# THE STATE OF CALIFORNIA'S DEBT AFFORDABILITY REPORT 

## October 2002



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## EXECUTIVE SUMMARY

The Treasurer is required to submit an annual State of California Debt Affordability Report to the Governor and the Legislature in accordance with the requirement of Government Code Section 12330. The following is a brief summary of the five sections comprising the Debt Affordability Report for 2002.

## SECTION I: THE VALUE OF DEBT AFFORDABILITY ANALYSIS

An important duty of California's state government is to provide infrastructure investment. The State funds many such infrastructure improvement projects directly from its General Fund and through debt financing repaid by the General Fund. Small variances in General Fund revenues can have a significant impact on debt capacity. Debt affordability analysis can be a useful tool to help policymakers identify appropriate levels of borrowing and make decisions about future capital projects.

## SECTION II: CALIFORNIA'S CURRENT DEBT POSITION

As of June 30, 2002, the State's outstanding net tax-supported debt totaled $\$ 28.46$ billion, while its authorized but unissued net tax-supported debt was $\$ 14.84$ billion. The State's debt service as a percentage of General Fund revenues for fiscal year 2001-02 is 3.66 percent, which is lower than the 4.13 percent recorded in fiscal year 2000-01 principally because of the implementation of the Strategic Debt Management Plan. Credit analysts generally consider the State's debt level to be moderate.

## SECTION III: THE MARKET'S PERCEPTION OF CALIFORNIA'S BONDS

The investment community has traditionally viewed California's bonds as high-quality investments. The State's general obligation bond credit ratings experienced considerable volatility over the last decade, reflecting trends in the State's economy and the fiscal condition of the State's General Fund. However, California's large economy, diverse taxing authority, and solid bond payment history allow the State to finance its capital projects at relatively low borrowing rates.

The three national bond rating agencies that track state and local governments are Fitch Ratings (Fitch), Moody's Investors Service (Moody's), and Standard and Poor's (S\&P). From 1996 through 2000, all three agencies upgraded the State's ratings several times. Peak general obligation bond ratings were achieved in late 2000 and early 2001 at AA by Fitch, Aa 2 by Moody's, and AA by S\&P. During 2001 Moody's and S\&P downgraded the State's credit ratings. These actions were taken in response to a weakening of the California and national economies during 2001 and the uncertainty this created for future General Fund revenues. An additional factor was the potential negative impact on the General Fund of the State's financial commitment to purchase electricity due to the extraordinary conditions of California's energy crisis in late 2000 and early 2001. Fitch, Moody's, and S\&P currently rate the State's general obligation bonds AA, A1, and A+, respectively.

In general, California's and other issuers' absolute borrowing costs have been declining since September 2000, when the State's average 20 -year bond yield was 5.38 percent. As of September 2002, the State's average 20 -year bond yield had fallen to 4.63 percent.

At the same time that the State's absolute borrowing cost has decreased, California's relative borrowing cost has increased compared to the AAA-rated national benchmark. The market's perceived deterioration in the State's creditworthiness over the past 24 months caused investors to increase the State's relative cost of borrowing. In September of 2000, based on its strong credit ratings and high investor demand, the State's borrowing cost was about 0.13 percent lower than the national AAA-rated, 20-year benchmark. As of September 2002, the State's average bond yield was 0.07 percent higher than this national benchmark, for a relative net increase of 0.20 percent.

## SECTION IV: STRATEGIC DEBT MANAGEMENT PLAN

In 2002, the Treasurer implemented the Strategic Debt Management Plan ("the Plan"). A principal goal of the Plan is to better match the timeframe for repaying debt for infrastructure projects to the useful life of the assets being funded. The Plan also reduces debt service in fiscal years 2001-02 to 2003-04 by approximately $\$ 2$ billion and increases the State's long-term capacity to finance California's crucial infrastructure needs. Implementation of the Plan is underway to accomplish these goals by: 1) shifting from level principal payments to level debt service payments for new bond issues; 2) restructuring existing debt to achieve significant one-time debt service reductions and to expedite the transition to level debt service; and 3) implementing recent legislation authorizing the State to issue variable rate debt for a portion of its general obligation bond portfolio.

## SECTION V: CALIFORNIA'S FUTURE DEBT CAPACITY

Section II examined California's current debt level in the context of three factors: General Fund revenue, statewide personal income, and statewide population. Of the three debt ratios, the rating agencies view California's ratio of debt service to General Fund revenues as the best indicator of the State's capacity for additional debt. The State's General Fund debt capacity is analyzed assuming three different scenarios of the State's commitment of General Fund revenues for debt service, as described below.

- The first analysis assumes a target 4.25 percent ratio of annual debt service to General Fund revenues. This target is reached by moving from 2.99 percent in fiscal year 200203 and 3.35 percent in fiscal year 2003-04 to 4.25 percent in fiscal year 2004-05 and thereafter. This ratio is higher than the fiscal year 2001-02 ratio of 3.66 percent, but close to the 4.08 percent level that is the average over the last five years.
- The second analysis assumes a gradual increase in the State's ratio of annual debt service to General Fund revenues from the fiscal year 2001-02 level of 3.66 percent to 5.00 percent by fiscal year 2005-06 and then maintains the ratio at 5.00 percent. This ratio is close to the 4.90 percent level that we project as the peak annual debt service level over the next 10 years, assuming issuance of all currently authorized but
unissued bonds and issuance of the portion of proposed bonds on the November 2002 ballot that this office projects would be sold over the next 10 years, if these 2002 bond measures all are approved by the voters.
- The third analysis assumes a gradual increase in the State's ratio of annual debt service to General Fund revenues from the fiscal year 2001-02 level of 3.66 percent to 6.00 percent by fiscal year 2005-06 and then maintains the ratio at 6.00 percent.

Additional sensitivity analyses were performed to show the implications of alternative General Fund revenue assumptions: one alternative assumes lower revenue growth, with General Fund revenues annually increasing at 1.00 percent less than the base case Department of Finance (DOF) forecast; the second alternative assumes higher revenue growth, with General Fund revenues annually increasing at 1.00 percent more than the base case DOF forecast. These sensitivity analyses were applied to each of the three scenarios above at their respective ratios of debt service to General Fund revenues. The results of all these analyses are summarized in the following table.

