

60 YEARS OF SERVICE

2005-06 Analysis



# MAJOR ISSUES

## *Capital Outlay*

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### **Design-Build Can Be a Useful Alternative Construction System**

- Design-build is a construction delivery method that is relatively new to state and local governments. Its use by the state and selected local agencies over the last ten years. We examine their experience to date, and find that design-build can be a useful option for some public construction projects. We recommend that the design-build authority be provided on an ongoing basis to state and local public agencies, but to do so within a framework that preserves the public's confidence in the procurement process, quality control, and access for small contractors to public contracts (see page G-17).



### **Administration Has Not Submitted Required Infrastructure Plan**

- The administration did not submit a statewide infrastructure plan in 2004, and again has not done so when it submitted the *2005-06 Governor's Budget*. Current law requires the plan to identify new and renovated infrastructure planned to be funded in the next five years, as well as provide cost estimates and a funding plan. Without this report the Legislature does not have information it needs to evaluate new capital outlay proposals in the budget. We recommend the Legislature defer action on all capital outlay proposals for new projects until the infrastructure plan is received and reviewed (see page G-15).



### **Bond Funds Not Sufficient to Complete All Higher Education Projects**

- The budget includes partial funding for 17 higher education projects that will require substantial future funding to complete. Existing 2004 higher education bond funds are not sufficient to complete these projects, and the availability of other state funds in the future is uncertain. We recommend remaining unallocated 2004 bond funds be designated to fund these projects in a priority order. Doing so will provide funding to the ten highest priority projects. We recommend the remaining seven lower-priority projects be funded only if the segments commit nonstate funds to complete the projects if other state funds are not available in the future (see page G-34).



### **UC Berkeley Long-Range Development Plan Lacks Specifics**

- The University of California, Berkeley recently completed a development plan to guide campus growth for the next 15 years. The campus plan calls for expanding the amount of academic and support buildings by 2.2 million gross square feet by 2020, about 18 percent more space than the campus currently has. The plan, however, has few specifics to justify the expansion. For instance, the expansion is based on a need to accommodate 4,000 more full-time equivalent students by 2010 compared to 1998, when in fact the campus actually accommodated that level of increase in 2002 with existing space. We recommend the Legislature not fund construction of new buildings at the Berkeley campus that will increase its size, until the university can demonstrate that additional buildings are needed based on enrollment growth and programmatic needs (see page G-53).

# TABLE OF CONTENTS

## *Capital Outlay*

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<b>Overview .....</b>	<b>G-7</b>
<b>Crosscutting Issues .....</b>	<b>G-15</b>
California Infrastructure Plan Not Submitted .....	G-15
Design-Build: An Alternative Construction System .	G-17
Insufficient Bond Funds to Complete All Higher Education Projects .....	G-34
<b>Departmental Issues .....</b>	<b>G-39</b>
Department of Forestry and Fire Protection (3540) ..	G-39
Department of Parks and Recreation (3790) .....	G-41
Department of Corrections (5240) .....	G-42
Department of the Youth Authority (5460) .....	G-46
University of California (6440) .....	G-48
California State University (6610) .....	G-56
California Community Colleges (6870) .....	G-58
<b>Findings and Recommendations .....</b>	<b>G-61</b>



# OVERVIEW

## Capital Outlay

**P**roposed funding for capital outlay in the budget year totals \$1.3 billion. Most of this amount (86 percent) will come from bond proceeds. Almost two-thirds of the proposed spending are for higher education facilities.

The 2005-06 Governor's Budget proposes approximately \$1.3 billion for capital outlay programs (excluding highway and rail programs, which are discussed in the "Transportation" chapter of this *Analysis*). This is spending on physical assets—such as college buildings, state parks, prisons, and office space.

Figure 1 summarizes the proposed 2005-06 expenditure authority for the capital outlay program. The proposed program represents a decrease

**Figure 1**  
**State Capital Outlay Program**  
**By Major Program Area**

*(Dollars in Millions)*

	Estimated 2004-05	Proposed 2005-06	Change	
			Amount	Percent
Legislative, Judicial and Executive	\$8.7	\$10.1	\$1.4	16.1%
State and Consumer Services	4.7	66.8	62.1	1,321.3
Business, Transportation and Housing	9.1	56.2	47.1	517.6
Resources	268.5	244.0	-24.5	-9.1
Health and Human Services	0.6	5.4	4.8	800.0
Youth and Adult Corrections	29.0	50.8	21.8	75.2
Education	73.2	17.0	-56.2	-76.8
Higher Education	1,360.8	829.1	-531.7	-39.1
General Government	32.5	8.9	-23.6	-72.6
<b>Totals</b>	<b>\$1,787.2</b>	<b>\$1,288.4</b>	<b>-\$498.8</b>	<b>-27.9%</b>

of almost \$499 million (28 percent) from the current-year level. The decrease occurs primarily in the higher education area because most of the funding from higher education general obligation bonds approved by the voters in 2004 has now been spent or committed.

### Funding Sources for Capital Spending

The Governor’s budget proposes funding the capital outlay program primarily from general obligation and lease-revenue bonds. Specifically, the budget requests \$963 million in funding from general obligation bonds and \$145 million from lease-revenue bonds. In total, these bonds would make up about 86 percent of the program’s funding in 2005-06. About \$74 million in capital outlay projects would be supported directly from the General Fund, while special funds and federal funds would provide \$107 million in project funding.

Figure 2 compares the sources of funds for the 2004-05 capital outlay program to those proposed for 2005-06. As the figure shows, funding from general obligation bonds is proposed to decrease from about \$1.5 billion in 2004-05 to less than \$1 billion in 2005-06. This drop is because most of the higher education general obligation bonds approved by the voters in 2004 have been spent or committed. The budget proposes increasing the amount from the General Fund by almost \$37 million and increasing the amount from special funds by about \$32 million. Most of the General Fund increase is for prisons and flood control projects. The special fund increase is primarily for Caltrans, Highway Patrol, and Department of Motor Vehicles offices, and funding for various land conservancies and the Department of Parks and Recreation.

<b>Figure 2</b>		
<b>State Capital Outlay Program Sources of Funding</b>		
<i>(In Millions)</i>		
<b>Funds</b>	<b>Governor’s Budget</b>	
	<b>2004-05</b>	<b>2005-06</b>
General Fund	\$36.7	\$73.7
General obligation bonds	1,510.8	963.2
Lease-revenue bonds	161.1	144.8
Special funds	63.7	96.1
Federal funds	14.9	10.6
<b>Totals</b>	<b>\$1,787.2</b>	<b>\$1,288.4</b>



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## Spending by Department

Figure 3 (see next page) shows the amounts proposed in the Governor's budget for each department's capital outlay program. In total, the budget proposes \$1.3 billion for capital outlay projects in 2005-06. Completing all the projects will require an additional \$859 million in future costs. Thus, the capital outlay program proposed in the budget represents a total cost of roughly \$2.1 billion.

As the figure shows, the bulk of the proposed funding will be for capital improvements in the three segments of higher education—totaling \$829 million (or 64 percent of total) in 2005-06, with anticipated future costs of \$518.2 million. Other than higher education, the budget-year capital outlay program focuses on resources programs. The budget proposes \$244 million for these programs in 2005-06, including \$88 million for land acquisitions by various conservancies, \$47 million for the Department of Forestry and Fire Protection to replace and relocate various fire stations and facilities, and \$43 million for the Department of Water Resources mainly for flood control. The resources projects will require a total of \$189 million to complete in future years.

For the Department of Corrections, the budget proposes capital projects totaling \$47 million in 2005-06. About 60 percent of the amount is for a central heating, ventilation, and air conditioning system at the Chuckawalla Valley State Prison. The remaining funds are primarily for projects to address deficiencies in wastewater treatment systems at various correctional institutions. The department's projects will require an additional \$125.6 million in future costs to complete.

Figure 4 (see page G-11) displays the proposed funding for each department, by source. This shows that most funding for higher education and resources programs would come from general obligation bonds, while funding for transportation (buildings) and highway safety would come from special funds such as gasoline tax and vehicle registration fee revenues. The General Fund and lease-revenue bonds will be the main source of funds for correctional, fire protection and flood control projects, and general state offices.

## Bond Funding and Debt-Service Payments

Figure 5 (see page G-12) shows the state's General Fund debt-service expenditures for bonds that support traditional outlay projects from 1997-98 to 2005-06. It shows that these expenditures have increased in recent years, and are projected to reach \$4 billion in 2005-06, up about \$366 million from the current-year level. The total consists of \$3.3 billion related to general obligation bonds, and about \$655 million related to lease-revenue bonds. The rapid increase between 2003-04 and the current year is

**Figure 3**  
**2005-06 Capital Outlay Programs**  
**Budget Year and Future Costs**

*All Funds (In Thousands)*

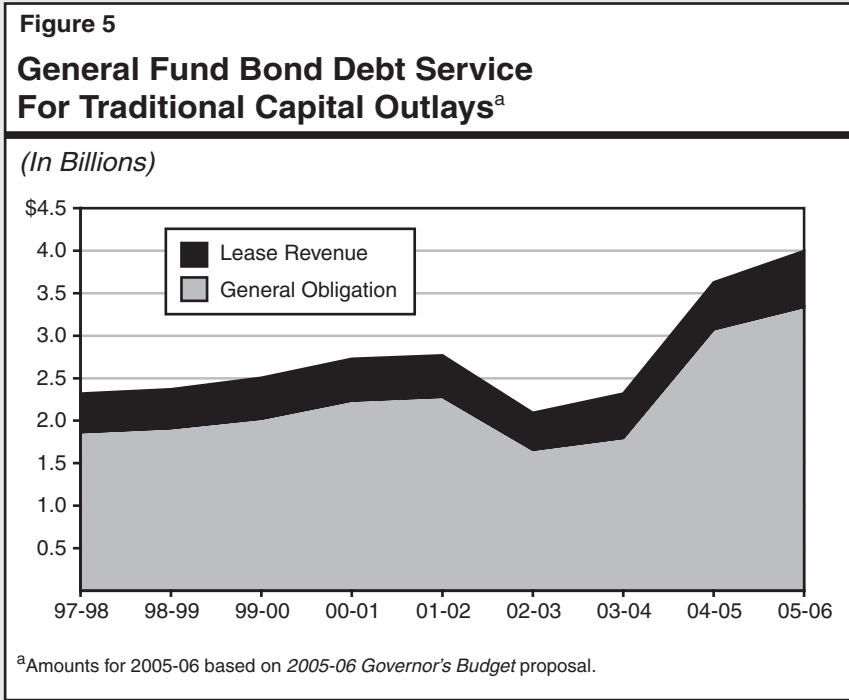
Department	Proposed 2005-06	Future Costs	Totals
<b>Legislative, Judicial, and Executive</b>			
Office of Emergency Services	\$1,493	—	\$1,493
Justice	8,594	—	8,594
<b>State and Consumer Services</b>			
General Services	\$66,769	—	\$66,769
<b>Business, Transportation, and Housing</b>			
Transportation	\$34,646	—	\$34,646
Highway Patrol	10,237	\$11,884	22,121
Motor Vehicles	11,286	—	11,286
<b>Resources</b>			
Forestry and Fire Protection	\$47,084	\$26,046	\$73,130
Wildlife Conservation Board	21,596	—	21,596
Boating and Waterways	3,380	—	3,380
Parks and Recreation	39,743	17,922	57,665
Water Resources	43,300	145,131	188,431
Land conservancies	88,931	—	88,931
<b>Health and Human Services</b>			
Mental Health	\$5,437	—	\$5,437
<b>Youth and Adult Corrections</b>			
Corrections	\$47,206	\$125,644	\$172,850
Youth Authority	3,604	13,967	17,571
<b>Education/Higher Education</b>			
Department of Education	\$17,033	—	\$17,033
University of California	305,161	\$255,518	560,679
California State University	261,507	167,129	428,636
Community Colleges	262,476	95,602	358,078
<b>General Government</b>			
Military	\$7,077	—	\$7,077
Veterans Affairs	862	—	862
Unallocated Capital Outlay	1,000	—	1,000
<b>Totals</b>	<b>\$1,288,422</b>	<b>\$858,843</b>	<b>\$2,147,265</b>

