

## **Infrastructure Overview**

#### LEGISLATIVE ANALYST'S OFFICE

#### Presented To:

Conference Committee on Infrastructure Bonds Hon. Kevin Murray, Chair





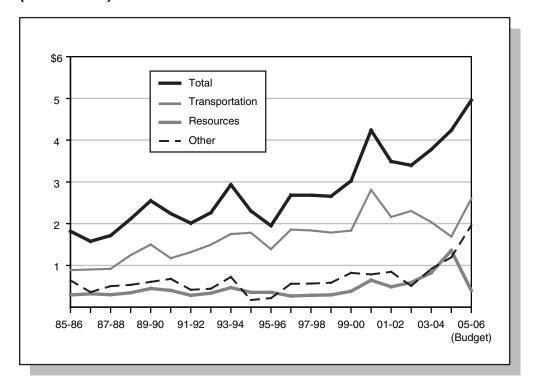
## **Major State Infrastructure**

Water Resources	<ul> <li>34 lakes and reservoirs.</li> <li>25 dams.</li> <li>20 pumping plants.</li> <li>4 pumping-generating plants.</li> <li>5 hydroelectric power plants.</li> <li>701 miles of canals and pipelines—State Water Project.</li> <li>1,595 miles of levees and 55 flood control structures in the Central Valley.</li> </ul>
Transportation	<ul> <li>50,000 lane miles of highways and 12,000 bridges.</li> <li>9 toll bridges.</li> <li>11 million square feet of Department of Transportation offices and shops.</li> <li>209 Department of Motor Vehicles offices.</li> <li>141 California Highway Patrol offices.</li> </ul>
Higher Education	<ul><li>10 University of California campuses.</li><li>23 California State University campuses.</li></ul>
Natural Resources	<ul> <li>287 park units containing 1.5 million acres and 4,000 miles of trails.</li> <li>228 forest fire stations, 39 conservation camps, and 13 air attack bases.</li> <li>16 agricultural inspection stations.</li> </ul>
Criminal Justice	<ul> <li>33 prisons and 43 correctional conservation camps.</li> <li>8 youthful offender institutions.</li> <li>11 crime laboratories.</li> </ul>
Health Services	<ul> <li>5 mental health hospitals comprising over 4 million square feet of facilities and 2,300 acres.</li> <li>5 developmental centers comprising over 5 million square feet of facilities and over 2,000 acres.</li> <li>2 public health laboratory facilities.</li> </ul>
General state office space	<ul> <li>8.5 million square feet of state-owned office space.</li> <li>16.6 million square feet of leased office space.</li> </ul>



# Recent State Expenditures on Capital Outlay

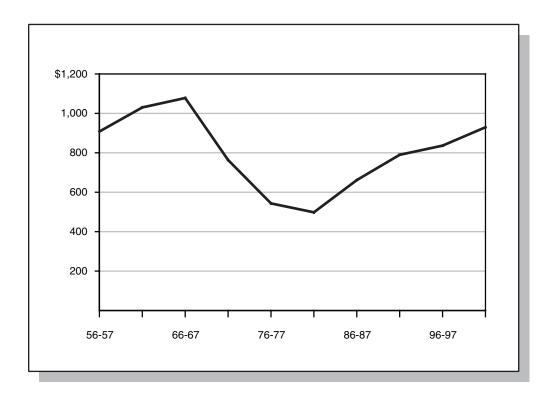
#### (In Billions)





# Real Per-Capita California State and Local Capital Outlay Expenditures

#### (In Today's Dollars)





# **Approaching State Infrastructure Investment**

- In approaching its decisions regarding infrastructure, it is important that the Legislature have a good framework for evaluating and addressing key infrastructure-related issues.
- These issues fall into two broad categories:
  - Infrastructure planning.
  - Infrastructure financing.



### **Infrastructure Planning**

- Most of the state's infrastructure investments were made in the 1950s and 1960s.
- Although the state has continued to spend increasing amounts on infrastructure in the past 20 years, further investments are necessary in order to:
  - Maintain existing infrastructure.
  - Build new infrastructure to accommodate growth demands.
  - Respond to legal requirements.
- At the core of the infrastructure planning process is identifying and prioritizing these various needs.