State of California Debt Capacity
Under Alternative Revenue Scenarios (\$ Billions)

|  | Ratio of Debt <br> Service to <br> General Fund <br> Revenues | 10-year Cumulative <br> Debt Capacity @ <br> Revenue <br> Forecast $-1 \% 0^{(1)}$ | 10-year Cumulative <br> Debt Capacity @ <br> Base Case Revenue <br> Forecast ${ }^{(1)}$ | 10-year Cumulative <br> Debt Capacity @ <br> Revenue Forecast <br> $+1 \%{ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: |
| Scenario | $4.25 \%$ | $\$ 45.10$ | $\$ 52.97$ | $\$ 61.50$ |
| 1 | $5.00 \%$ | $\$ 57.39$ | $\$ 66.64$ | $\$ 76.57$ |
| 2 | $6.00 \%$ | $\$ 73.83$ | $\$ 84.78$ | $\$ 96.90$ |
| 3 |  |  |  |  |

Source: Department of Finance, September 2002 ${ }^{(l)}$
${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13.

## SECTION I: THE VALUE OF DEBT AFFORDABILITY ANALYSIS

## Introduction

California state government delivers a broad range of services to California residents and businesses. Central to its responsibilities is the State's duty to provide for infrastructure investment. The Debt Affordability Report will assist policymakers to make informed decisions regarding the use of debt for infrastructure investment.

Financial prudence is important to state policymakers. In order for policymakers to determine appropriate levels of borrowing for infrastructure investments, it is necessary for them to understand the amount of debt the State can issue without adversely affecting payments for existing bonds and crucial state operations and services. Recognizing the need for guidance on borrowing, policymakers enacted legislation requiring the State Treasurer to prepare an annual Debt Affordability Report for presentation to the Governor and the Legislature.

This Report examines the State's projected capacity to issue new debt over the next 10 years. The State's debt capacity is analyzed under a variety of potential scenarios, including varying levels of General Fund revenues allocated to debt service, as well as different projected growth rates in General Fund revenues. Finally, the potential impact of proposed bond authorizations on the 2002 and 2004 ballots also is analyzed.

## California's General Fund

California state government finances programs and projects largely through its General Fund. Analysis of the General Fund budget plays a key role in debt affordability because modest variations, as this Report will show later, can cause significant changes in the amount of debt the State can afford to issue.

As shown in Figure 1.1, the primary sources of revenue for the General Fund are the personal income tax, sales tax, and corporation tax.

Figure 1.1


Figure 1.2 shows the State's main General Fund expenditures are for education (K-12 and higher education), health and welfare programs, and youth and adult correctional programs.

Figure 1.2


Source: State of California 2002-03 Budget

## Capital Expenditures

An essential duty of state government is to foster the development of infrastructure through projects such as schools, highways, public safety facilities, and water and environmental protection projects. The State's General Fund supports expenditures, including debt service, to fund the cost of planning, constructing or modifying facilities, as well as acquiring land necessary for such projects. Highlights of past state funding for these vital projects include:

- Kindergarten to $\mathbf{1 2}^{\text {th }}$ Grade Education: In 2001, California had 8,761 schools containing 275,000 classrooms to provide learning environments for 6.1 million students. The State has assisted local school districts to build new schools and modernize existing ones. During the past 10 years, California's school-age population grew by more than one million students, an increase of 21 percent. Since 1992 California voters have authorized over $\$ 11.52$ billion in State general obligation bonds to fund construction of new schools and the renovation and modernization of existing schools.
- Higher Education: There are three public institutions of higher education in California: the University of California, California State University, and California Community Colleges. Together they educate over three million students on 141 campuses throughout the State. The California Community Colleges comprise the largest system of higher learning in the world. Voter authorized state general obligation bonds have provided over $\$ 4.37$ billion for campus improvements since 1992.
- Transportation: In 1919, the first State Highway Bond Act, for $\$ 18$ million, was approved to establish a state highway system. Since those early capital expenditures, thousands of miles of highway and freeway have been built. In addition to expansion, retrofits and improvements to the existing transportation system are very important. For example, in 1996 voters approved $\$ 2$ billion in state general obligation bonds to strengthen bridges to better withstand earthquakes.
- California Water Project: In 1960, California voters approved a $\$ 1.75$ billion bond issue to begin building a state water project. The California State Water Project is a water storage and delivery system of reservoirs, aqueducts, power plants and pumping plants. The Project provides water to approximately 20 million Californians and about 660,000 acres of irrigated farmland. It serves to improve water quality in the Sacramento-San Joaquin Delta, control floodwaters on the Feather River in Northern California, provide recreation, and preserve fish and wildlife. California voters have authorized over $\$ 3.34$ billion in state general obligation bonds to fund water quality and flood improvement projects since 1996.


## Paying for Capital Investments

To finance infrastructure investment, the State can fund long-term projects with either "pay-as-you-go" or debt financing. The pay-as-you-go capital funding method places project costs on residents and businesses paying taxes during the time the project is under construction. Funding projects with cash-on-hand avoids the interest costs of debt financing and can be a strong tool for fiscal discipline. However, there are significant disadvantages to pay-as-you-go funding.

By concentrating the burden of payment for long-term projects on current taxpayers, the capacity to fund important near-term activities is reduced. Since infrastructure is usually built with a useful life of several decades, pay-as-you-go funding does not equitably distribute the cost of long-term investments between those who pay for the project in the present and those who enjoy the benefits in the future. Thus, the ability to invest for both current and future needs is constrained.

Debt financing of capital assets does for state government and taxpayers what a mortgage does for a homeowner; it makes it possible to pay for a facility over its period of use. Borrowing spreads capital costs across time, enhances the ability to budget, and provides for more consistent outlays. Debt financing allows completion of capital projects at today's prices, reducing the risk of unknown and potentially inflated prices in the future. Since it is undesirable for current California residents to live with substandard infrastructure or for future generations to be burdened with high levels of debt, the State must use long-term financing prudently to equitably distribute the costs of those assets. This balance of responsibility between current and future generations is essential to the continued economic and fiscal health of the State.

## Debt Affordability

An important responsibility of financial management is to determine how to allocate limited financial resources to meet both current operations and long-term capital needs. Debt affordability analysis can help policymakers balance the resource needs of long-term infrastructure investments and on-going operating budget commitments.