**Figure 4**  
**2005-06 Capital Outlay Program**  
**Funding Sources by Department**

(In Thousands)

	GO Bonds	LR Bonds	General Fund	Other <sup>a</sup>	Totals
<b>Legislative, Judicial, and Executive</b>					
Emergency Services	—	—	\$1,493	—	\$1,493
Justice	—	\$8,594	—	—	8,594
<b>State and Consumer Services</b>					
General Services	\$750	\$49,082	\$16,937	—	\$66,769
<b>Business, Transportation, and Housing</b>					
Transportation	—	—	—	\$34,646	\$34,646
Highway Patrol	—	—	—	10,237	10,237
Motor Vehicles	—	—	—	11,286	11,286
<b>Resources</b>					
Forestry and Fire Protection	—	\$41,746	\$5,338	—	\$47,084
Wildlife Conservation Board	\$545	—	—	\$21,051	21,596
Boating and Waterways	—	—	—	3,380	3,380
Parks and Recreation	25,898	—	—	13,845	39,743
Water Resources	26,600	—	16,700	—	43,300
Land conservancies	80,264	—	—	8,667	88,931
<b>Health and Human Services</b>					
Mental Health	—	—	\$5,437	—	\$5,437
<b>Youth and Adult Corrections</b>					
Corrections	—	\$28,881	\$18,325	—	\$47,206
Youth Authority	—	—	3,604	—	3,604
<b>Education/Higher Education</b>					
Department of Education	—	\$16,563	\$470	—	\$17,033
University of California	\$305,161	—	—	—	305,161
California State University	261,507	—	—	—	261,507
Community Colleges	262,476	—	—	—	262,476
<b>General Government</b>					
Military	—	—	\$3,484	\$3,593	\$7,077
Veterans Affairs	—	—	862	—	862
Unallocated	—	—	1,000	—	1,000
<b>Totals</b>	<b>\$963,201</b>	<b>\$144,866</b>	<b>\$73,650</b>	<b>\$106,705</b>	<b>\$1,288,422</b>

<sup>a</sup> Includes special and federal funds.



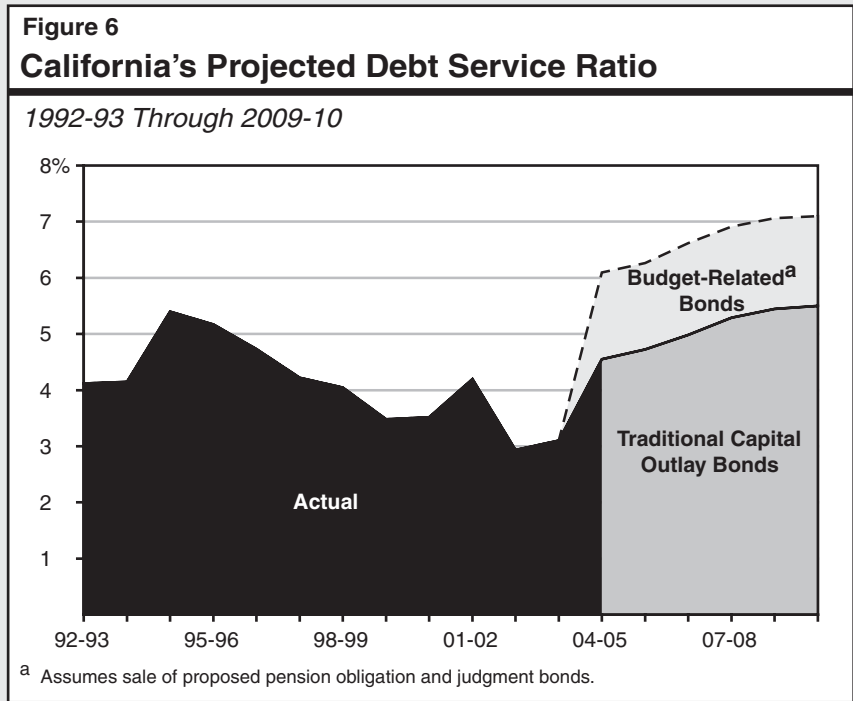
partly related to the conclusion of a two-year debt refinancing program undertaken by the Treasurer to help deal with the budget shortfall. This resulted in the deferral of about \$900 million in annual debt payments in both 2002-03 and 2003-04. In addition, growth in debt service costs reflects voter approval and state issuance of a substantial amount of new debt for schools, resources, and other purposes.

### Budget-Related Borrowing Imposing Additional Debt-Service Costs

In addition to costs associated with capital outlay related bonds, the state is also incurring annual costs for budget-related debt. This includes about \$1.2 billion annually beginning in 2004-05 for the repayment of the deficit-financing bonds authorized by Proposition 57 (approved by the voters in March 2004). Under the Governor's budget plan, the state would also incur annual costs beginning in 2006-07 for debt service on pension obligation bonds (about \$48 million annually) and a judgment bond (about \$30 million annually).

The level of General Fund debt-service payments stated as a percentage of state revenues is commonly referred to as the state's debt service ratio (DSR). This ratio is used by policymakers and the investment commu-

nity as one indicator of the state’s debt burden. As shown in Figure 6, California’s DSR for traditional capital outlay purposes peaked in the mid-1990s at about 5.4 percent before falling back to about 3 percent in 2002-03, reflecting the deferral of debt payments discussed above. The DSR rebounded beginning in 2003-04, and is expected to reach 4.7 percent in the budget year. We project that the DSR will rise further to around 5.5 percent by 2009-10, as the over \$30 billion in currently authorized bonds are sold off. When the payments for budget-related bonds are included, the DSR rises to slightly over 7 percent by 2009-10.





# CROSSCUTTING ISSUES

## *Capital Outlay*

### CALIFORNIA INFRASTRUCTURE PLAN NOT SUBMITTED

*We recommend the Legislature defer action on all capital outlay appropriations in the budget for new (not continuing) projects until the required infrastructure plan is submitted and reviewed.*

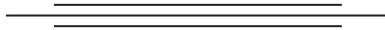
Chapter 606, Statutes of 1999 (AB 1473, Hertzberg), requires the Governor to annually submit to the Legislature a five-year infrastructure plan in January in conjunction with submission of the Governor's budget. The plan is required to identify new and renovated infrastructure requested by state agencies (including higher education), and aggregate funding for transportation and K-12 education. Additionally, the plan is required to provide a cost estimate and a specific funding source for the infrastructure projects identified. If the plan proposes the issuance of new state debt, it must evaluate the impact of the issuance on the state's overall debt position. Thus, the plan represents the administration's funding priorities for infrastructure improvements across all departments and programs.

***No Current Infrastructure Plan.*** The Department of Finance indicates that no plan was submitted in 2004 because of other priorities resulting from the mid-term change of administration. The administration, however, again did not submit an infrastructure plan with the *2005-06 Governor's Budget*. This means the most recent plan is the one submitted in 2003, by the prior administration. Therefore, the Legislature has no information about the current administration's priorities regarding infrastructure investment.

Without current information about the types and amounts of capital outlay spending the administration plans for the next five years, and how these expenditures will be funded, the Legislature does not have information it needs to evaluate the administration's capital outlay proposals included in the budget and determine how they address the state's long-term infrastructure needs.

***Defer Funding New Capital Outlay Projects Pending Infrastructure Plan.*** The Governor's budget proposes almost \$1.3 billion in funding for capital outlay improvements (not including transportation and the State Water Project). About \$900 million of the amount would fund *continuing* projects for which work including preliminary plans and/or working drawings is underway. Because these projects have been approved by the Legislature in previous years, we recommend that funding be provided in 2005-06 so that they can continue. Withholding funding for their completion at this time would be disruptive and result in additional costs.

We recommend, however, the Legislature defer action on all capital outlay proposals in the budget for *new projects* (proposed to cost a total of about \$400 million) until the 2005 infrastructure plan has been submitted and reviewed by the Legislature. Doing so allows the Legislature to ensure that the administration's priorities related to these projects are the same as the Legislature's.





## DESIGN-BUILD: AN ALTERNATIVE CONSTRUCTION SYSTEM

*Design-build is a construction delivery method that is relatively new to state and local government. Seventeen statutes have been enacted since 1993 authorizing its limited use by the state and local agencies. In this report, we look at the experience of these agencies and examine the advantages and disadvantages of the design-build method compared to the traditional design-bid-build method. We find that design-build can be a useful option for some public construction projects. We make recommendations for statutory changes to provide that option while preserving the public's confidence in the procurement process, quality control, and access for small contractors to public contracts.*

For most of the last century the state—like all sectors of government across the nation—accomplished construction work using a system called “design-bid-build.” The state used this approach almost exclusively to build its roads and freeways, public buildings, correctional institutions, universities, hospitals, and water and natural resources infrastructure. Similarly, local governments have used mainly design-bid-build to construct public projects.

In the 1990s, the state began to experiment with awarding and managing construction contracts using the “design-build” system. Figure 1 summarizes the various legislation authorizing state and local entities to use design-build under specified circumstances.

Seven of the laws require local entities that use the process to report on their projects to the Legislative Analyst's Office (LAO) at various times between December 2004 and January 2007. Three of the laws (Chapters 594 of 2000, 637 of 2002, and 976 of 2002) require the LAO to report on these implementations of design-build. This report contains the LAO's consolidated findings on design-build to date. Specifically, the report describes the differences between the primary construction delivery and procurement processes, and discusses their advantages and disadvantages. The report then reviews public sector experience using design-build in California, and makes recommendations regarding design-build authority for state and local agencies.

<b>Figure 1</b>		
<b>Recent State Laws Authorizing Design-Build</b>		
<b>State</b>		
<b>Authorization</b>	<b>Facilities</b>	<b>Comments</b>
Ch 429/93 (AB 896 Brown)	Junipero Serra (Los Angeles) and Civic Center (San Francisco) buildings.	
Ch 430/93 (SB 772, Petris)	Elihu Harris (Oakland) building.	
Ch 761/97 (SB 1270, Johnston)	East End Project (Sacramento).	
Ch 252/98 (SB 776, Johannessen)	Permits Department of General Services to use design-build on at least five projects authorized by Legislature.	<ul style="list-style-type: none"> <li>• Used for CalTrans District 7 building (Los Angeles).</li> <li>• Expires 1/1/06.</li> </ul>
Ch 782/98 (SB 1934, Johnston)	Department of Corrections headquarters (Sacramento).	<ul style="list-style-type: none"> <li>• Not used.</li> </ul>
Ch 733/99 (AB 290, Steinberg) <sup>a</sup>	Department of Parks and Recreation, Stanford Mansion restoration (Sacramento).	
Ch 672/01 (SB 809, Ortiz)	West End Project (Sacramento).	<ul style="list-style-type: none"> <li>• In planning stages.</li> </ul>
<b>Local</b>		
<b>Authorization</b>	<b>Facilities</b>	<b>Comments</b>
Ch 663/95 (AB 1717, Cortese)	Four specified counties.	<ul style="list-style-type: none"> <li>• Projects not exceeding \$50 million.</li> <li>• Expired 1/1/01.</li> </ul>
Ch 1040/96 (AB 2660, Aguiar)	Authorized local agencies to enter into agreements for private funding and development of revenue producing facilities.	
Ch 258/99 (AB 755, Corbett)	Alameda County, juvenile justice facility.	
Ch 541/00 (AB 958, Scott) <sup>a</sup>	Transit operators.	<ul style="list-style-type: none"> <li>• Projects exceeding \$10 million.</li> <li>• Expired 1/1/05.</li> </ul>
Ch 594/00 (AB 2296, Dutra) <sup>ab</sup>	Seven specified counties.	<ul style="list-style-type: none"> <li>• Projects exceeding \$10 million.</li> <li>• Expires 1/1/06.</li> </ul>
Ch 767/00 (SB 1144, Johannessen) <sup>a</sup>	Two specified cities.	<ul style="list-style-type: none"> <li>• Projects not exceeding \$50 million.</li> </ul>
<b>Continued</b>		