## California's Infrastructure Needs and Priorities

- Where have we underinvested?
- What did the most recent state infrastructure proposal contain? What funding was proposed?
- Mow comprehensive is the plan?
- How should the needs and their timing be prioritized?
  - A systematic approach is needed.
  - What should be state versus local responsibilities in providing and funding infrastructure?
  - Are there policy changes that can be made to reduce the demand for infrastructure improvements, and thus required infrastructure spending?
  - What criteria should be used in establishing priorities?
  - What practical and other factors need to be taken into consideration in infrastructure investments?



### **Funding Infrastructure**

### Choice of Financing Mechanism— Two Key Issues Are:

- The basic *financial approach* to use.
- The **source of funds** to ultimately pay for the acquisition or use of facilities, regardless of the financial approach used.
- Financial Approaches. Generally speaking, three main options are available for financing the acquisition and use of capital infrastructure. These include:
  - *Pay-As-You-Go.* This is when infrastructure projects are paid for directly.
  - **Renting and Leasing.** This can sometimes be feasible in cases where privately owned infrastructure (such as buildings) is available for public use.
  - **Bond Financing.** This is the most common form of infrastructure financing, and typically involves borrowing money to be paid off over several decades to build or acquire long-lived capital facilities that generate services over many years.



### **Funding Infrastructure**

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**Sources of Funding.** Regarding sources of funding to ultimately pay for infrastructure, these can include both general and selective taxes, user fees, the sales of other physical assets or income streams, and a variety of other alternatives.

- One approach of allocating a project's costs among funding sources is the "beneficiary pays" funding principle.
- For example, in cases where an identified population or group—as opposed to the population as a whole—benefits from the infrastructure expenditure, it may be appropriate to finance the expenditure, in whole or in part, from fees levied on that group.
- An example of bond funding using an existing asset involves the state's tobacco bonds for which the state received from certain investors a lump sum of cash in exchange for giving them rights to the state's future stream of tobacco settlement monies.



### Bond Financing— Basic Background

- What Is Bond Financing? Bond financing is a type of long-term borrowing that the state uses to raise money for various purposes. The state obtains this money by selling bonds to investors. In exchange, it agrees to repay this money, with interest, according to a specified schedule.
- Why Are Bonds Used? The state has traditionally used bonds to finance major capital outlay projects such as educational facilities, prisons, parks, water projects, and office buildings.
  - This is done mainly because these facilities are used over many years, their large dollar costs can be difficult to pay for all at once, and different taxpayers over time benefit from the facilities.
  - Recently, however, the state has also used bond financing to help close major shortfalls in its General Fund budget.



### Bond Financing— Basic Background

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What Types of Bonds Does the State Sell? The state sells three major types of bonds. These are:

- General Fund-Supported Bonds. These are paid off from the state's General Fund, which is largely supported by tax revenues. These bonds take two forms. The majority are general obligation (GO) bonds. These must be approved by the voters and their repayment is guaranteed by the state's general taxing power. The second type is lease-revenue bonds, which are authorized by the Legislature. These are paid off from lease payments (primarily financed from the General Fund) by state agencies using the facilities they finance. These bonds do not require voter approval and are not guaranteed. As a result, they have somewhat higher interest costs than GO bonds.
- *Traditional Revenue Bonds.* These also finance capital projects but are not supported by the General Fund. Rather, they are paid off from a designated revenue stream—usually generated by the projects they finance—such as bridge tolls. These bonds also do not require voter approval.



# **Bond Financing— Basic Background**

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■ Budget-Related Bonds. In March 2004, the voters authorized \$15 billion in bonds to pay off the state's accumulated budget deficit and other obligations. Of this amount, \$11.3 billion was raised through bond sales in May and June of 2004. The General Fund cost of repaying the principal and interest on these bonds is the equivalent of a one-quarter-cent share of the state sales tax (project at \$1.4 billion for 2006–07). The bonds' repayments are also guaranteed by the state's general taxing power in the event the sales tax proceeds fall short.

