,000	44,095	n.a.	0
Higher Education Facilities Bond Act of 1986.....	11/4/86	400,000	228,900	n.a.	0
Higher Education Facilities Bond Act of 1988.....	11/8/88	600,000	386,005	4,705	7,000
Higher Education Facilities Bond Act of June 1990.....	6/5/90	450,000	304,805	14,500	7,000
Higher Education Facilities Bond Act of June 1992.....	6/2/92	900,000	690,555	83,420	22,700
Housing and Homeless Bond Act of 1988.....	11/8/88	300,000	118,615	n.a.	0
Housing and Homeless Bond Act of 1990.....	6/5/90	150,000	84,095	n.a.	0
Lake Tahoe Acquisitions Bond Act.....	8/2/82	85,000	47,820	n.a.	0
New Prison Construction Bond Act of 1981.....	6/8/82	495,000	155,500	n.a.	0
New Prison Construction Bond Act of 1984.....	6/5/84	300,000	112,500	n.a.	0
New Prison Construction Bond Act of 1986.....	11/4/86	500,000	300,690	n.a.	1,500
New Prison Construction Bond Act of 1988.....	11/8/88	817,000	536,245	7,600	8,400
New Prison Construction Bond Act of 1990.....	6/5/90	450,000	286,160	40,100	0
Passenger Rail and Clean Air Bond Act of 1990.....	6/5/90	1,000,000	650,130	107,900	0
Public Education Facilities Bond Act of 1996.....	3/26/96	3,000,000	1,544,180	920,805	516,700
1988 School Facilities Bond Act.....	11/8/88	800,000	485,395	45,000	0
1990 School Facilities Bond Act.....	6/5/90	800,000	537,640	34,745	0
1992 School Facilities Bond Act.....	11/3/92	900,000	695,971	65,094	0
Safe, Clean Reliable Water Supply Act of 1996.....	11/5/96	995,000	50,000	238,000	707,000
Seismic Retrofit Bond Act of 1996.....	3/26/96	2,000,000	348,325	1,201,995	448,000
School Building and Earthquake Bond Act of 1974.....	11/5/74 (c)	40,000	37,330	n.a.	0
School Facilities Bond Act of 1988.....	6/7/88	800,000	492,135	n.a.	0
School Facilities Bond Act of 1990.....	11/6/90	800,000	532,470	55,000	0
School Facilities Bond Act of 1992.....	6/2/92	1,900,000	1,467,785	65,000	0
Senior Center Bond Act of 1984.....	11/6/84	50,000	20,000	n.a.	0
State Beach, Park, Recreational and Historical Facilities Bonds.....	6/4/74	250,000	3,850	n.a.	0
State School Building Lease-Purchase Bond Law of 1982.....	11/2/82	500,000	130,925	n.a.	0
State School Building Lease-Purchase Bond Law of 1984.....	11/6/84	450,000	217,300	n.a.	0
State School Building Lease-Purchase Bond Law of 1986.....	11/4/86	800,000	475,000	n.a.	0
State, Urban, and Coastal Park Bond Act of 1976.....	11/2/76	280,000	22,525	n.a.	2,450
Water Conservation and Water Quality Bond Law of 1986.....	6/3/86	150,000	74,695	n.a.	47,000
Water Conservation Bond Law of 1988.....	11/8/88	60,000	30,175	20,935	3,000
Total General Fund Bonds.....		\$ 28,468,000	\$ 14,628,996	\$ 3,285,714	\$ 2,551,180
Enterprise Fund Bonds (Self Liquidating)					
California Water Resources Development Bond Act of 1959.....	11/8/60	\$ 1,750,000	\$ 1,010,900	n.a.	\$ 167,600
Harbor Development Bond Law of 1958.....	11/4/58	60,000	285	n.a.	0
State School Building Aid and Earthquake Reconstruction and Replacement Bond Law of 1974.....	11/5/74 (c)	110,000	3,750	n.a.	0
Veterans Bonds.....	(d)	5,610,000	2,881,565	n.a.	301,500
Total Enterprise Fund Bonds.....		\$ 7,530,000	\$ 3,896,500	0	\$ 469,100
TOTAL GENERAL OBLIGATION BONDS.....		\$ 35,998,000	\$ 18,525,496	\$ 3,285,714	\$ 3,020,280

(a) Total commercial paper authorized to be issued by the respective Finance Committees. Of this total \$1,211,220,000 is outstanding as of September 1, 1998. Pursuant to terms of the Finance Committee resolutions, no more than \$1.5 billion of commercial paper can be outstanding at any one time.