Authorization	Facilities	Comments
Ch 421/01 (AB 1402, Simitian) <sup>a</sup>	School districts.	<ul style="list-style-type: none"> <li>• Projects exceeding \$10 million.</li> <li>• Expires 1/1/07.</li> </ul>
Ch 637/02 (AB 1000, Simitian) <sup>ab</sup>	Three specified community college districts, and five additional as selected by the community colleges Chancellor.	<ul style="list-style-type: none"> <li>• Expires 1/1/08.</li> </ul>
Ch 976/02 (SB 1759, Johannessen) <sup>ab</sup>	Four specified cities.	<ul style="list-style-type: none"> <li>• Projects exceeding \$5 million.</li> <li>• Expires 1/1/06.</li> </ul>
Ch 196/04 (SB 1130, Scott)	Transit districts.	<ul style="list-style-type: none"> <li>• Revised Ch. 541/00.</li> <li>• Expires 1/1/07.</li> </ul>
<p><sup>a</sup> Required to report information to Legislature.</p> <p><sup>b</sup> The LAO is required to report on local implementation.</p>		

## CONSTRUCTION DELIVERY AND PROCUREMENT

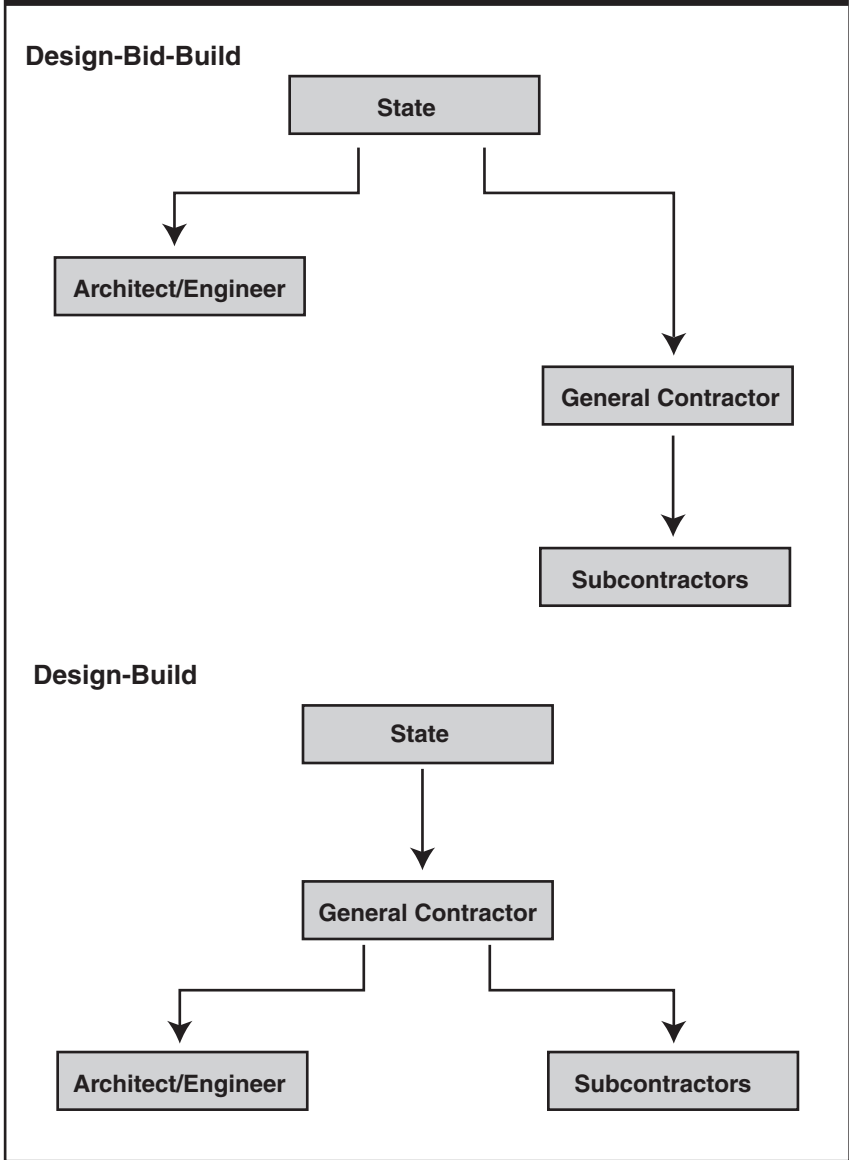
### Construction Delivery

There are two primary *construction delivery* systems used in the public and private sectors. These are (1) the traditional design-bid-build and (2) the increasingly common design-build approaches. The construction delivery system defines the contractual and reporting relationship among the principal participants in the construction project and the methods and procedures used to complete construction. Figure 2 (see next page) shows these relationships in simplified form. While there are variations to these approaches, most construction delivery systems fall into one or the other.

#### Design-Bid-Build

Under the design-bid-build system, the public agency first awards an architect/engineer contract to design the project based on subjective criteria of qualifications and experience of the architect/engineer. This contract generally accounts for a relatively small portion of the project’s total costs—about 5 percent to 10 percent. After detailed project plans and drawings are completed, a contractor is selected to perform the construction work, which accounts for 90 percent to 95 percent of the project’s costs. In almost all cases, contracts for construction work are awarded objectively based on competitive bidding.

**Figure 2**  
**Comparison of Two Primary Construction Delivery Systems**



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## Design-Build

With design-build, the public agency contracts with a general contractor to both design and build the project. The agency does not separately contract with an architect/engineer for design. That is the responsibility of the general contractor. The general contractor in turn subcontracts, through competitive bidding or otherwise, for an architect/engineer and various construction trade work. Design-build delivery methods have a number of variations, but most can be placed in one of two categories—*stipulated price* and *construction management*.

**Stipulated Price.** With *stipulated price design-build* a public agency specifies how much it will pay for construction of a particular building. For example, the agency might provide only a programmatic description of the building it wants by specifying the size of the building, types of spaces, and perhaps some acceptable construction materials. The agency then asks competing firms to present proposals that illustrate a conceptual design and provide specifications for materials and building systems that it is willing to construct for the price stipulated by the agency.

**Construction Management.** With *construction management design-build* the public agency awards a contract to a “construction manager” (frequently a construction firm, but sometimes an architect/engineer firm) on the basis of a fee. The construction manager designs the project and solicits bids from subcontractors and suppliers. The total of these bids plus the construction manager’s fee determine the total price the agency pays for the building.

## Construction Procurement

There are two principal *construction procurement* systems. These are: (1) procurement by *competitive bidding*; and (2) procurement based on *experience, qualifications, and best value*. The construction procurement system defines the process used to select and award contracts for construction projects.

### Competitive Bidding

Procurement by competitive bidding means a public agency awards contracts for construction or construction-related work objectively, based on bids. Bids are offers to perform the work for a specific price, with the contract going to the lowest bidder. This is the way construction contracts are awarded under design-bid-build. Competitive bidding also is used to procure most of the construction work when construction management design-build is used. Competitive bidding may or may not be used when stipulated price design-build is used.

### Experience, Qualifications, Best Value

Procurement based on the experience and qualifications of competitors, or a judgment that a competitor will provide best value to the project, is subjective. It is used to award most design-build contracts, as well as architect/engineer contracts in design-bid-build. Although these are subjective criteria and bidding is not used, this procurement system has competitive elements because contractors compete to show they have the most experience and are best qualified.

## CONSTRUCTION DELIVERY PROCESSES: PROS AND CONS

Each of the construction delivery processes has advantages and disadvantages. Figure 3 summarizes the pros and cons of the design-bid-build process versus the design-build (with stipulated price) process.

<b>Figure 3</b>	
<b>Design-Bid-Build Versus Design-Build Advantages and Disadvantages</b>	
<b>Advantages</b>	<b>Disadvantages</b>
<b>Design-Bid Build</b>	
<ul style="list-style-type: none"> <li>• Building is fully defined.</li> <li>• Competitive bidding results in lowest cost.</li> <li>• Relative ease of assuring quality control.</li> <li>• Objective contract award.</li> <li>• Good access for small contractors.</li> </ul>	<ul style="list-style-type: none"> <li>• Agency gets involved in conflicts and disputes.</li> <li>• Builder not involved in design process.</li> <li>• May be slower.</li> <li>• Price not certain until construction bid is received.</li> <li>• Agency may need more technical staff.</li> </ul>
<b>Design-Build (Stipulated Price)</b>	
<ul style="list-style-type: none"> <li>• Price certainty.</li> <li>• Agency may avoid conflicts and disputes.</li> <li>• Builder involved in design process.</li> <li>• Faster project delivery.</li> <li>• Agency needs less technical staff.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited assurance of quality control.</li> <li>• Subjective contract award.</li> <li>• Limited access for small contractors.</li> </ul>

### Design-Bid-Build

#### Advantages

*Building Is Fully Defined.* With design-bid-build, the facility the agency wants is fully defined by detailed working drawings and specifications

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before bids are solicited. This means there is little uncertainty about what the agency wants and what the contractor is required to deliver.

***Competitive Bidding Results in Lowest Costs.*** With design-bid-build, the contract is awarded to the bidder who offers to construct the building for the lowest price. This competition motivates bidders to offer the lowest price they can because they know price is the only basis for award of the contract. Also, since the building the agency wants is fully defined by detailed working drawings and specifications, bidders do not need to increase their bids to cover contingencies that might arise if a building is not fully defined.

***Relative Ease of Assuring Quality Control.*** Quality in a construction project is controlled using detailed working drawings and specifications, which are the *basis of the contract* between the agency and a construction contractor. This allows an agency inspector to compare the materials and workmanship of the project under construction with what are required. If the requirements are not met, provisions of the contract can compel the contractor to correct the work. Without detailed working drawings and specifications, there is little an agency can do to control the quality of the contractor's work.

***Objective Contract Award.*** Awarding construction work, which represents about 90 percent to 95 percent of the building cost, by competitive bidding, uses an objective criterion of lowest cost. This reduces the opportunity for bias and inappropriate influence to play a part in awarding the construction contract. The smaller architect/engineer contract (representing about 5 percent to 10 percent of the building cost) is awarded based on subjective criteria of experience and qualifications because it is for professional services that cannot be defined in detail before the building is designed.

***Good Access for Small Contractors.*** By awarding contractors based on price, the design-bid-build process provides the best opportunity for qualified small and new contractors to obtain government contracts. Small and newly established contractors may be able to perform work at a lower cost than large competitors because of lower overhead and more efficient operations.

## Disadvantages

***Agency Gets Involved in Conflicts and Disputes.*** Design and construction of a building is a complex and difficult undertaking. There will always be conflicts and disputes that can lead to time-consuming and expensive legal action, no matter what construction delivery process is used. One major source of conflicts is errors and omissions in the working drawings and specifications prepared by the architect/engineer. In the design-bid-build process the public agency hires the architect/engineer directly, and the law holds the agency to be the guarantor of the completeness and

accuracy of the architect/engineer's work. This draws the agency into disputes between the designer and builder and frequently subjects it to significant liability because of its perceived "deep pockets."

***Builder Not Involved in Design Process.*** With design-bid-build, the builder is not known until after the design work has been completed, bids have been submitted, and a construction contract awarded. This means the design cannot incorporate any input by the construction contractor on construction materials and methods that could improve the building's design, functionality, and cost.

***May Be Slower.*** The design-bid-build process is usually slower than the design-build process, mainly because of the sequential nature of the process. In contrast, under design-build, design and construction work may be undertaken concurrently. (This difference, however, may not be significant in the case of larger projects because procurement using subjective criteria of experience, qualifications, and best value often requires substantial time to allow competitors to prepare proposals and agency officials to evaluate them.)