In order to issue additional debt, the State must have the ability to make debt service payments without jeopardizing future funding for prior debt obligations and for critical state operations and services. To maintain or improve its bond ratings and promote investors' acceptance of its bonds, the State must demonstrate to rating agencies and potential investors that sufficient capacity exists to assure timely payment of all existing and future debt service.

Common debt ratios serve as indicators of a state's existing and potential additional capacity. Among the key ratios used by market participants to measure an issuer's debt capacity are debt service to revenues, debt to income, and debt per capita. The ratio most closely tied to an issuer's fiscal position is the ratio of debt service to revenues. This report examines these ratios and other factors with implications for the State's debt affordability.

## SECTION II: CALIFORNIA'S CURRENT DEBT POSITION

The annual Debt Affordability Report provides policymakers and other interested parties with information about the State's current debt levels and the relative burden that debt service payments place on the State. Outstanding debt represents a major long-term budget commitment for the State, extending as much as 30 years into the future before all currently outstanding debt would be fully repaid. Credit analysts, including the major rating agencies, consider the State's current debt burden and the potential for increased debt burden through the future issuance of bonds as critical factors in assigning credit ratings to the State or, in the case of investors, in determining whether to purchase California bonds.

## California's Outstanding Debt

The State's debt position is evaluated by the rating agencies and the investor community based on "net tax-supported debt". This is the amount of debt that must be repaid by the General Fund. Net tax-supported debt excludes: 1) commercial paper and debt obligations of less than one year, such as revenue anticipation notes and warrants; 2) "self-supporting" state debt, which is repaid from specific project revenues rather than the General Fund; and 3) debt of federal, state and local governments and their agencies that are not obligations of the State's General Fund. It also excludes all types of "conduit" bonds issued by state financing authorities on behalf of other governmental or private entities whose obligations secure the bonds.

## California's Outstanding Net Tax-Supported Debt

As shown in Figure 2.1, on June 30, 2002, the State's net tax-supported debt totaled $\$ 28.46$ billion, representing a 5.8 percent net increase from the $\$ 26.89$ billion outstanding on June 30, 2001. This net increase of $\$ 1.37$ billion was derived from a total of $\$ 4.13$ billion in bonds issued and $\$ 2.76$ billion in bonds retired. In fiscal year 2001-02, the State sold $\$ 2.80$ billion in new general obligation bonds and $\$ 229.1$ million in lease-purchase revenue bonds for new capital projects. In addition, the State sold $\$ 1.105$ billion in general obligation bonds that refunded existing debt.

Figure 2.1

| The State's Net Tax-Supported Debt Increased <br> by 5.8\% During FY 2001-02* (\$ Billions) |  |
| :--- | ---: |
| 2001 Net Tax-Supported Debt | $\$ 26.89$ |
| 2002 Net Tax-Supported Debt | 28.46 |
| Change in Dollars | $\$ 1.57$ |
| Change in Percent | $5.84 \%$ |
| *As of June 30 each year |  |

Approximately 78 percent of the State's outstanding net tax-supported debt consists of general obligation bonds authorized by the State's voters. The remaining 22 percent represents leasepurchase revenue bonds authorized by the Legislature. Another $\$ 14.84$ billion in net taxsupported debt has been authorized by the voters or the Legislature but not yet issued. See

Appendix 1 for a list of the State's authorized net tax-supported debt, including both outstanding bonds and amounts unissued as of June 30, 2002.

## Programs Funded With Net Tax-Supported Debt

Of the $\$ 28.46$ billion of net tax-supported debt outstanding as of June 30, 2002, $\$ 17.10$ billion or 60.1 percent was issued for education-to build classrooms for K-12 students and to make improvements to higher education campuses. Figure 2.2 reflects the allocation of this $\$ 28.46$ billion in bond funds to state programs.

Figure 2.2
State of California Programs Funded with
$\$ 28.46$ Billion in Outstanding Bonds

## Annual Debt Service Commitments

Debt service is the principal and interest that the State pays on outstanding bonds. Total debt service on net tax-supported debt is comprised of debt service on general obligation bonds and lease-purchase revenue bonds. The State's net tax-supported debt service payments (both principal and interest) totaled approximately $\$ 2.71$ billion for fiscal year 2001-02, or about 3.66 percent of General Fund revenues totaling $\$ 73.89$ billion. The fiscal year 2002-03 budget includes net-tax supported debt service payments on outstanding bonds of close to $\$ 2.37$ billion, or approximately 2.99 percent of projected General Fund revenues of $\$ 79.16$ billion.

The ratio of debt service to General Fund revenues would have been 3.97 percent and 4.15 percent in fiscal years 2001-02 and 2002-03, respectively, if the Treasurer's Strategic Debt Management Plan had not been implemented.

Figure 2.3 shows the State's annual debt service for all net tax-supported bonds outstanding as of June 30, 2002. See Appendices 2 through 4 for the breakdown of annual debt service on the State's general obligation and lease-purchase revenue bonds, respectively.

As shown in Figure 2.3, over the next 30 years debt service on currently outstanding bonds will decline as these bond issues reach final maturity. As a result, the portion of the State's budget committed to pay debt service on bonds that are currently outstanding will decline. In addition, Figure 2.3 reflects a reduction in debt service for fiscal year 2002-03 resulting from implementation of the Treasurer's Strategic Debt Management Plan. This Plan, which is reviewed in detail in Section IV, also reduces projected debt service in fiscal year 2003-04.

Figure 2.3


## Measuring the State's Debt Burden

One way to measure California's debt level is through the use of debt ratios. Debt ratio analysis provides a convenient way to compare the debt burdens of a wide variety of borrowers. The most common debt ratios applied to state issuers are: (1) debt service as a percentage of general fund revenues, (2) debt as a percentage of personal income, and (3) debt per capita. Serving as guides for evaluating the ability of the issuer to repay its existing and anticipated obligations, these financial ratios are often compared to historical levels or to those of other issuers. Debt ratios are one of many factors considered by rating agencies when assigning a rating.