Bond acts marked "n.a." are not legally permitted to utilize commercial paper, or all bonds were issued before the commercial paper program began.

(b) Treats full commercial paper authorization as issued; see footnote (a).

(c) Pursuant to Prop 203, passed by the voters in the March 26, 1996 primary election, \$40 million in bonds unissued at that time became general fund supported, while all previously issued bonds will remain under "State School Building Aid Bonds" as self-liquidating Enterprise Bonds.

(d) Various dates.

SOURCE: State of California, Office of the Treasurer.

FIGURE A-3.4

**State Public Works Board and
Other Lease-Purchase Financing
Outstanding Issues
As of September 1, 1998**

Name of Issue	Outstanding
General Fund Supported Issues:	
State Public Works Board	
California Community Colleges	\$ 644,020,000
Department of Corrections *	2,777,252,932
Energy Efficiency Program (Various State Agencies) (a).....	136,070,000
The Regents of The University of California * (b).....	1,144,511,465
Trustees of The California State University.....	763,690,000
Various State Office Buildings.....	324,105,000
Total State Public Works Board Issues.....	\$ 5,789,649,397
Total Other State Building Lease Purchase Issues.....	\$ 770,230,000
Total General Fund Supported Issues.....	\$ 6,559,879,397
Special Fund Supported Issues:	
East Bay State Building Authority Certificates of Participation (State of California Department of Transportation) *	\$ 88,960,101
San Bernardino Joint Powers Financing Authority (State of California Department of Transportation).....	63,755,000
San Francisco State Building Authority (State of California Department of General Services Lease) (c)	54,270,000
Total Special Fund Supported Issues.....	\$ 206,985,101
TOTAL	\$ 6,766,864,498

* Includes the initial value of capital appreciation bonds rather than the accreted value.
 (a) This program is self-liquidating based on energy cost savings.
 (b) The Regents' obligations to the State Public Works Board are payable from law fully available funds of The Regents which are held in The Regents' treasury funds and are separate from the State General Fund. A portion of The Regents' annual budget is derived from General Fund appropriations.
 (c) The sole tenant is the California Public Utilities Commission.

SOURCE: State of California, Office of the Treasurer.

FIGURE A-3.5

**Authorized But Unissued Financings
Lease Revenue Bonds
As of November 1, 1998**

	Unissued Amount
State Public Works Board (SPWB)	
Higher Education Instructional Facilities:	
UC	--
CSU	--
CCC	\$ 40,433,000
Total Higher Education	\$ 40,433,000
Department of Corrections:	
McGee Correctional Training Facility	\$ 16,500,000
Various Prison Projects	30,887,000
Sacramento Headquarters	160,000,000
Total Corrections	\$ 207,387,000
Department of Youth Authority:	
Various Institution Facility Projects	\$ 7,882,000
State Buildings:	
Dept. of Health Services (Richmond Lab Ph I)	\$ 54,500,000
Dept. of Health Services (Richmond Lab Ph II)	108,416,000
Dept. of Forestry & Fire Protection, Comm Towers	10,000,000
DGS, Long Beach State Office Building	75,000,000
DGS, San Diego State Office Buildings	90,000,000
Dept. of Veterans Affairs, So. Calif. Veterans Home	36,000,000
Franchise Tax Board, Phase III	211,000,000
Health and Welfare Agency Data Center (HWDC)	24,000,000
Dept. of Justice, Replacement Laboratories	18,444,000
Capital Area East End Complex	392,000,000
Office of Emergency Services Headquarters	25,330,000
Dept. of Mental Health, Atascadero Hospital Addition	333,235,000
Total State Buildings	\$ 1,077,925,000
Energy Efficiency Revenue Bonds	\$ 279,220,000
Total SPWB	\$ 1,612,847,000
Joint Powers Authority (JPA)	
Los Angeles State Office Building (Junipero Serra)	\$ 69,500,000
Total Lease Revenue	\$ 1,682,347,000

SOURCE: Office of the State Treasurer

FIGURE A-4.1

**Debt Service Analysis of Currently Authorized
G.O. Bond/Lease Revenue Bond Debt Service Model
(Excluding Self-Liquidating Bonds)
(Dollars in Millions)**