***Price Not Certain Until Construction Bid Is Received.*** With design-bid-build, the architect/engineer firm prepares cost estimates as the design work progresses, typically when the working drawings and specifications are about 10 percent, 35 percent, and 100 percent complete. While this gives the agency an early indication of the project's cost, there is no cost certainty until design is completed and construction bids have been received.

***Agency May Need More Technical Staff.*** Design-bid-build requires the completion of detailed working drawings and specifications before bids are solicited, and then a substantial inspection and quality control effort during construction. This may require an agency to employ a substantial number of technical staff to manage larger design-bid-build projects.

## ***Design-Build—Using Stipulated Price***

### **Advantages**

***Price Certainty.*** With the "stipulated price" method of implementing design-build, an agency has the best certainty of the cost of the building at the outset of the project. This is because the agency specifies what it is willing to pay for a building before it solicits proposals from design-build contractors for the configuration, features, and materials they are willing to provide for the specified price. The risk with this approach is that the agency may not get the best quality building for the price it pays.

***Agency May Avoid Conflicts and Disputes.*** Because the designer and builder are part of the same design-build entity, and the public agency is



not the guarantor of the completeness and accuracy of the work of the architect/engineer, the agency may avoid conflicts and disputes that can arise between the architect/engineer and construction contractor.

***Builder Involved in Design Process.*** The construction contractor is involved in the design process from the beginning and can provide helpful insights on construction materials and methods that can make the design more efficient and less costly to construct.

***Faster Project Delivery.*** By overlapping design and construction to some extent, and by potentially reducing conflicts between designer and builder, design-build can usually deliver a project faster than the design-bid-build approach. With large projects, however, this may be less of an advantage because of the extra time needed for competitors to prepare their statements of qualifications and technical proposals.

***Agency Needs Less Technical Staff.*** Under design-build, the public agency does not have to review the accuracy and completeness of the architect/engineer's work. Thus, the agency may have less need for in-house technical staff to manage projects.

## Disadvantages

***Limited Assurance of Quality Control.*** Because the building the agency wants is not defined in detail at the time it enters into a contract with a design-build contractor, there is limited basis for enforcing a contract and the agency may have little control over the quality of the construction work.

***Subjective Contract Award.*** With design-build, the design and construction work generally is awarded based on subjective criteria such as experience, qualifications, and best value. Agencies have established contractor evaluation and selection processes and policies to try to mitigate the risks of subjective judgments, but drawbacks still exist, such as:

- ***Public Managers Have Discretion in Awarding "Points."*** Agencies frequently use a points system. The number of points public officials award to competing firms on various criteria is arrived at subjectively. There is no objective way to determine the correct number of points to award a competitor on a given criterion. For example, there is no objective way to determine that one contractor's "waste management plan" warrants "43" points and another's only "40."
- ***Criteria Do Not Relate Directly to Specific Building Being Procured.*** While evaluating contractors based on qualifications and experience provides a measure of contractors' competence, it is not a guarantee on the project outcome. This is because under design-build a specifically designed building is not the "deliverable."

- **Comparison of Alternative Proposals for “Added Value” Difficult.** It is difficult to make a reasoned comparison of alternative added value proposals. For example, it is impossible to directly compare the benefit from higher quality plumbing piping proposed by one contractor with the benefit from an enhanced electrical distribution system proposed by another. In addition, many of the benefits can only be realized over time—often after the building has been completed, adding to the difficulty of comparing alternative proposals.

**Limited Access for Small Contractors.** Because design-build contracts mostly are awarded based on qualification and experience, this method may tend to work against small, newly established contractors, who do not have the range of experience of large, long-established firms. As a result, access to design-build contracts, especially the large contracts, may be limited for these contractors.

## **Design-Build—Using Construction Management**

The advantages and disadvantages of design-build construction delivery using construction management methods are similar to those for design-build using a stipulated price, with two main exceptions:

**Price.** The public agency has far less price certainty under this method than if the stipulated price approach is used. Even so, construction management still provides more certainty than design-bid-build, where the total price is not known with reasonable certainty until design is finished and bids have been received. With construction management, a series of trade contracts is bid over time. This provides partial cost information earlier, and allows design changes to be made in subsequent trade packages to control costs and keep the project within budget.

**Benefit of Competitive Bidding Flows to Agency.** With the construction management approach to design-build delivery, the savings resulting from competitive bidding for subcontracts and supplies benefits the public agency rather than the design-build contractor. This is an important advantage construction management has over stipulated price.

## **EXPERIENCE WITH DESIGN-BUILD**

### **Cities and Counties**

The authority for local governments to use design-build was first granted by the state in 1995 and has been extended to various California cities and counties. Figure 4 (see next page) summarizes how these local

**Figure 4****Summary of Design-Build Activities by Authorized Counties and Cities**

Agency	Design-Build		Types of Projects
	Used	Did Not Use	
<b>Counties</b>			
<b>Chapter 663, Statutes of 1995</b>			
Solano	X		<ul style="list-style-type: none"> <li>• \$2.3 million juvenile hall expansion.</li> <li>• \$0.4 million county recorder's office renovation.</li> </ul>
<b>Chapter 594, Statutes of 2000</b>			
Alameda	X		<ul style="list-style-type: none"> <li>• \$15 million county recorder's office building.</li> <li>• \$135 million juvenile justice center (under construction).</li> </ul>
Contra Costa		X	
Sacramento	X		<ul style="list-style-type: none"> <li>• \$2.5 million branch library.</li> </ul>
Santa Clara		X	
Solano	X		<ul style="list-style-type: none"> <li>• \$18.4 million health and social services building (under construction).</li> <li>• \$80 million county administration center (under construction).</li> </ul>
Sonoma		X	
Tulare		X	
<b>Cities</b>			
<b>Chapter 1040, Statutes of 1996</b>			
Woodland	X		<ul style="list-style-type: none"> <li>• \$14.4 million police station.</li> </ul>
<b>Chapter 767, Statutes of 2000</b>			
Davis	X		<ul style="list-style-type: none"> <li>• \$7.3 million police station.</li> </ul>
West Sacramento	X		<ul style="list-style-type: none"> <li>• \$2.6 million pump station.</li> </ul>
<b>Chapter 976, Statutes of 2002</b>			
Brentwood		X	
Hesperia		X	
Vacaville		X	
Woodland		X	

governments have used this authority under those statutes that required them to report their design build activities to the Legislature. As the figure shows, of the 13 counties and cities that have been given the design-

build option, six—Alameda, Sacramento, and Solano counties, and the cities of Davis, West Sacramento, and Woodland—have used the option to construct one or more capital outlay projects.

**Views on Design-Build Generally Favorable.** The counties and cities that have used design-build generally expressed favorable opinions of the process. Almost all reported that compared to the traditional design-bid-build process, it took less staff time to construct a project and resulted in fewer claims and less litigation. To a substantial degree, this is because the local agency is removed from disputes between the architect/engineer and the construction contractor. They also indicated that by awarding a fixed price contract, design-build provided more price certainty.

**Lessons Learned.** These local agencies also made various observations about the general usage of design-build:

- **Project Cost Thresholds Not Needed.** Statutory requirements regarding specified maximum and/or minimum project costs prevented agencies from using design-build on certain projects. Local agencies do not see any compelling reason for imposing such cost thresholds.
- **Adding Objectivity in Procurement Process Would Be a Plus for Public Projects.** Many of the officials we talked with acknowledged the benefit of applying some objective criteria in awarding design-build contracts, and not relying solely on subjective assessment of competitors' experience, qualifications, and proposals of best value. They indicated that this is one means to maintain the public's confidence in the procurement process. In an effort to provide objectivity, Sacramento, Solano (on the health and social services building project), and Alameda Counties, and the cities of West Sacramento and Davis used a two-step process to select a design-build contractor. Details varied, but generally they first used subjective criteria such as experience and qualifications to identify a limited group of finalists to compete for the design-build contract. The finalists then submitted design and cost proposals based on county criteria, and the contract was awarded based on the objective criteria of lowest cost. Similarly, for the Solano County administration center and the Woodland police facility, the design-build contracts were based on a mixture of (1) the subjective criteria of experience, qualifications, and proposals of best value, and (2) the objective criterion of cost.
- **Good Project Definition Is Needed Before Awarding Design-Build Contract.** Agency officials indicated that it is important to thoroughly specify the building it wants using conceptual drawings, specifications, program statements, and similar documentation so

(1) design-build proposers understand what is required and  
(2) there is documentation to form a basis for the contract between the agency and the design-build contractor.

- **Best Suited for Straightforward Projects.** Most agencies seemed to feel design-build was best suited to projects of conventional design and construction, such as office buildings and parking garages. When buildings are more specialized, such as jails and hospitals, there was less certainty that design-build was the best construction delivery process. This is because the user agency often has more unique design preferences it wants accommodated in the building.

**Reasons for Not Using Design-Build.** Local agencies that did not use design-build provided different reasons for not doing so. For example:

- Contra Costa County indicated it did not use design-build authority granted it because of the high cost threshold for qualifying projects, and the time available to utilize design-build under the statute was too short to coordinate with the timing of the projects the county needed to build.
- Sonoma County did not use design-build because of the high threshold of project cost set by Chapter 594. County staff also indicated that due to a general lack of public sector experience in using design-build, it is not inclined to use a new delivery system for large projects. Had the cost threshold been lower, the county would have considered using design-build for relatively smaller-scale projects, such as an office building.
- The City of Hesperia indicated it did not use the design-build authority granted under Chapter 976 because the legislation contained a requirement that the city establish a labor force compliance program and contract with a third party for its operation, unless all contractors on the project entered into collective bargaining agreements. The city felt this provision would negate any economic benefit it might gain from the design-build process.
- The Cities of Brentwood and Vacaville did not use their design-build authority because they did not have projects they considered suitable for design-build delivery due to size, complexity, or scheduling considerations.

All of the cities and counties that did not use the design-build authority, however, indicated that they would like to have design-build authority available to them as an alternative construction delivery method.

## The State

The Department of General Services (DGS) has completed several major projects using design-build. Generally, the DGS-managed design-build contracts have been completed on schedule and within budget, although there have been exceptions. For example, the East End project required an \$18 million augmentation and was completed about a year and a half after its original scheduled completion date. The Caltrans District 7 building is currently under construction and has required no augmentations to date. It is currently estimated to be completed about 15 months after its originally scheduled completion date. Nonetheless, DGS has indicated general satisfaction with the design-build approach used on all of these projects, pointing primarily to the advantages of using the process discussed above.

## Federal

Federal agencies have been authorized to use a design-build construction delivery process since 1996, and federal officials have expressed general satisfaction with it as an option. The federal procurement process has two phases. In the first phase, federal officials reduce the number of competitors to no more than five based on subjective criteria of experience and qualifications. In phase two, competitors submit technical and price proposals which are evaluated and a design-build contract is awarded based on a combination of subjective ("best value") and objective (price) criteria.

## Issues to Address

To date, experience in design-build by state and local agencies in California as well as the federal government has generally been positive. Nevertheless, the experience has been relatively recent and limited. As such, questions and issues remain in how design-build can best be implemented in the public sector. The key issues include:

- ***How to Ensure Integrity of the Procurement Process.*** Local and state officials we talked with were almost uniformly in favor of the authority to use subjective criteria such as experience, qualifications, and best value as a basis for awarding design-build contracts. However, they also recognize that allowing subjectivity in the award of public contracts may permit inappropriate influence to be brought to bear on the procurement process. There have been incidents in other states where the integrity of the process was compromised.
- ***How to Ensure Cost and Quality Control.*** With design-build, the project an agency wants constructed is inherently only minimally defined at the time the contract is awarded to a contractor. De-

pending on how the process is implemented and how well defined the project is at the outset, the agency may not get the building it thought it was paying for.

- **How to Ensure Access for Small and Newly Established Contractors.** Using criteria such as experience and qualifications to award contracts reduces the likelihood that contracts are awarded to small and newly organized contractors. Over time, this may limit competition for public agency construction contracts.