Debt Service as a Percentage of General Fund Revenues: Credit analysts use the ratio comparing a state's debt service to general fund revenues to examine a state's fiscal flexibility, given that its debt service is considered a fixed part of its budget. The higher the percentage of a state's budget required for debt service, the less financial flexibility the state has for responding to economic slowdowns, reduced revenues, and changes in priorities for other budget expenditures and capital outlays. This is a particularly important ratio for the State of California due to the limited amount of discretionary spending authority available to state officials as a result of constitutional limits imposed by California voters through the initiative process.

Figure 2.4 illustrates the volatility of California's debt service ratio since fiscal year 1990-91. This ratio is affected by changes to General Fund revenues and to the amount of debt service on outstanding debt. The increase in the ratio above 5.00 percent in the mid-1990's occurred at a time when the State's General Fund was stressed by a severe recession. That recession had a strong impact on the General Fund by decreasing tax revenues and placing greater demand on the State for many public services. The drop in the ratio to 3.74 percent in fiscal year 1999-00 reflects a time when the California economy had been growing robustly for several years. The ratio was reduced from 4.13 percent in fiscal year 2000-01 to 3.66 percent in fiscal year 2001-02 primarily because implementation of the Treasurer's Strategic Debt Management Plan produced a $\$ 222.9$ million reduction in debt service in fiscal year 2001-02. Typically, shifts in this ratio are caused primarily by changes in the economy that drive changes in state revenues.

Section V of this Report provides sensitivity analysis to show the impact of various alternative General Fund revenue forecasts on projected state debt capacity.

Figure 2.4

## State of California Debt Service as a Percentage of General Fund Revenues



Fiscal Year

Source of General Fund Revenues: Department of Finance, September 2002

Debt As A Percentage Of Personal Income: Comparing a state's level of debt to the total personal income of its residents is a common measure of a borrower's ability to repay its obligations because it indicates the potential ability of a state to generate revenues.

As shown in Figure 2.5, California's current ratio of debt as a percentage of personal income is 2.51 percent, compared to the Moody's Investors Service (Moody's) 2002 median of 2.30 percent for all states. The decline in the State's ratio from 2.65 percent in fiscal year 1994-95 to 2.24 percent in fiscal year 1999-00 indicates that the State's wealth, as measured by personal income, grew faster than the amount of its outstanding debt over this period.

This trend reversed in fiscal years 2000-01 and 2001-02. Over those two years, the cumulative growth for personal income was 3.50 percent while the cumulative growth of state debt was 15.59 percent. As a result, by fiscal year 2001-02, the ratio of debt as a percentage of personal income increased by a cumulative 0.27 percentage points to 2.51 percent. The Moody's median ratio increased by 0.20 percent during this period.

Figure 2.5 shows California's ratio of debt as a percentage of statewide personal income from 1990-91 through 2001-02, along with the comparable median for all states published by Moody's.

Figure 2.5


Debt Per Capita: Debt per capita measures the average state resident's share of the State's total debt outstanding. It does not account for the employment status, income or financial resources of the residents. As a result, debt per capita does not reflect a state's ability to repay its obligations as well as the other two ratios and is generally considered the least informative of the three debt ratios. Figure 2.6 shows that the State's current per capita debt is $\$ 805$, compared to the Moody's 2002 median of $\$ 573$ for all states. California debt per capita increased by $\$ 31$ between fiscal year 2000-01 and 2001-02. Moody's comparable median of debt per capita increased by $\$ 32$ during the same period, reflecting significant similarity in the trends in California and the rest of the nation.

Figure 2.6


State of California Debt per Capita

Fiscal Year

Sources: Department of Finance May 2002 Population Estimates; Moody's Investors Service

## California's Debt Levels Compared to Other Large States

In order to make informed decisions, investors usually compare the credit strengths and weaknesses of the bond market's various issuers. Comparing California's debt position to those of other states also serves a useful purpose for policymakers. The comparison of California to other states is made possible through the use of benchmark debt ratios. Moody's calculates the ratios of debt to personal income and debt per capita for each state and publishes an annual report containing the median ratios.

In addition to comparing California's debt ratios to the Moody's state medians, it is useful to compare California to its "peer group" of the 10 most populous states. As shown in Figure 2.7, the debt ratios of these 10 states are, on average, higher than the Moody's medians for all states. Comparatively, California's debt ratios rank below the medians for the 10 most populous states.

Figure 2.7
Debt Ratios of 10 Most Populous States Ranked by Ratio of Debt to Personal Income

| State | $\begin{gathered} \text { Ratings by } \\ \text { Moody's/S\&P/Fitch }{ }^{(1)} \end{gathered}$ | Debt to Personal Income ${ }^{(2)}$ | Debt per Capita ${ }^{(3)}$ |
| :---: | :---: | :---: | :---: |
| Texas | Aal/AA/AA + | 0.90\% | \$238 |
| Michigan | Aaa/AAA/AA+ | 1.50\% | \$438 |
| Pennsylvania | Aa2/AA/AA | 2.30\% | \$671 |
| California | A1/A+/AA | 2.50\% | \$795 |
| Ohio | Aal/AA+/AA + | 2.60\% | \$749 |
| Illinois | Aa2/AA/AA+ | 2.80\% | \$908 |
| Georgia | Aaa/AAA/AAA | 2.90\% | \$804 |
| Florida | Aa2/AA+/AA | 3.40\% | \$959 |
| New Jersey | Aa2/AA/AA | 5.60\% | \$2,066 |
| New York | A2/AA/AA | 5.90\% | \$2,045 |
| Moody's Median All States |  | 2.30\% | \$573 |
| Moody's 10-State Median |  | 2.70\% | \$800 |

${ }^{(1)}$ Moody's Investors Service, Standard \& Poor's, and Fitch Ratings
${ }^{(2)}$ Moody's 2002 State Debt Medians (May 2002) are based on 2000 personal income figures released by the U.S. Bureau of Economic Analysis, whereas the personal income figures used in Figure 2.5 are provided by the State of California Department of Finance.
${ }^{(3)}$ Moody's 2002 State Debt Medians (May 2000) are based on 2000 population figures from the U.S. Census Bureau, whereas the population figures used in Figure 2.6 are provided by the State of California Department of Finance.