### What Are the Direct Costs of Bond Financing?

- The state's cost for using bonds of a given type depends primarily on their interest rates and the time period over which they are repaid. For example, the most recently sold GO bonds will be paid off over a 30-year period.
- Assuming for illustrative purposes tax-exempt interest rates for such bonds of about 5 percent, the cost of paying them off over 30 years is about \$2 for each dollar borrowed—\$1 for the amount borrowed and \$1 for interest.
- This cost, however, is spread over the entire 30-year period, so the cost after adjusting for inflation is considerably less—about \$1.30 for each \$1 borrowed.



#### The State's Current Outstanding Debt



Amount of General Fund Debt. As of January 1, 2006, the state had about \$44 billion of General Fund bond debt outstanding on which it is making principal and interest payments. This consists of close to \$36 billion of GO bonds and nearly \$8 billion of lease-revenue bonds.

- Unissued GO Bonds. In addition, the state has not yet sold about \$32 billion of authorized GO and lease-revenue infrastructure bonds, either because the projects involved have not yet been started or those in progress have not yet reached their major construction phase. The issuance of commercial paper for some of this amount has been authorized by bond-related Finance Committees. These funds can be used to initiate projects.
- **Deficit-Financing Bonds.** The above totals do not include the \$15 billion of deficit-related bonds authorized in March 2004, from which \$11.3 billion has been raised.

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#### **General Fund Debt-Service Costs**

- General Fund debt payments for infrastructure-related GO and lease-revenue bonds will total about \$3.8 billion in 2005-06 and \$4.2 billion in 2006-07.
- If the annual costs of the deficit-related bonds are included, total debt-service costs will be about \$5 billion in 2005-06 and \$5.6 billion in 2006-07.



### The State's Current Outstanding Debt

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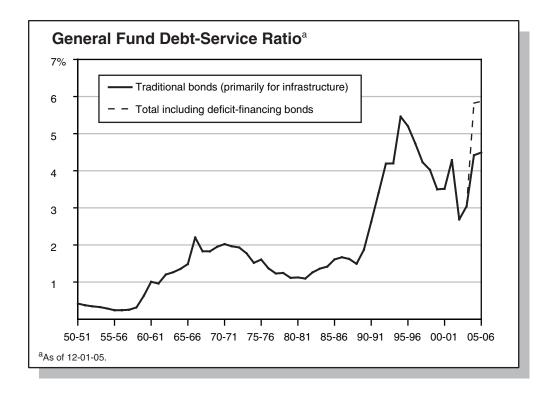
#### Affordability and the Debt-Service Ratio

- There is no accepted rule for how much debt is "too much" or how much debt the state can "afford." Rather, this depends on policy choices about how many revenues to devote to the funding of infrastructure and other bond-financed activities.
- However, some in the investment community look to the debt-service ratio (the ratio of General Fund debt payments as a percentage of state revenues) as a useful general indicator of the state's debt burden, and some have expressed concerns when the ratio starts to exceed 6 percent.
- The accompanying figure (see page 14) shows that the ratio increased in the early 1990s and peaked at 5.4 percent in the middle of the decade.
- We estimate that the ratio for 2005-06 would stand at about 4.3 percent. If the annual debt service on the deficit-related bonds is included, the ratio for 2005-06 would be about 5.6 percent.



# The State's Current Outstanding Debt

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# **Conditions Favorable to the Use of Bond Financing**

- The projects or purposes for which bonds are to be used are themselves worthy of spending taxpayers' money on, based on a favorable cost-benefit comparison.
- Acquiring a capital facility through nonbond financing is not feasible, such as when sufficient funds for direct appropriations are not available, leasing or renting is not feasible, or there are higher-priority uses for such monies.
- A project is extremely expensive, and either must be put in place relatively quickly or cannot be completed in stages.
- A project's costs are to be shared over time by its beneficiaries, and its benefits will last over many years or are skewed toward the future.
- The financial trade-offs between bond and nonbond financing favor the former, such as when the increases in tax rates or fees needed to provide up-front project funding are simply too large to consider.
- It is an acceptable borrowing environment, meaning that interest rates are not abnormally high, the state's debt level is not excessive, and enough bonding capacity is being saved for high-priority future bond financing needs.