## WHERE DOES THE STATE GO FROM HERE?

Figure 5 shows that many of the statutes authorizing design-build in California included expiration dates, after which authority to use the design-build process ends. As these statutes expire, the Legislature likely will be asked to extend the authority, either for limited terms or permanently. The Legislature will also likely be requested to provide the authority to a larger number of public entities. Based on our review, we recommend the Legislature provide the design-build authority on an ongoing basis to local agencies and the state—within a framework that protects the integrity of the procurement process, controls the quality of the construction work, and provides access to public contracts for small and newly established contractors. Specifically, we recommend:

<b>Figure 5 Design-Build Legislation Expiration Dates</b>		
<b>Chapter/Year</b>	<b>Agencies</b>	<b>Expiration Date</b>
541/2000	Transit operators	1/1/05
252/1998	Department of General Services	1/1/06
594/2000	Seven specified counties	1/1/06
976/2002	Four specified cities	1/1/06
421/2001	School districts	1/1/07
196/2004	Transit operators	1/1/07
637/2002	Eight community college districts	1/1/08

- **Inclusive, Uniform Statute.** Instead of separate legislation providing the design-build authority for different time spans for different groups of state and local entities, as currently exist, we recommend that a single statute be adopted that applies to all public entities providing the same authority and limitations, if any. This

would provide contractors and public officials with a consistent business environment within which to operate throughout the state.

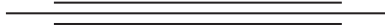
- ***Design-Build Should Be Optional to—And Not Replace—Design-Bid-Build.*** Design-build should be an available option for state and local agencies, but not a replacement of design-bid-build. This is because for many projects agencies may want the greater control over the design that they would have with design-bid-build.
- ***Contracts for Most of Project Cost Should Be Objectively Awarded Based On Competitive Bidding.*** In order to preserve the integrity of public sector procurement and provide prudent stewardship of public funds, we recommend that most of the cost of a project be procured by competitive bidding. As discussed above, one way to do this is by using construction management with competitive bidding of subcontracts. Any savings resulting from competitive bidding would flow to the public agency. Another way is sometimes called the “two-envelope system.” With this system the agency defines its building requirements with conceptual drawings and specifications, as well as functional requirements. Statements of qualifications are submitted by design-build contractors, and the agency selects a short list based on qualifications and experience—typically three to five firms. The agency then usually pays each of the finalists a modest amount to develop a technical proposal, which is submitted in one envelope, with their price in a second envelope. The agency reviews the technical proposals to see if they satisfy its requirements. For those finalists whose technical proposals are satisfactory, the agency opens the second envelopes and the contract is awarded to the proposal having the lowest cost.
- ***Ensure Access for Greatest Number of Contractors.*** As discussed above, legislation permitting design-build contracts to be awarded based on qualifications and experience may have the practical result over time of restricting contract awards primarily to the biggest and longest-established firms. To encourage competition and access, we recommend statutory language which provides that design-build contracts be accessible to design-build contractors with experience and qualifications *that are consistent with needs of the project*, rather than limited to the biggest and longest-established firms.
- ***No Cost Limitations.*** We recommend there be no maximum or minimum project cost threshold imposed on the authority.
- ***Buildings Only.*** At this time, we recommend that the Legislature grant design-build authority only to buildings and directly related



infrastructure. There are more complex issues associated with other public works projects such as transportation, public transit, and water resources facilities. Evaluation of design-build as a construction delivery option for these other infrastructure facilities is beyond the scope of this report.

## **CONCLUSION**

Design-build can provide state and local agencies with a useful alternative to the more commonly used design-bid-build process to deliver construction projects. However, to the extent design-build contracts are awarded based solely on subjective criteria, there is an opportunity for compromising the public procurement process. Thus, it is important that statutory changes that make the design-build process more widely available to state and local agencies also preserve the public's confidence in the procurement process. Using construction management with competitive bidding of subcontracts or a two-envelope system can achieve that.



## INSUFFICIENT BOND FUNDS TO COMPLETE ALL HIGHER EDUCATION PROJECTS

*The budget includes funding for development of preliminary plans and/or working drawings for 17 higher education projects. These projects will require substantial future funding to complete construction. Existing 2004 bond funds are insufficient to cover all of these future costs and the availability of state funds to complete construction of these projects is uncertain. We recommend that remaining 2004 bond funds be allocated to these projects in a priority order. We further recommend that seven lower priority projects be funded contingent upon the segments committing to use nonstate funds to complete the projects in the event state funds are not available in the future.*

The source of state funds for the higher education capital outlay proposals in the Governor's budget is the Higher Education Capital Outlay Bond Fund of 2004. The fund was established by voter approval of Proposition 55, the Kindergarten-University Public Education Facilities Bond Act of 2004. That act authorized the issuance of \$12.3 billion of general obligation bonds—including \$10 billion for K-12 education facilities and \$2.3 billion for higher education facilities. Figure 1 summarizes the amount of funds authorized for higher education facilities in the 2004-05 budget and the amounts proposed for 2005-06 in the Governor's budget.

The Governor's budget proposes \$829 million for new projects and continuing projects that have been partially funded in prior years. Included is \$69 million for partial funding of 17 new and continuing projects in the three segments that will require an estimated \$419 million of future funding beyond 2005-06 to complete their construction.

Given these future costs, there would not be sufficient money remaining in the 2004 bond fund to cover the future funding requirement. Specifically, only \$199 million would be available after 2005-06 if the Governor's proposed projects are approved. This means, in order to fully fund all the proposed projects, an additional \$220 million will be needed beyond 2005-06 from either future voter-approved general obligation bonds, lease-

**Figure 1****Distribution of 2004 Bond Funds for Higher Education Facilities***(In Millions)*

Segment	Appropriated 2004-05	Proposed 2005-06
Community Colleges	\$620	\$305
CSU	313	262
UC	339	262
Subtotals	\$1,272	\$829
<b>Total appropriated or proposed</b>		<b>\$2,101</b>
<b>Balance remaining</b>		<b>\$199</b>

revenue bonds, the General Fund, or some nonstate funds from the segments. Because the availability of state funds to complete these projects is uncertain, we do not think proceeding with these projects as proposed in the budget year would be prudent. Instead, we recommend that the uncommitted 2004 bond funds be allocated in accordance with the priorities we discuss below.

*Target Remaining Bond Funds to High Priority Projects.* We first recommended priorities for allocating limited state funds for capital outlay for higher education facilities in our *Analysis of the 2001-02 Budget Bill* (page G-19). Our priorities, as summarized in Figure 2 (see next page), were based on the principles of, first, providing safe and reliable infrastructure, then using existing facilities efficiently, then providing new facilities for student instruction to meet the needs of enrollment growth and programmatic changes, and finally providing other new facilities needed to support the academic program.

We examined the 17 projects that will need future funding and classified them according to the seven priority rankings in Figure 2. We did this using information about the projects submitted by the segments—among the most important of which was the amount of space devoted to different uses in a building. Our project rankings are shown in Figure 3 (see page G-37).

Figure 3 shows that the \$199 million of unallocated 2004 bond funds is enough to fund the estimated \$173 million needed to complete the ten projects in the first four rankings. This would leave about \$26 million of unallocated 2004 bond funds, which is not sufficient to fund the next priority project—the Santa Cruz McHenry Project—with an estimated future

cost of \$40 million. In any event, we believe that the \$26 million amount is a reasonable reserve for contingencies. Therefore, we recommend the Legislature allocate remaining 2004 bond proceeds to fund completion of the top ten projects shown in Figure 3.

**Figure 2**

**LAO Recommended Priorities for Funding Higher Education Capital Outlay Projects**

Priority Rank	Description of Priority
1	Critical fire, life safety, and seismic deficiencies
2	Necessary equipment
3	Critical deficiencies in utility systems
4	Improvements to undergraduate academic programs
5	Integrity of operationally important facilities
6	Administrative and support facilities, and faculty offices
7	New faculty research facilities

*Only Approve Lower Priority Projects With Nonstate Funding Commitment.* As noted above, we recommend that the state not commit to the start of the last seven projects ranked in Figure 3. The budget requests a total of \$46.2 million in 2005-06 for these projects, and they will require an additional \$246 million in future years to complete. If funding for these seven projects in the budget year is approved but state funds are not available in the future to complete their construction, funding in the budget may be wasted. For example, preliminary plans and working drawings completed in 2005-06 would be shelved, awaiting funds to construct the projects. For the Santa Cruz McHenry Project, which is requesting only a portion of the funds needed for construction, there is a risk that about half of the building might get constructed with funds appropriated in 2005-06, but the other half could not be completed if additional state funds were not available in the future. This could place the Legislature in a position of having to fund the construction of the remaining half of the building with funding that otherwise would have been available for higher statewide priorities.

Accordingly, we recommend that funding proposed in the budget for these seven lower priority projects be approved contingent upon the segments committing to use nonstate funds to complete the projects if state funds are not available in the future. This can be carried out by stating explicitly the segments' funding commitment in the supplemental report language that defines these projects.

<b>Figure 3</b>			
<b>Recommended Priority for Allocation of Remaining 2004 Bond Funds</b>			
<i>(In Millions)</i>			
<b>Priority Rank</b>	<b>Segment</b>	<b>Project</b>	<b>Future Project Cost</b>
<b>Recommended for 2004 Bond Funding</b>			
1	CSU	Hayward, Seismic Upgrade, Warren Hall	\$28.9
1	UC	San Francisco, Medical Sciences Building Improvements, Phase 1	15.3
1	UC	Riverside, Environmental Health and Safety Expansion	11.0
3	UC	Santa Cruz, Infrastructure Improvements, Phase 1	7.3
4	CSU	Long Beach, Peterson Hall 3 Replacement	70.7
4	CCC	Citrus CCD, Citrus College, Vocational Technology Building	11.1
4	CCC	Contra Costa CCD, Los Medanos College, Core Building Remodel	2.3
4	CCC	Rio Hondo CCD, Rio Hondo College, Applied Technology Building Reconstruction	10.6
4	CCC	San Mateo CCD, Skyline College, Allied Health Vocational/Technical Training Center	7.6
4	CCC	Santa Barbara CCD, Santa Barbara City College, Drama Music Building Modernization	8.6
Subtotal			(\$173.4)
<b>Nonstate Funding May Be Required</b>			
5	UC	Santa Cruz, McHenry Project	\$40.4
6	UC	Riverside, Student Academic Support Services Building	17.7
6	CCC	Palo Verde CCD, Palo Verde College, Fine and Performing Arts Complex	14.5
6	CSU	Northridge, Performing Arts Center	52.6
6/7	UC	Irvine, Social and Behavioral Sciences Building	37.8
6/7	UC	Los Angeles, Life Sciences Replacement Building	63.4
6/7	UC	Santa Cruz, Digital Arts Facility	19.5
Subtotal			(\$245.9)
<b>Total</b>			<b>\$419.3</b>



# DEPARTMENTAL ISSUES

*Capital Outlay*

## DEPARTMENT OF FORESTRY AND FIRE PROTECTION (3540)

The California Department of Forestry and Fire Protection operates over 500 facilities statewide, including 229 forest fire stations. The Governor's budget proposes \$47.1 million for the department's capital outlay program. This amount includes \$41.7 million for four major capital outlay projects from lease-payment bonds, and \$5.3 million from the General Fund for three major projects and one minor project.

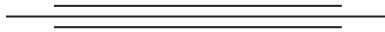
Regarding major projects, the budget request includes funding for two continuing projects that have previously been funded for preliminary plans and five new projects for which preliminary plans, working drawings, and construction are now proposed.