Year	General Fund	Debt Service	Debt Service % of G. F.	GO/Lease Revenue Bonds Authorized	Bond Sales	Authorized But Unsold	Outstanding Debt
1998-99	\$ 56,293	\$ 2,507	4.5%	\$ (9,545)	\$ (1,868)	\$ 14,812	\$ 21,829
1999-00	\$ 60,272	\$ 2,809	4.7%	-	\$ 2,322	\$ 12,490	\$ 22,628
2000-01	\$ 63,439	\$ 3,005	4.7%	-	\$ 2,888	\$ 9,602	\$ 23,974
2001-02	\$ 66,920	\$ 3,213	4.8%	-	\$ 2,830	\$ 6,772	\$ 25,184
2002-03	\$ 70,769	\$ 3,318	4.7%	-	\$ 2,366	\$ 4,405	\$ 25,977
2003-04	\$ 74,739	\$ 3,349	4.5%	-	\$ 1,710	\$ 2,695	\$ 26,245
2004-05	\$ 79,084	\$ 3,301	4.2%	-	\$ 444	\$ 2,251	\$ 25,506
2005-06	\$ 83,444	\$ 3,181	3.8%	-	\$ 960	\$ 1,291	\$ 24,113
2006-07	\$ 87,828	\$ 3,150	3.6%	-	\$ 758	\$ 533	\$ 23,996
2007-08	\$ 92,682	\$ 3,041	3.3%	-	-	\$ 533	\$ 22,329
2008-09	\$ 97,780	\$ 2,958	3.0%	-	-	\$ 533	\$ 20,647
Totals				\$ -	\$ 14,279		

ASSUMPTIONS:

Debt service for future bond sales is based on 25 year serial bonds with a coupon rate of 5.5% for 98-99 and 99-00, 6.0 thereafter for G.O. bonds and 6.0 for 98-99, 5.75 for 99-00 and 6.5% thereafter for lease-revenue bonds.

General Fund revenues are based on DOF May 98 Revision.

STO info based on various most recent STO reports.

FIGURE A-4.2

Debt Service Analysis Assuming a Debt Service Ratio of 5.5 Percent
G.O. Bond/Lease Revenue Bond Debt Service Model
 (Excluding Self-Liquidating Bonds)
 (Dollars in Millions)

Year	General Fund	Debt Service	Debt Service % of G.F.	GO/Lease Revenue Bonds Authorized	Bond Sales	Authorized But Unsold	Outstanding Debt
1998-99	\$ 56,293	\$ 2,507	4.5%	\$ (9,545) 1\	\$ (1,868) 1\	\$ 14,812	\$ 21,828
1999-00	\$ 60,272	\$ 2,809	4.7%	\$ 26,778	\$ 2,322	\$ 39,267	\$ 22,628
2000-01	\$ 63,439	\$ 3,511	5.5%	-	\$ 7,953	\$ 31,315	\$ 28,836
2001-02	\$ 66,920	\$ 3,707	5.5%	-	\$ 3,480	\$ 27,834	\$ 29,843
2002-03	\$ 70,769	\$ 3,918	5.5%	-	\$ 3,991	\$ 23,843	\$ 31,563
2003-04	\$ 74,739	\$ 4,112	5.5%	-	\$ 3,588	\$ 20,254	\$ 33,288
2004-05	\$ 79,084	\$ 4,315	5.5%	-	\$ 6,054	\$ 14,200	\$ 34,820
2005-06	\$ 83,444	\$ 4,580	5.5%	-	\$ 4,510	\$ 9,690	\$ 36,944
2006-07	\$ 87,828	\$ 4,867	5.5%	-	\$ 3,757	\$ 5,933	\$ 39,641
2007-08	\$ 92,682	\$ 5,130	5.5%	-	\$ 5,400	\$ 533	\$ 37,238
2008-09	\$ 97,780	\$ 5,418	5.5%	-	-	\$ 533	\$ 34,822
Totals				\$ 26,778	\$ 41,056		

ASSUMPTIONS:

Debt service for future bond sales is based on 25 year serial bonds with a coupon rate of 5.5% for 98-99 and 99-00, 6.0 thereafter for G.O. bonds 6.0 for 98-99, 5.75 for 99-00 and 6.5% thereafter for lease-revenue bonds.

General Fund revenues are based on DOF May 98 Revision.

STO info based on various most recent STO reports.

1\ Assumes currently scheduled bonds will be sold.