Over the past few years, many states have elected to use debt to finance their backlog of infrastructure needs. Low interest rates create a desirable environment for using bonds to leverage current state resources. Moody's observes that, as a result, state debt burdens throughout the nation continue to rise, although they are within affordable levels due to growth in personal income. Moody's expects these national debt issuance trends to continue as the need for public investment in critical infrastructure grows.

## SECTION III: THE MARKET'S PERSPECTIVE ON CALIFORNIA'S BONDS

Section III focuses on the capital market's view of the creditworthiness of the State and the attractiveness of its bonds. The State's bonds attract a wide range of investors, including individuals and financial institutions. These investors require rates of return on their investments consistent with their perceptions of an issuer's ability to repay its obligations. The investment community traditionally has viewed California's bonds as high quality investments due to the State's large economy, diverse taxing authority, and solid bond payment history. Even during challenging economic times like the present, this favorable perspective of the State has allowed it to finance capital projects at relatively low borrowing rates. Through its market outreach activities, the State Treasurer's Office keeps buyers of the State's bonds, credit rating analysts, and other interested parties informed.

## Investors in California's Bonds

Purchasers of California's bonds generally are seeking two investment objectives: reliable interest earnings that are exempt from federal and state taxation; and safe investments that will preserve the value of their capital. Investors in the State's bonds range from large financial institutions, such as tax-exempt mutual funds and casualty insurance companies, to individuals, such as California taxpayers in higher income tax brackets and individuals saving for long-term goals like home ownership, college tuition, or retirement. Figure 3.1 shows the 10 largest holders of State of California general obligation bonds as of September 20, 2002.

Figure 3.1
Top 10 Institutional Investors in State of California General Obligation Bonds Ranked by Par Amount Held (\$ Thousands)

| Investor |
| ---: |
| Franklin Advisors, Inc. | Amount

Source: First Call Corporation-BondWatch Web, as of September 20, 2002

Information about the State's bonds is available to investors from several sources: official disclosure documents for bond sales; stories in the news media; investment banking firms selling municipal bonds; the Treasurer's own website and investor relations activities; and perhaps most importantly, the major credit rating agencies. Drawing on this information and their own portfolio requirements, investors indicate interest in the State's bonds through the price offered for purchase-all other things being equal, the higher the price the investors are willing to pay, the lower the State's cost of borrowing.

## Importance of Credit Ratings

A bond rating from a credit rating agency is an independent assessment of the relative credit risk associated with purchasing and holding a particular bond through its scheduled term of repayment. Bond ratings serve as unbiased opinions of a borrower's financial strength and the likelihood it will repay its debt. Bond ratings are one of the most important indicators of creditworthiness readily available to the investment community and have a direct impact on the borrowing rates paid by the State. The State Treasurer's Office keeps credit analysts informed of the State's economic outlook, fiscal conditions, and planned bond sales through periodic conference calls and meetings held over the course of the year.

The three national bond-rating agencies that track state and local governments are Fitch Ratings (Fitch), Moody's Investors Service (Moody's), and Standard \& Poor's (S\&P). Although rating scales differ slightly between the agencies, they all have comparable rating categories, including single-A, double-A, and their strongest category, triple-A (see Appendix 5 for a comparison chart).

## State's Credit Ratings

Fitch, Moody's, and S\&P currently rate the State's general obligation bonds AA, A1, and A+, respectively. Reflecting trends in the California economy and the State's fiscal position, the general obligation bond credit ratings experienced considerable volatility from 1990 through the present as shown in Figure 3.2.

Figure 3.2
History of State of California General Obligation Bond Ratings Since 1990


Source: Fitch Ratings, Moody's Investors Service, and Standard \& Poor's

1990 TO 1995: By 1990, after several years of strong economic growth in the 1980's, the State had been upgraded to triple-A, the highest credit rating, by each of the three rating agencies. From December 1991 through July 1994, the State's credit ratings were downgraded from tripleA to single-A levels. The downgrade actions reflected a progressive weakening of the California economy and related pressures on General Fund revenues, as well as questions about the State's ability to manage its annual budget due to a structural imbalance between revenues and expenditures.

1996 TO 2000: From February 1996 through September 2000, the State's credit ratings were upgraded by the rating agencies eight times, eventually reaching double-A levels. The improved ratings were attributed to improvements in the California economy, funding of higher budget reserves, and elimination of the accumulated budget deficit.

2001 To DATE: During 2001, Moody's and S\&P downgraded the State's credit ratings. These rating actions were taken in response to a weakening of the California and national economies during 2001, and the uncertainty this created for future General Fund revenues. The rating agencies have noted that the General Fund suffers from a "structural imbalance," meaning the demographic forces that influence expenditure growth are outpacing the economic forces influencing revenue growth. The agencies also cited a potential negative impact on the General Fund from the State's financial commitment to purchase electricity due to the extraordinary conditions in California's energy markets in late 2000 and early 2001.

## Cost of California's Debt

In general, California's and other issuers' absolute borrowing costs have been declining since September 2000, when the State's average 20 -year bond yield was 5.38 percent. As of September 2002, the State's average 20 -year bond yield was 4.63 percent.

At the same time that the State's absolute borrowing cost has decreased, California's relative borrowing cost has increased compared to the AAA-rated national benchmark. In September 2000, based on its strong credit ratings and high investor demand, the State's borrowing cost was about 0.13 percent below the national benchmark for AAA-rated bonds. However, beginning in January 2001, when California's credit ratings were first placed on credit watch by S\&P, the State's cost of funds increased relative to the AAA-rated national for a variety of reasons, including: (1) revenue shortfalls made it difficult for policymakers to balance the state budget, which led to rating downgrades; and (2) the State began loaning General Fund cash balances to the Department of Water Resources (DWR) to purchase power in anticipation of up to \$13.42 billion in borrowing by the Department of Water Resources (DWR) that would repay the General Fund. By May 2001, at the height of the energy crisis and following downgrades to California's ratings by Moody's and S\&P, the 20-year yield on California's bonds was roughly 0.23 percent higher than the AAA-rated national benchmark. As of September 2002, the State's average bond yield was back to a level 0.07 percent higher than this national benchmark, for a relative net increase of 0.20 percent since September 2000. In other words, investors are currently demanding 0.20 percent higher interest for California bonds relative to the AAA-rated national benchmark than they were in September 2000.

Figure 3.3 illustrates the trends in both absolute and relative interest rates of California general obligation bonds since July 2000.