### **Defer Action Pending Project Scope Definition**

*We recommend that the Legislature defer action on \$294,000 (General Fund) proposed for a replacement water supply system at the Bear Valley Forest Fire Station until the department provides a budget package that defines the scope and costs of the project.*

The budget requests \$294,000 from the General Fund to begin preliminary plans and working drawings for a project to replace the water supply system at the Bear Valley Forest Fire Station. Our review indicates that

while, in concept, the project to replace the water system is warranted, the department has not completed a budget package study to determine the most feasible, cost-effective means of permanently resolving the recurring water supply problems at this facility. Without defining the scope and the estimated cost of the project, providing funding for preliminary plans and working drawings is premature. We understand from the department that a study is underway to refine the project's scope and cost. It is anticipated that the study will be completed this spring. Accordingly, we recommend that action on this project be deferred until the budget package for the project is completed and available for review by the Legislature.





## DEPARTMENT OF PARKS AND RECREATION (3790)

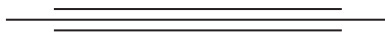
The budget proposes \$42.7 million for capital outlay for the Department of Parks and Recreation (DPR). This amount includes \$25.9 million from Proposition 40 and Proposition 12 bond funds, \$7.8 million from the Off-Highway Vehicle Trust Fund, \$5 million in federal funds, \$3 million from reimbursements, and \$1 million from the Habitat Conservation Fund.

The budget proposes \$26.1 million for various park development projects, \$7.5 million for statewide acquisition projects, \$5.6 million for acquisition and development of off-highway vehicle parks, and \$3.5 million for various minor projects.

### **Redirect Selected Project Funding to Support ADA Projects**

*We recommend redirecting funding for selected projects from Proposition 12 and federal funds to support Americans with Disabilities Act (ADA) projects proposed for funding from the General Fund. We further recommend the adoption of budget bill language to specify the use of the selected funds for ADA project purposes. (See the “Resources” chapter for our write-up on this issue.)*

Our review of DPR’s proposed capital outlay budget finds that it includes support for several projects from Proposition 12 and federal funds that could be redirected to fund a proposal in the department’s support budget for the continued modification to state park facilities in compliance with the ADA. For a discussion of this issue, please see the “Department of Parks and Recreation (Item 3790)” write-up in the “Resources” chapter of this *Analysis*.



## DEPARTMENT OF CORRECTIONS (5240)

The California Department of Corrections (CDC) operates 32 prisons and 40 fire and conservation camps comprising about 3,000 structures having 37 million gross square feet of building space. The CDC also contracts for a variety of community-based services including 12 community correctional facilities and various community reentry programs. The department completed construction of one new prison in 2004—California State Prison-Kern County at Delano II—which is scheduled for occupancy in mid-2005. The CDC's total inmate population increased by about 2,000—from 162,000 in December 2003 to 164,000 in December 2004.

For 2005-06, the budget requests \$47.2 million for CDC's capital outlay program, including \$18.3 million from the General Fund and \$28.9 million from lease-revenue bonds. The proposed funding would provide:

- \$36.7 million to continue work on seven projects.
- \$4.5 million to begin design of seven new projects.
- \$5 million for minor projects and \$1 million for budget planning.

### **Projects at Centinela State Prison Should Be Combined**

*We recommend the Legislature defer action on two projects proposed for improving the wastewater treatment plant at Centinela State Prison pending the department's revised budget proposal for a combined project that reflects the savings that can be achieved in design, bidding, and construction through consolidation of the two projects.*

The budget proposes two projects to correct deficiencies at the Centinela State Prison's wastewater treatment plant.

- \$207,000 from the General Fund to develop preliminary plans for a new headworks (intake structure) for the plant, with an estimated future cost for working drawings and construction of almost \$3 million.

- \$275,000 from the General Fund to develop preliminary plans for various other improvements at the plant, with an estimated future cost for working drawings and construction of about \$2.8 million.

Our review of the projects' schedules shows that the two projects are planned to proceed concurrently and would take almost identical time for construction. Discussions with the department further indicate that combining the two projects could achieve some savings. In fact, CDC engineers estimate that about 5 percent of the total cost of the projects could be saved by combining the two projects for design and construction purposes. This could result in cost savings of \$300,000 or more. Savings are expected to come in areas such as field investigations, engineering, construction mobilization, and construction inspection.

In order to realize these estimated savings, we recommend the Legislature defer action on the two projects pending the department's revised budget proposal for a combined project that reflects the lower cost resulting from the consolidation of the two projects.

### **Projects Recommended for Approval Contingent on Review of Preliminary Plans**

*We recommend the Legislature approve \$36.7 million for working drawings and construction of seven projects, contingent on receipt and review of substantially complete preliminary plans, cost estimates, and schedules to verify the projects are consistent with prior legislative approval.*

The Governor's budget includes \$36.7 million for working drawings and/or construction of seven projects for which funds have been appropriated in prior years for development of preliminary plans and/or working drawings. These projects are summarized in Figure 1 (see next page). We recommend, in general, that the Legislature not approve additional funds for projects until substantially complete preliminary plans and cost estimates have been submitted to the Legislature and reviewed in order to verify the projects are consistent with the approved scope and within budget. Accordingly, we recommend the Legislature not approve funding for these seven projects unless substantially complete preliminary plans and cost estimates are submitted to the Legislature in time for review before budget hearings.

**Figure 1**

**Department of Corrections  
Projects Recommended for Approval  
Contingent on Substantial Completion of Preliminary Plans**

(In Millions)

	Phase <sup>a</sup>	Budget Amount	Future Cost
California Men's Colony, San Luis Obispo: Potable Water Distribution System Upgrade	W	\$1.4	\$29.6
Deuel Vocational Institution, Tracy: Groundwater Treatment/Nonpotable Water Distribution System	W	0.8	9.8
Chuckawalla Valley State Prison, Blythe: Heating, Ventilation, and Air Conditioning System	C	28.9	—
High Desert State Prison/California Correctional Center: Arsenic Removal from Potable Water Supply	W	0.8	12.7
Small Management Exercise Yards Statewide	C	2.6	3.7
Pleasant Valley State Prison: Bar Screen, Pre-Lift	C	0.9	—
Wasco State Prison: Prescreening Facility	C	1.3	—
<b>Totals</b>		<b>\$36.7</b>	<b>\$55.8</b>

<sup>a</sup> W = working drawings and C = construction.

**Bond Funds Should Be Used Instead of General Fund**

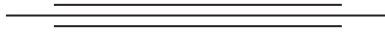
*There is about \$2.5 million in uncommitted prison construction bond funds that can be used to fund capital projects in 2005-06. We recommend these funds be used in order to free up General Fund money in the budget. (Delete \$1,308,000 from Item 5240-301-0001 [11] and add \$1,308,000 from a new Item 5240-301-747 [1]; and delete \$925,000 from Item 5240-301-0001 [14] and add \$925,000 from a new Item 5240-301-751 [1].)*

Information from the Department of Finance on the condition of prison bond funds shows that there are:

- Almost \$1.6 million of uncommitted funds remaining in the 1988 Prison Construction Bond Fund.
- Almost \$955,000 of uncommitted funds remaining in the 1990 Prison Construction Bond Fund.

Our review also shows that no projects have been planned for these bond funds. As such, they are available to fund some of the capital outlay

work proposed in the budget. For 2005-06, the department is requesting (1) \$1.3 million from the General Fund to construct a new prescreening facility at the wastewater treatment plant at Wasco State Prison and (2) \$925,000 to install a bar screen to remove bulky debris for the wastewater treatment of Pleasant Valley State Prison in Coalinga. Our review shows that these projects are appropriate uses of the remaining bond funds. Accordingly, we recommend that the Wasco State Prison project be funded from the 1988 bond and the Pleasant Valley State Prison project be funded from the 1990 bond. Doing so will reduce the funding required from the General Fund.



## DEPARTMENT OF THE YOUTH AUTHORITY (5460)

The Department of the Youth Authority (CYA) currently operates eight institutions with about 3,600 beds, and four fire and conservation camps with about 300 beds. These institutions house about 150 female and 3,300 male wards, down from a total of over 10,000 in 1996.

*Camp Closures Proposed to Continue.* The department has recently closed three institutions and one fire camp in response to a declining population and a legislative mandate to do so. Even with the closures, CYA's institutions and camps still have a surplus capacity of about 400 beds. In response, the Governor's budget proposes to close two more fire and conservation camps—Ben Lomond in Santa Cruz and Washington Ridge in Nevada City. The closures would leave two camps still open, with a capacity of around 150 beds, for less violent wards. (Please see our review of the closure proposal in Item 5460 in the "Judiciary and Criminal Justice" chapter.)

*Request for Capital Outlay Funding.* The budget requests \$3.6 million from the General Fund for the following:

- \$2.7 million for nine minor capital outlay projects and budget packages.
- \$646,000 to initiate a project to install fire protection sprinklers in all CYA institutions.
- \$208,000 to initiate a project to renovate the central kitchen at the Northern California Youth Correctional Facility.

### **Required Report Has Not Been Submitted**

*We recommend the Legislature not approve a total of \$3 million, including funding for a kitchen renovation and funding for statewide budget packages and planning, and minor projects because a required report on the condition of the Youth Authority's facilities has not been*

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*submitted and it is needed in order to evaluate capital outlay proposals in the budget. (Delete \$2,958,000 from Item 5460-301-0001 [1], [3], and [4].)*

**Facilities Information and Funding Priorities Lacking.** The *Supplemental Report of the 2003-04 Budget Act* directed the Youth Authority to prepare and submit a report on the condition of its facilities to the Legislature by November 1, 2003. The report was required to contain a survey and assessment of the condition of the Youth Authority's facilities, including identification of needed corrections and improvements, preliminary cost estimates, and a plan for their implementation. This report has not been submitted. As a consequence, the Legislature does not have the information it sought to assist it in making decisions about the department's capital outlay proposals.

In addition, the administration has not released an updated five-year statewide infrastructure plan, including its plan for CYA's facilities. This five-year plan is required by law to be annually updated and to identify the administration's priorities for funding infrastructure improvements for various programs and departments. Instead, the most recent information is from the 2003 plan prepared by the prior administration. Without an updated statewide plan, the Legislature is not able to determine if the proposals put forward in the budget address the state's most critical needs.

An example of why the facilities report and infrastructure plan are important is the budget request for \$208,000 to develop preliminary plans and working drawings for a blast chiller (for food storage) at the Northern California Youth Correctional Facility at Stockton. This project was not included for funding in the 2003 statewide infrastructure plan. Absent a new (2005) plan showing the current administration's funding priorities, there is no basis to determine why this project should have a higher priority than those projects that were included in the 2003 infrastructure plan, and how funding this project affects the priority of other projects.

Accordingly, we recommend that pending the receipt of the above report, the Legislature not approve the blast chiller project described above, as well as:

- \$250,000 for preschematic/master planning budget packages and advance planning.
- \$2,500,000 for minor projects.

**Fire Sprinkler Project Should Proceed for Safety Reasons.** We do not include in our recommendation deletion for a fourth project: \$646,000 to develop preliminary plans for the installation of fire protection sprinkler systems. We recommend approval of this project because it is needed to resolve fire and life safety hazards at various institutions statewide.

## UNIVERSITY OF CALIFORNIA (6440)

The Governor proposes \$305 million from the 2004 Higher Education Capital Outlay Bond Fund for 24 projects. The proposed funding level would provide \$297 million to continue work on 18 continuing projects and \$8 million to start six major new projects.

### Construction Cost Guidelines

*As in the past, we recommend the Legislature fund the construction of facilities at the University of California based on construction cost guidelines similar to those used by the California State University.*

Construction cost guidelines are an important tool available to the Legislature to contain construction costs. These guidelines, usually stated in terms of “dollars per assignable square foot (asf),” are developed by surveying the actual construction cost of similar buildings. When adjusted for inflation and cost differences due to geographical factors, the guidelines provide a means to assess the reasonableness of the cost of capital outlay proposals from the segments.

The California State University (CSU) and California Community Colleges (CCC) have used construction cost guidelines in implementing their capital outlay programs for a number of years. Figure 1 summarizes the cost guidelines used by the two segments for classrooms, teaching laboratories, and offices. We have compared the CSU and CCC guidelines to the actual construction cost of hundreds of similar higher education buildings at major public and private universities and colleges throughout the country and found their guidelines to be comparable.