FIGURE A-4.3

Debt Service Analysis Assuming a Debt Service Ratio of 6.0 Percent
G.O. Bond/Lease Revenue Bond Debt Service Model
 (Excluding Self-Liquidating Bonds)
 (Dollars in Millions)

Year	General Fund	Debt Service	Debt Service % of G.F.	GO/Lease Revenue Bonds Authorized	Bond Sales	Authorized But Unsold	Outstanding Debt
1998-99	\$ 56,293	\$ 2,507	4.5%	\$ (9,545) 1\	\$ (1,868) 1\	\$ 14,812	\$ 21,828
1999-00	\$ 60,272	\$ 2,809	4.7%	\$ 32,487	\$ 2,322	\$ 44,977	\$ 22,628
2000-01	\$ 63,439	\$ 3,830	6.0%	-	\$ 11,138	\$ 33,839	\$ 31,894
2001-02	\$ 66,920	\$ 4,041	6.0%	-	\$ 3,165	\$ 30,674	\$ 32,999
2002-03	\$ 70,769	\$ 4,266	6.0%	-	\$ 5,218	\$ 25,455	\$ 34,798
2003-04	\$ 74,739	\$ 4,489	6.0%	-	\$ 5,310	\$ 20,145	\$ 36,736
2004-05	\$ 79,084	\$ 4,762	6.0%	-	\$ 4,944	\$ 15,201	\$ 38,876
2005-06	\$ 83,444	\$ 5,020	6.0%	-	\$ 4,760	\$ 10,441	\$ 40,845
2006-07	\$ 87,828	\$ 5,306	6.0%	-	\$ 5,158	\$ 5,283	\$ 43,444
2007-08	\$ 92,682	\$ 5,586	6.0%	-	\$ 3,650	\$ 1,633	\$ 40,843
2008-09	\$ 97,780	\$ 5,907	6.0%	-	\$ 1,100	\$ 533	\$ 38,228
Totals				\$ 32,487	\$ 46,766		

ASSUMPTIONS:

Debt service for future bond sales is based on 25 year serial bonds with a coupon rate of 5.5% for 98-99 and 99-00, 6.0 thereafter for G.O. bonds and 6.0 for 98-99, 5.75 for 99-00 and 6.5% thereafter for lease-revenue bonds.

General Fund Revenues are based on DOF May 98 Revision.

STO info based on various most recent STO reports.

1\ Assumes currently scheduled bonds will be sold.

FIGURE A-4.4

Debt Service Analysis Assuming a Debt Service Ratio of 6.5 Percent
G.O. Bond/Lease Revenue Bond Debt Service Model
(Excluding Self-Liquidating Bonds)
(Dollars in Millions)

Year	General Fund	Debt Service	Debt Service % of G.F.	GO/Lease Revenue Bonds Authorized	Bond Sales	Authorized But Unsold	Outstanding Debt
1998-99	\$ 56,293	\$ 2,507	4.7%	\$ (9,545) 1\	\$ (1,868) 1\	\$ 14,812	\$ 21,828
1999-00	\$ 60,272	\$ 2,809	4.7%	\$ 38,105	\$ 2,322	\$ 50,594	\$ 22,628
2000-01	\$ 63,439	\$ 4,145	6.5%	-	\$ 14,288	\$ 36,306	\$ 34,918
2001-02	\$ 66,920	\$ 4,350	6.5%	-	\$ 4,701	\$ 31,605	\$ 35,912
2002-03	\$ 70,769	\$ 4,590	6.5%	-	\$ 3,866	\$ 27,739	\$ 37,796
2003-04	\$ 74,739	\$ 4,839	6.5%	-	\$ 6,410	\$ 21,329	\$ 39,932
2004-05	\$ 79,084	\$ 5,123	6.5%	-	\$ 3,944	\$ 17,384	\$ 42,115
2005-06	\$ 83,444	\$ 5,447	6.5%	-	\$ 5,660	\$ 11,724	\$ 44,647
2006-07	\$ 87,828	\$ 5,736	6.5%	-	\$ 5,741	\$ 5,983	\$ 47,203
2007-08	\$ 92,682	\$ 6,044	6.5%	-	\$ 4,150	\$ 1,833	\$ 44,409
2008-09	\$ 97,780	\$ 6,391	6.5%	-	\$ 1,300	\$ 533	\$ 41,600
Totals				\$ 38,105	\$ 52,383		

ASSUMPTIONS:

Debt service for future bond sales is based on 25 year serial bonds with a coupon rate of 5.5% for 98-99 and 99-00, 6.0 thereafter for G.O. bonds and 6.0 for 98-99, 5.75 for 99-00 and 6.5% thereafter for lease-revenue bonds.

General Fund revenues are based on DOF May 98 Revision.

STO info based on various most recent STO reports.

1\ Assumes currently scheduled bonds will be sold.