Figure 3.3


Source: Thomson Municipal Market Data

## State Treasurer's Investor Relations Program

The State Treasurer's Office keeps investors and rating agency credit analysts informed of the State's economic outlook, fiscal condition and planned bond sales through its investor relations outreach and related activities. Through face-to-face meetings, conference calls and Internet broadcasts scheduled to coincide with planned bond sales, the State Treasurer maintains open lines of communication with capital market participants, thereby providing the State with timely and cost effective access to the capital markets. During fiscal year 2001-02, the Treasurer held periodic conference calls, generally attracting more than 150 investors, to provide updates on the State's financial condition, California's economy, the status of budget proposals, and the DWR Power Supply Revenue Bond program.

Each month, the State Treasurer's Office publishes The Treasury Note newsletter to keep bond buyers abreast of current state issues and to address frequently asked questions about the State's bond program. A toll-free telephone line, (800) 900-3873, also is maintained to answer questions regarding state bonds. Through its website (http://www.treasurer.ca.gov), the State Treasurer's Office provides the financial and investment community with up-to-date information regarding the State's credit ratings, future bond sales, and planned bond redemptions. Past issues of The Treasury Note, state financial reports, and links to other online state resources also are available through this website.

## SECTION IV: STRATEGIC DEBT MANAGEMENT PLAN

## Overview of the Strategic Debt Management Plan

The Strategic Debt Management Plan ("Plan") was developed by the Treasurer to provide a comprehensive approach to better match the timeframe for repaying debt for infrastructure projects to the useful life of assets being financed. The Plan also creates significant near-term reductions in debt service payments in the 2001-02, 2002-03, and 2003-04 fiscal years. In addition, the Plan increases the State's long-term capacity to finance California's crucial infrastructure needs over the next 10 years.

Implementation of the Plan is underway based on these three elements:

1. Shift to level debt service payments for new bond issues and a short-term deferral of principal payments to facilitate the transition to level debt service;
2. Use targeted restructuring of existing debt to achieve significant one-time debt service savings and to facilitate the transition to level debt service; and
3. Implement recent legislation that allows the State to issue variable rate debt for a portion of the State's general obligation bond portfolio.

Shift to Level Debt Service for New Bond Issues: The State has traditionally structured its general obligation bond issues to repay principal in equal annual amounts over the life of the bond. This repayment method is referred to as level principal. Because interest is paid each year in addition to principal, the level principal approach has much higher debt service in the early years of the bond issue, as shown in Figure 4.1, which illustrates level principal amortization for a $\$ 1$ billion issue.

Figure 4.1


Assumes $5.75 \%$ interest rate, 30-year amortization period

A widely accepted alternative to a level principal repayment structure is level debt service. The level debt service structure combines principal and interest to form equal annual payments, as shown in Figure 4.2, which illustrates level debt service amortization for a $\$ 1$ billion issue.

Figure 4.2


The State Treasurer's Office analyzed the long-term costs and benefits of a shift in debt amortization practices for state general obligation sales from level annual principal payments to level annual debt service payments (principal and interest combined).

After surveying other state issuers of general obligation bonds nationwide, the State Treasurer's Office found that the level debt service structure is widely used. In fact, 28 of 38 other states that issue general obligation bonds currently report using level annual debt service as their primary debt amortization practice. Many local government issuers in California also use level annual debt service for their general fund debt. Figure 4.3 provides a listing of states that issue general obligation bonds, categorized by the method of debt amortization reported.

Figure 4.3

| States Utilizing <br> Level Annual Debt Service |  |  |  | States Utilizing Level Annual Principal Payments |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Alabama | 15 | New Jersey | 1 | Delaware |
| 2 | Arkansas | 16 | New Mexico | 2 | Illinois |
| 3 | Connecticut | 17 | New York | 3 | Maine |
| 4 | Florida | 18 | Ohio | 4 | Minnesota |
| 5 | Georgia | 19 | Oklahoma | 5 | New Hampshire |
| 6 | Hawaii | 20 | Oregon | 6 | North Carolina |
| 7 | Louisiana | 21 | Rhode Island | 7 | Pennsylvania |
| 8 | Maryland | 22 | South Carolina | 8 | Tennessee |
| 9 | Massachusetts | 23 | Texas* | 9 | Texas* |
| 10 | Michigan | 24 | Utah | 10 | Vermont |
| 11 | Mississippi | 25 | Virginia |  |  |
| 12 | Missouri | 26 | Washington |  |  |
| 13 | Montana | 27 | West Virginia |  |  |
| 14 | Nevada |  | Wisconsin |  |  |
| * Texas utilizes both level annual debt service and equal annual principal payments. <br> Source: Public Resources Advisory Group, telephone survey of issuers. |  |  |  |  |  |

The Treasurer is implementing this aspect of the Plan over three years and also is using this transition period to facilitate a more rapid shift toward level debt service. During the transition period, initial principal payments for each new bond issue are expected to be scheduled for the fifth year following each bond issuance. This approach takes into account the significant amount of state debt previously issued with level principal, for which principal is currently scheduled to be paid over the next four years. The State will structure bonds issued during this transition period to achieve level debt service thereafter in combination with debt service for certain targeted restructuring bonds discussed below.

Targeted Restructuring of Existing Debt: Because of the significant amount of state debt already issued under level principal payment practices, it would take more than 10 years for the State to achieve overall level debt service payments if it relied on using this approach solely on future bond issues. The State is facilitating an expedited move toward level debt service on its overall debt portfolio by incorporating targeted refunding of existing debt to restructure the State's current and future debt service payment schedule.

As discussed above for new bond issues, there will be a transition period for the refunding bonds to facilitate the shift toward level debt service. Initial principal payments for each restructuring bond issue are expected to be scheduled for the fifth year following the restructuring bond issuance to achieve level debt service thereafter in combination with debt service for the new bond issues discussed above.

Implementation of Variable Rate Debt: The Legislature and the Governor have approved the Treasurer's proposal to issue variable rate general obligation bonds. Under this new law the State now has the ability to issue variable rate bonds for up to 20 percent of its total outstanding general obligation bonds.