The UC, however, does not use construction cost guidelines. Figure 2 summarizes the unit construction cost of nine UC buildings proposed in the budget containing classroom, teaching laboratory, office and faculty research space. As the figure shows, the estimated construction unit cost for these buildings ranges from \$375 to \$847 per asf.



<b>Figure 1</b>		
<b>CSU and CCC</b>		
<b>Construction Cost Guidelines</b>		
<i>(Dollars per Assignable Square Foot)</i>		
<b>Building Type</b>	<b>CSU</b>	<b>CCC</b>
Classrooms	\$333	\$276
Teaching laboratories	529	429
Offices	333	291

<b>Figure 2</b>	
<b>University of California</b>	
<b>Construction Contract Costs, 2005-06 Projects</b>	
<i>(Dollars per Assignable Square Foot)</i>	
<b>Building</b>	<b>Unit Cost</b>
Los Angeles: Life Sciences Replacement Building	\$847
Davis: Physical Sciences Expansion	710
Santa Cruz: McHenry Project	710
San Diego: Music Building	686
Riverside: Materials Science and Engineering	565
Santa Cruz: Digital Arts Facility	551
Irvine: Engineering Unit 3	530
Irvine: Social and Behavioral Sciences Building	436
Riverside: Student Academic Support Services Building	375

When compared to CSU and CCC construction cost guidelines for the types of space they have in common with UC—classrooms, teaching laboratories, and offices—UC’s costs are considerably higher than the construction cost guidelines for CSU and the community colleges.

Accordingly, we recommend the Legislature fund construction of space that is common to both UC and CSU—such as classrooms, teaching laboratories, and offices—based on CSU’s construction cost guidelines. Use of these guidelines will allow UC to construct high quality instructional and academic support facilities while conserving the state’s limited funding resources. (In our recommendations below, we use these guidelines in costing out the share of projects’ total costs we recommend be borne by the state.)

## **Eight Projects Require Future Funding to Complete**

*Eight University of California (UC) projects in the budget will require future funding to complete construction. Because the availability of state funds for this purpose is uncertain, we recommend the Legislature designate unallocated 2004 bond funds for future construction of three of these projects. We further recommend funding the remaining five projects only if UC agrees to complete their construction with nonstate funds if state funds are not available in the future to do so.*

As we discussed in the “Crosscutting Issues” section of this chapter, there are not sufficient funds to complete all higher education capital outlay projects proposed in the budget year (eight of these projects are proposed for UC). The budget proposes to fund early phases of these projects (such as for preparation of preliminary plans or working drawings) from the 2004 Higher Education Capital Outlay Bond Fund. However, our review shows that there is no assured source of funds to pay for over \$212 million in future costs, primarily construction costs, to complete these projects.

We recommend that the Legislature allocate remaining bond funds to projects based on their priority ranking. For the UC, we find three projects to have high priority based on the deficiencies they are intended to address. These are shown in the top half of Figure 3. Specifically, the San Francisco project would correct health, safety, and related functional deficiencies in an existing building. The Riverside environmental expansion project would construct a facility to store and handle hazardous materials for the entire campus. As discussed in the “Crosscutting Issues” section write-up on “Insufficient Bond Funds to Complete All Higher Education Projects,” both of these projects fall into the category of projects to correct fire, life safety, and seismic deficiencies. The Santa Cruz infrastructure improvement project would correct deficiencies in the campus storm water drainage system, and is a critical utility project. As we show in the “Crosscutting Issues” write-up, we estimate these three high priority projects can be funded—along with two CSU and five community college projects—from the remaining unallocated 2004 bond funds. Accordingly, we recommend the Legislature approve supplemental report language specifying that the completion of these three projects will be funded from unallocated 2004 bond funds.

We recommend the other five projects be funded only if UC agrees to fund their completion from nonstate funds if state funds are not available. These projects, which involve mainly expansion of faculty research facilities and faculty and administrative offices, are also listed in Figure 3.

In the event it is necessary for UC to fund completion of these projects using nonstate funds, it has available for this purpose the overhead revenue it receives for faculty research. This issue is discussed below.

<b>Figure 3</b>	
<b>UC Projects Requiring Future Funding</b>	
<i>(In Thousands)</i>	
<b>Projects Recommended for Full Funding</b>	<b>Future Project Cost</b>
San Francisco: Medical Sciences Building Improvements, Phase 1	\$15,319
Riverside: Environmental Health and Safety Expansion	10,964
Santa Cruz: Infrastructure Improvements, Phase 1	7,326
<b>Total</b>	<b>\$33,609</b>
<b>Projects Needing Alternative Funding Commitment</b>	<b>Future Project Cost</b>
Irvine: Social and Behavioral Sciences Building	\$37,850
Los Angeles: Life Sciences Replacement Building	63,382
Riverside: Student Academic Support Services Building	17,730
Santa Cruz: McHenry Project	40,361
Santa Cruz: Digital Arts Facility	19,481
<b>Total</b>	<b>\$178,804</b>

### Projects Recommended for Partial Reimbursement Funding

*We recommend the Legislature shift \$79 million proposed for five projects from General Fund-supported bonds to reimbursements from the University of California's (UC's) research overhead revenue. We also recommend the Legislature approve supplemental report language recognizing a shift of \$88 million in future funding for three of these projects from state bonds to UC reimbursements. (Delete \$4,258,000 from Item 6440-301-6041 [4] and add [18] \$4,258,000 Reimbursements for the same project; delete \$634,000 from Item 6440-301-6041 [16] and add [20] \$634,000 Reimbursements for the same project; delete \$31,758,000 from Item 6440-302-6041 [4] and add [8] \$31,758,000 Reimbursements for the same project; delete \$1,644,000 from Item 6440-302-6041 [5] and add [9] \$1,644,000 Reimbursements for the same project; delete \$40,674,000 from Item 6440-302-6041 [6] and add [10] \$40,674,000 Reimbursements for the same project.)*

As we noted in an earlier report (*Funding UC Faculty Research Facilities*, June 2004), UC has a large revenue source in the facilities and administration overhead it charges sponsors for faculty research. Most of UC's revenue for research comes from the federal government and private for- and not-for-profit entities. This revenue has increased consistently over the last 20 years. For example, between 2000-01 and 2003-04 it grew from \$2.4 bil-

lion to \$2.9 billion, a 21 percent increase. For 2005-06, the UC projects research revenue to increase to over \$3 billion, of which about 55 percent is from the federal government.

Included in this research revenue is overhead revenue for facilities, which accounts for about 13 percent of the total research revenue. In 2003-04, we estimate the overhead revenue for facilities was about \$377 million and will be roughly \$390 million in 2005-06. Overhead revenue is retained by UC for various uses at its discretion and is not allocated by the Legislature.

**Proposed Projects Include Faculty Research Facilities.** Five projects proposed for funding in the Governor’s budget have a mixture of uses but consist predominantly of faculty research space, ranging from 51 percent to 83 percent of total usable space.

If construction of faculty research space in these buildings is funded by the university from research overhead revenue and construction of the remaining space is funded by the state, the cost to the university would be about \$79 million in 2005-06 and an additional \$88 million in the future. This is shown in Figure 4. This means that, in total, about \$167 million would need to be funded from research overhead revenue to complete these proposed projects. As it has done in the past, UC can finance this amount by the sale of bonds backed by a pledge of its research overhead revenue.

<b>Figure 4</b>				
<b>Projects Recommended for Partial UC Reimbursement Funding</b>				
<i>(In Thousands)</i>				
<b>Project (Percent Research Space)</b>	<b>2005-06</b>		<b>Future Funding</b>	
	<b>State</b>	<b>UC</b>	<b>State</b>	<b>UC</b>
Irvine: Social and Behavioral Sciences Building (51%)	\$1,206	\$1,644	\$20,274	\$17,576
Irvine: Engineering Unit 3 (51%)	15,589	31,758	—	—
Los Angeles: Life Sciences Replacement Building (83%)	482	4,258	6,438	56,944
Riverside: Materials Science and Engineering Building (66%)	9,875	40,674	—	—
Santa Cruz: Digital Arts Facility (58%)	254	634	6,301	13,180
<b>Totals</b>	<b>\$27,406</b>	<b>\$78,968</b>	<b>\$33,013</b>	<b>\$87,770</b>
<b>Total Cost of All Projects</b>		<b>\$227,157</b>		
<b>Total UC Reimbursements</b>		<b>\$166,738</b>		

This financing would cost the university about \$13 million a year over 25 years. This is about 3 percent of the research overhead revenue UC currently receives from its research sponsors a year.

Our review shows that paying the capital outlay cost of faculty research space from research overhead is appropriate and consistent with the state's historical policy of not funding the construction of UC facilities that are capable of being self-funded (for example student and faculty housing, parking garages, and teaching hospitals). Accordingly, we recommend the cost of the faculty research space in these five buildings be shifted from the state to UC reimbursements because it will relieve the state of a General Fund-backed debt burden of about \$167 million. We estimate this would save the General Fund about \$325 million in debt repayment costs over 25 years.

### **Berkeley Long Range Development Plan Lacks Specifics**

*The University of California's new "Long Range Development Plan" for the Berkeley campus proposes to construct up to 2.2 million gross square feet (gsf) of new buildings by 2020. The plan does not contain enough information for the Legislature to use it as a basis for considering future proposals at the campus. We recommend the Legislature not fund construction of additional new buildings at the Berkeley campus if it would increase the amount of academic and support buildings on the campus beyond the present 12.1 million gsf, unless the university provides information that demonstrates the proposed expansion is justified based on enrollment and programmatic needs.*

The UC prepares Long Range Development Plans (LRDP) for each campus that set upper limits for broad campus parameters—such as enrollment, number of employees, and square footage of buildings—for 15 to 20 years into the future. The plans may also identify special features that might be built such as athletic stadiums, parking garages, faculty and student housing, and nature reserves. Sometimes operating systems that are planned are also identified—such as shuttle buses and exclusive bicycle and pedestrian circulation paths. An environmental impact report (EIR) is prepared on the LRDP and after required public review both the plan and EIR are approved by the UC Board of Regents. The LRDP then serves as the "outer envelope" for campus growth in the period covered by the plan.

*Berkeley Campus New Long Range Plan Just Adopted.* The Berkeley campus prepared a draft LRDP and EIR for the period 2005 through 2020. The plan (which is referred to as the "2020 LRDP") and EIR were made available for public comment in the spring of 2004, and the university's Board of Regents approved them in January 2005. The 2020 LRDP calls for expanding the amount of academic and support buildings on the campus

by 2.2 million gross square feet (gsf). This would increase the total amount of academic and support buildings on the campus from 12.1 million to 14.3 million gsf—an 18 percent increase. (Academic and support buildings are most of what is on a college campus; housing, parking, and athletic facilities make up most of the balance.)

***Few Specifics Provided to Justify Expansion.*** The 2020 LRDP provides little information about the buildings it plans to construct, other than to indicate up to 700,000 gsf (32 percent) would be for faculty research. No information is provided about how much of the additional space would be for student instruction, faculty and administrative offices, and other purposes such as libraries and plant maintenance buildings.

There is also little information to show that this large increase in campus facilities is needed to accommodate enrollment growth. For example, the 2020 LRDP indicates the campus plans to accommodate an additional 4,000 full-time equivalent (FTE) students by 2010 *over its base year of 1998*. But in 1998 the Berkeley campus accommodated 28,443 FTE students and in 2002 it accommodated 32,469—an *increase of 4,026 FTE students*. This means the Berkeley campus was able to accommodate *all* of the enrollment growth assumed in the 2020 LRDP within the *existing* facilities on the campus in 2002. Therefore, it is unclear why 2.2 million additional gsf of buildings would be needed to accommodate enrollment.