Interest rates on variable rate bonds are not fixed at the time of issuance but rather are reset at daily, weekly, monthly or other specified intervals over the life of the long-term bond issue. Since variable rate bonds also may be redeemed periodically by the investor, they carry lower interest rates than bonds with fixed, long-term maturities. Issuing variable rate bonds will allow the State to potentially achieve significant savings, as variable rate bonds have historically carried rates significantly below those of fixed rate bonds. The historical spread between the all-in costs of fixed rate and variable rate bonds is approximately 200 basis points, or 2.00 percent. Cumulative saving over the life of the variable rate bonds will be significant, if variable rate bonds continue to be issued up to the 20 percent statutory limit.

## Benefits of the Plan

As a result of the Plan, the State can achieve a number of benefits:

- Save a cumulative $\$ 178$ million on projected debt service payments in fiscal years 2002-03 and 2003-04 on the new bonds anticipated to be issued between January 2002 and June 30, 2003;
- Gain $\$ 7$ billion to $\$ 10$ billion in valuable additional long-term debt capacity for infrastructure needs assuming the level debt service approach is continued over the next 10 years;
- Save a cumulative $\$ 1.9$ billion on projected debt service payments between January 2002 and June 30, 2004; and
- Save a cumulative $\$ 34$ million on projected debt service payments in fiscal years 200304 and 2004-05 on new bonds anticipated to be issued in variable rate mode in fiscal years 2002-03.

The estimated three-year cumulative debt service reduction under the plan is approximately $\$ 2$ billion. Near-term debt service savings are being used to help close the State's budget gap, reducing the need for additional cuts in vital public services. Additionally, some portion of these debt service savings could provide further budgetary capacity for pay-as-you-go infrastructure projects.

These debt service savings over the next three years will be partially offset in later years. However, overall, the plan provides net present value savings estimated at $\$ 181.1$ million through fiscal year 2033-34, assuming full implementation of all components, including the issuance of $\$ 1.5$ billion in variable rate debt, through fiscal year 2003-04.

Figure 4.4 summarizes the near-term savings projected from the plan.

Figure 4.4

| Summary of Near-Term Debt Service Savings Under the Plan |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Year 1 <br> FY 2001-02 <br> (actual) | Year 2 <br> FY 2002-03 <br> (projected) | Year 3 <br> FY 2003-04 <br> (projected) | Cumulative <br> Total <br> Savings |
| Strategic Action |  |  |  |  |

Figure 4.5 illustrates the State's debt service under the Plan as compared to the State's projected debt service prior to implementation of the Plan.

Figure 4.5


## SECTION V: CALIFORNIA'S FUTURE DEBT CAPACITY

## Introduction

Section V presents concepts about debt affordability and provides in-depth debt capacity analysis assuming the State commits varying levels of its General Fund revenues for debt service. This analysis establishes an initial range of state debt capacity assuming various scenarios for the level of General Fund revenues policymakers commit to pay debt service given the current longrange revenue forecast. To address the inherent variability of long-range revenue forecasts, this Report uses additional sensitivity analysis based on differing General Fund revenue scenarios to illustrate an expanded range of estimated state debt capacity.

This section begins with a discussion of previously authorized but unissued debt and the impact of these planned bond sales on remaining debt capacity. In addition, this section examines the potential impact of bond propositions on the 2002 and 2004 ballots. There is approximately $\$ 18.59$ billion in new general obligation bond authorizations on the ballot in the November 2002 election. Furthermore, $\$ 12.3$ billion in school bonds and $\$ 9.95$ billion in high-speed passenger rail bonds will be on the ballot in the March and November 2004 elections, respectively.

## Authorized But Unissued Debt

As of June 30, 2002, the State had a total of $\$ 14.84$ billion in authorized net tax-supported bonds that had not yet been issued pending sufficient progress on the projects to be funded with these future bonds. See Appendix 1 for a list of the State's authorized net tax-supported debt, including both outstanding bonds and amounts unissued as of June 30, 2002. Of this amount, approximately $\$ 10.66$ billion, or 72 percent, consists of general obligation bonds approved by voters in statewide elections. The remaining $\$ 4.18$ billion, or 28 percent, consists of leasepurchase revenue bonds approved by the Legislature. Figure 5.1 shows the various programs that will be funded when these bonds are issued in the future.

Figure 5.1

## State of California Programs to be Funded with $\$ 14.84$ Billion in Authorized but Unissued Bonds (\$ Thousands)



As of June 30, 2002

As illustrated in Figure 5.2, once all authorized bonds are issued by the State Treasurer, the amount of annual debt service on outstanding debt will increase. If all $\$ 14.84$ billion of the currently authorized but unissued bonds were issued between fiscal years 2002-03 and 2009-10, the incremental increase to annual General Fund debt service from these bonds would range from $\$ 195.5$ million in fiscal year 2003-04 to $\$ 1.09$ billion in fiscal year 2012-13. Debt service as a percentage of annual General Fund revenues over the next 10 years would peak in fiscal year 2004-05 at 4.27 percent. See Appendix 10-1 for additional detail regarding these ratios.

Figure 5.2
State of California Historic and Projected General Fund Debt Service and Revenues Assuming Issuance of $\$ 14.84$ Billion of Authorized but Unissued Bonds (\$ Millions)


Source of General Fund Revenues: Department of Finance, September 2002 Revenue Projections ${ }^{(1)}$.
${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13

Planned Bond Sales for Fiscal Years 2002-03 and 2003-04
As illustrated in Figure 5.3, in fiscal year 2001-02, the State sold $\$ 2.80$ billion in new general obligation bonds and $\$ 229.10$ million in lease-purchase revenue bonds for new capital projects. In addition, the State sold approximately $\$ 1.11$ billion in general obligation bonds that refunded existing debt as part of the Strategic Debt Management Plan. No refunding lease purchase revenue bonds were sold by the State during fiscal year 2001-02. Based on the June 30, 2002 balance of authorized but unissued debt, the State Treasurer expects to sell approximately $\$ 2.55$ billion in general obligation bonds and another $\$ 640.0$ million in lease-purchase revenue bonds during fiscal year 2002-03, for a total of $\$ 3.19$ billion. The State also expects to issue $\$ 2.10$ billion in new money general obligation bonds, $\$ 1.19$ billion in lease-purchase revenue bonds, and $\$ 921$ million in general obligation refunding bonds in fiscal year 2003-04, for a total of $\$ 4.21$ billion. These proposed bond issues include restructuring bonds in accordance with the Strategic Debt Management Plan.