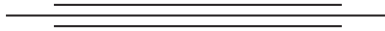
Similarly, there is nothing in the 2020 LRDP to demonstrate that the additional buildings are needed for programmatic reasons. For example, there is no information to show that a special type of teaching laboratory is needed to meet demand for certain science courses or that new rehearsal space is needed in order to offer instruction in a type of performance art not presently offered at the campus. In the absence of information that connects enrollment and programmatic needs to the proposed 2.2 million additional gsf of buildings, the planned expansion of the Berkeley campus is not justified for state funding at this time.

***2020 LRDP Needs More Information.*** Before the Legislature can use the Berkeley campus 2020 LRDP as a basis for future capital outlay decisions, it needs to be supplemented by additional information showing that enrollment and programmatic needs require an increase in the amount of buildings on the campus. This includes:

- An analysis showing the amount of instructional space needed to accommodate projected enrollment based on year-round utilization of the facilities.
- A survey of existing academic and support space and its utilization, to determine if instructional needs can be satisfied within existing facilities, assuming appropriate renovations, and—if not—the amount of additional space actually needed.

- Information about programmatic deficiencies that may exist and an analysis to demonstrate that new space needed for programmatic reasons cannot be accommodated in existing facilities with appropriate renovations.

The LRDP is an important capital planning tool for the university and the Legislature. The LRDPs establish the infrastructure limits of the campus—in terms of physical size and capacity—within which project-specific five-year capital outlay plans are prepared. These five-year plans are the basis for capital improvement proposals the university makes for state funding. But for LRDPs to be helpful, they must provide sufficient information to show how an increase in campus facilities is actually needed to serve students. The Berkeley campus' 2020 LRDP lacks this information. Accordingly, until information on enrollment and programmatic needs is provided to the Legislature to justify the increase in the size of the Berkeley campus proposed in the 2020 LRDP, we recommend state funding not be provided for projects that would increase the amount of academic and support buildings on the campus beyond the current total of about 12.1 million gsf.



# CALIFORNIA STATE UNIVERSITY (6610)

The Governor proposes \$262 million from the Higher Capital Outlay Bond Fund of 2004 for 23 projects. Of this amount, \$25 million is for 4 new projects and \$237 million is for 19 previously approved projects. We recommend approval of all but one of the projects, which we discuss below.

### Three Projects Require Future Funding

*There are insufficient uncommitted funds remaining in the 2004 bond fund to complete 17 projects at all three segments that are proposed for partial funding in the budget. Three of these are California State University (CSU) projects. We recommend two of the projects be approved and that bond funds be designated for the future costs of these projects. We recommend the third be approved contingent upon CSU committing to fund the project's completion with nonstate funds if state funds are not available.*

The Governor's budget proposes \$4.2 million to prepare preliminary plans and/or working drawings for three CSU projects from the 2004 Higher Education Capital Outlay Bond Fund. The three projects will require \$152 million to complete after 2005-06, as summarized in Figure 1.

<b>Figure 1</b>		
<b>CSU Projects Without Assured Funding for Completion</b>		
<i>(In Thousands)</i>		
<b>Campus</b>	<b>Project</b>	<b>Future Project Cost</b>
Hayward	Seismic Upgrade, Warren Hall	\$28,933
Long Beach	Peterson Hall 3 Replacement	70,743
Northridge	Performing Arts Center	52,635
<b>Total</b>		<b>\$152,311</b>



As we discussed in the “Crosscutting Issues” section of this chapter, there are not sufficient funds to complete 17 higher education capital outlay projects proposed in the budget year, including the three projects for CSU. We recommend that the Legislature allocate remaining bond funds to projects based on their priority ranking. For CSU, we recommend \$100 million of remaining 2004 bond funds be designated for the completion of the CSU Hayward and CSU Long Beach projects. Both projects provide classrooms and teaching laboratories to improve academic programs.

The Northridge project is an auditorium, which falls into our grouping of administrative and support facilities. As such, it is lower than the other projects in our priority ranking and not fundable with the remaining 2004 bond funds. Accordingly, we recommend the CSU Northridge project be approved contingent upon CSU committing to use nonstate funds to complete the project if state funds are not available.



## CALIFORNIA COMMUNITY COLLEGES (6870)

The Governor proposes \$262 million from the Higher Education Capital Outlay Bond Fund of 2004 for 50 projects. Of this amount, \$75 million is for 22 new projects and \$187 million is for 28 previously approved projects. We recommend the Legislature approve 49 projects. We discuss the remaining project below.

### Six Projects Require Future Funding

*There are insufficient uncommitted funds remaining in the 2004 Higher Education Bond Fund to complete 17 higher education projects proposed to receive partial funding in the budget. Six of these projects are at community colleges. We recommend the Legislature approve five of the projects and designate \$40 million of unallocated 2004 bond funds for the future costs of the projects. We further recommend approval of the sixth project contingent on the district committing to fund the project's completion with nonstate funds if state funds are not available.*

The Governor's budget proposes \$4 million from the 2004 Higher Education Capital Outlay Bond Fund to prepare preliminary plans and/or working drawings for six community college projects. The six projects will require \$54.5 million to complete after 2005-06, as summarized in Figure 1.

As discussed in the "Crosscutting Issues" section of this chapter, there are not sufficient funds to complete 17 projects in all three segments of higher education, including the six projects for community colleges.

We recommend that the Legislature allocate remaining bond funds to projects based on their priority ranking. For community colleges, we recommend the Legislature approve five of the projects and designate a total of \$40 million from the 2004 bond to cover the future costs of these projects. The five projects are the Citrus, Contra Costa, Rio Hondo, San Mateo, and Santa Barbara Community College District (CCD) projects shown in Figure 1. All five of these projects provide classrooms and teaching laborato-

ries—facilities to improve undergraduate academic programs. This type of building falls into our fourth highest recommended priority rank, as discussed in the “Crosscutting Issues” section. The Palo Verde project is an auditorium, which qualifies in our sixth highest priority rank—administrative and support facilities, and faculty offices. Because there are not enough 2004 bond funds remaining to fund projects in this rank, we recommend the Palo Verde CCD project be approved only if the district commits to fund the project’s completion with nonstate funds if state funds are not available.

**Community Colleges Have Other Funding Option.** The community colleges have an option to provide funding to complete projects because they can issue local district bonds to provide a source of funds. Since the passage of Proposition 39 in 2000, which reduced the voter approval requirement for school facilities bond measures from two-thirds to 55 percent, 51 out of 55 (93 percent) CCD bond measures have been approved and over \$12 billion has been made available for community college facilities. In the event that nonstate funds were needed to complete the Palo Verde CCD project, the district would have the option of seeking locally approved bonds.

**Figure 1****CCC Projects Without Assured Funding for Completion***(In Thousands)*

CCD <sup>a</sup>	Project	Future Project Cost
Citrus	Citrus College, Vocational Technology Building	\$11,064
Contra Costa	Los Medanos College, Core Building Remodel	2,277
Palo Verde	Palo Verde College, Fine and Performing Arts Complex	14,469
Rio Hondo	Rio Hondo College, Applied Technology Building Reconstruction	10,591
San Mateo	Skyline College, Allied Health Vocational/ Technical Training Center	7,577
Santa Barbara	Santa Barbara City College, Drama Music Building Modernization	8,563
<b>Total</b>		<b>\$54,541</b>

<sup>a</sup> Community college district.



# FINDINGS AND RECOMMENDATIONS

## *Capital Outlay*

### Analysis

### Page

### Crosscutting Issues

- G-15     ■     **California Infrastructure Plan Not Submitted.** Recommend the Legislature defer action on all capital outlay appropriations for *new* projects until the required infrastructure plan is submitted and reviewed.
- G-17     ■     **Design-Build: An Alternative Construction System.** We find that design-build can be a useful option for some public projects. Recommend statutory changes to provide state and local agencies the design-build option while preserving the public's confidence in the procurement process, quality control, and access for small contractors to public contracts.
- G-34     ■     **Insufficient Bond Funds to Complete All Higher Education Projects.** Recommend the Legislature use unallocated 2004 bond funds to cover the future cost of ten high priority projects. Further recommend the Legislature approve preliminary funding for seven projects contingent upon the segments committing to use nonstate funds to complete these projects in the event state funds are not available in the future.

### Department of Forestry and Fire Protection

- G-39     ■     **Defer Action on Bear Valley Forest Fire Station Project.** Defer action on \$294,000 from the General Fund for a water supply system replacement project, pending completion of a study that defines the scope and cost of the project.

**Analysis****Page****Parks and Recreation**

- G-41 ■ **Redirect Selected Project Funding to Support ADA Projects.** Recommend redirecting funding for selected projects from Proposition 12 and federal funds to support Americans with Disabilities Act projects proposed for funding from the General Fund.

**Department of Corrections**

- G-42 ■ **Projects at Centinela State Prison Should Be Combined.** Recommend action on two wastewater treatment plant projects be deferred until the department submits a revised budget proposal combining the two projects to achieve savings in design and construction.
- G-43 ■ **Approve Projects Contingent on Review of Preliminary Plans.** Recommend the Legislature not approve funding for seven projects unless substantially complete preliminary plans and cost estimates are submitted to the Legislature in time for review before budget hearings.
- G-44 ■ **Bond Funds Should Be Used Instead of General Fund.** Recommend shifting \$1.3 million for one specified project from General Fund to 1988 Prison Construction Bond Fund, and \$925,000 for another specified project from General Fund to 1990 Prison Construction Bond Fund.

**Department of the Youth Authority**

- G-46 ■ **Required Facilities Condition Report Has Not Been Submitted. Reduce \$2,958,000 from Item 5460-301-0001 (1), (3) and (4).** Recommend not approving all proposed capital outlay proposals except one for installation of fire protection sprinkler systems statewide, pending receipt of the specified report and infrastructure plan.

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**Analysis****Page****University of California**

- G-48     ■     **Construction Cost Guidelines.** Recommend the Legislature fund the construction of facilities at the University of California in accordance with construction cost guidelines used by California State University for classrooms, teaching laboratories, and offices.
- G-50     ■     **Eight Projects Require Future Funding to Complete.** Recommend the Legislature designate unallocated 2004 bond funds for future construction of three specified projects. Recommend five other specified projects be funded only if UC agrees to complete their construction with nonstate funds if state funds are not available in the future to do so.
- G-51     ■     **Projects Recommended for Partial Reimbursement Funding.** Reduce \$4,258,000 from Item 6440-301-6041 (4) and add (18) \$4,258,000 Reimbursements for the same project; Reduce \$634,000 from Item 6440-301-6041 (16) and add (20) \$634,000 Reimbursements for the same project; Reduce \$31,758,000 from Item 6440-302-6041 (4) and add (8) \$31,758,000 Reimbursements for the same project; Reduce \$1,644,000 from Item 6440-302-6041 (5) and add (9) \$1,644,000 Reimbursements for the same project; Reduce \$40,674,000 from Item 6440-302-6041 (6) and add (10) \$40,674,000 Reimbursements for the same project. Recommend shifting cost of constructing faculty research space from general obligation bonds to UC research overhead revenue reimbursements.
- G-53     ■     **Berkeley Long Range Development Plan.** Recommend the Legislature not fund construction of additional new buildings at the Berkeley campus if to do so would increase the amount of academic and support buildings on the campus beyond the current level, unless the university provides information that will demonstrate the campus expansion proposed in the plan is justified based on enrollment and programmatic needs.

**Analysis****Page****California State University**

- G-56     ■     **Three Projects Require Future Funding.** Recommend approval of two specified projects at Hayward and Long Beach and recommend uncommitted 2004 bond funds be designated to complete these projects in the future after 2005-06. Further recommend specified project at Northridge be approved contingent upon CSU committing to fund completion of construction with nonstate funds in the event state funds are not available.

**Community Colleges**

- G-58     ■     **Six Projects Require Future Funding.** Recommend the Legislature designate unallocated 2004 bond funds to complete future construction of five specified projects. Further recommend one specified project be approved subject to the community college district committing to fund the project's completion with nonstate funds in the event state funds are not available.