Figure 5.3


The State Treasurer's Office schedules general obligation bond sales according to cashflow estimates received from departments managing the projects funded with general obligation bonds. Interim project funding needs arising between long-term general obligation bond sales are met through the issuance of tax-exempt general obligation commercial paper and/or loans from the Pooled Money Investment Account. General obligation bonds are sold periodically to repay these interim-funding sources. The planned sales of lease-purchase revenue bonds are determined by review of project completion dates and compliance with federal tax laws. Actual amounts and timing of sales also may vary depending on market conditions. Similarly, approval of additional bond authorizations by the voters or the Legislature would affect future bond sale projections.

Figure 5.4 shows the debt service requirements on existing debt and these near-term planned bond sales. Factoring in the projected increase in debt service solely from these planned bond sales and DOF's 10-year revenue projections, California's debt service as a percentage of General Fund revenues over the next 10 years would increase from 2.99 percent in fiscal year $2002-03$ to a peak of 4.27 percent by the end of fiscal year 2004-05. The projected General Fund debt service associated with the issuance of these planned bond sales is approximately $\$ 195.51$ million in fiscal year 2003-04 and $\$ 407.00$ million in fiscal year 2004-05. See Appendix 10-2
for greater detail about these projections.
Figure 5.4
State of California Historic and Projected General Fund Debt Service and Revenues Assuming Issuance of $\$ 6.48$ Billion of Planned Bond Sales Through FY 2003-04 (\$ Millions)


Source of General Fund Revenues: Department of Finance, September 2002 Revenue Projections ${ }^{(I)}$.
${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13.

## 2002 and 2004 Bond Propositions

The November 2002 California statewide ballot includes proposals for $\$ 18.59$ billion in new general obligation bond authorizations. The $\$ 18.59$ billion consists of $\$ 3.44$ billion in water bonds, $\$ 2.1$ billion in housing bonds, $\$ 11.4$ billion in K-12 school bonds, and $\$ 1.65$ billion in higher education bonds. See Appendix 8 for additional details on these bond proposals.

If all of these proposed bond authorizations are approved by the voters in November 2002, the State Treasurer's Office anticipates the issuance of $\$ 16.14$ billion of these bonds over the next 10 years, assuming sufficient progress will be made on the projects to be funded with these proposed bonds. The remaining $\$ 2.45$ billion of bonds are anticipated to be issued after fiscal year 2011-12. When this $\$ 16.14$ billion of anticipated issuance from November 2002 bonds is added to the $\$ 14.84$ billion of currently authorized but unissued bonds also anticipated for issuance over the next 10 years, the total incremental new debt would be $\$ 30.98$ billion. Annual
debt service would increase to a peak of $\$ 4.79$ billion in fiscal year 2009-10. Annual debt service as a percentage of projected annual General Fund revenues over the next 10 years would peak at 4.90 percent in fiscal year 2006-07. See Appendix 10-3 for additional details on these projections.

Figure 5.5 shows the debt service requirements assuming issuance of $\$ 14.84$ billion of authorized but unissued debt and $\$ 16.14$ billion of the bonds on the November 2002 Ballot.

Figure 5.5
State of California Historic and Projected General Fund Debt Service and Revenues Assuming Issuance of $\$ 14.84$ Billion of Authorized but Unissued Bonds and \$16.14 Billion of 2002 Bonds (\$ Millions)


Fiscal Year
Source of General Fund Revenues: Department of Finance, September 2002 Revenue Projections ${ }^{(I)}$.
${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13.

The March and November 2004 California statewide ballots will include proposals for $\$ 22.25$ billion in new general fund bond authorizations. The projected $\$ 22.25$ billion consists of $\$ 10.00$ billion in K-12 school bonds, $\$ 2.30$ billion in higher education bonds, and $\$ 9.95$ billion in highspeed passenger rail bonds. See Appendix 8 for additional details on these proposals.

If all of these proposed bond authorizations are approved by the voters in 2004, the State Treasurer's Office anticipates the issuance of $\$ 15.68$ billion of these bonds over the next 10 years, assuming sufficient progress will be made on these projects to be funded with these
proposed bonds. It is anticipated that the remaining $\$ 6.57$ billion of bonds will be issued after fiscal year 2011-12. When this $\$ 15.68$ billion of anticipated issuance from 2004 bonds is added to the $\$ 14.84$ billion of currently authorized but unissued bonds and the $\$ 16.14$ billion of November 2002 bonds also anticipated for issuance over the next 10 years, the total incremental new debt would be $\$ 46.66$ billion. Annual debt service would increase to a peak of $\$ 5.70$ billion in fiscal year 2010-11. Annual debt service as a percentage of projected annual General Fund revenues over the next 10 years would peak at 5.43 percent in fiscal year 2008-09. See Appendix 10-4 for additional details on these projections.

Figure 5.6 shows the debt service requirements assuming issuance of $\$ 14.84$ billion in authorized but unissued debt, $\$ 16.14$ billion in November 2002 ballot debt, and $\$ 15.68$ billion in 2004 ballot debt.

Figure 5.6
State of California Historic and Projected General Fund Debt Service and Revenues Assuming Issuance of $\$ 14.84$ Billion Authorized but Unissued Bonds, \$16.14 Billion of 2002 Bonds and \$15.68 Billion of 2004 Bonds (\$ Millions)


Source of General Fund Revenues: Department of Finance, September 2002 Revenue Projections ${ }^{(1)}$.
${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13.

## Results of 2002 Debt Affordability Analysis

In illustrating the State's projected debt capacity over the next 10 years, this Report employs the ratio of debt service to General Fund revenues as the key indicator of capacity. The State's projected annual General Fund revenues utilized throughout the Report appear in Figure 5.8.

Figure 5.7 lists the projected General Fund revenue forecast for fiscal years 2002-03 through 2012-13.

Figure 5.7

| State of California <br> Projected General Fund Revenues (\$ Thousands) |  |  |
| :---: | :---: | :---: |
| Fiscal Year | Revenue <br> Forecast ${ }^{(1)}$ | Annual \% Change |
| 2002-03 | \$ 79,158,000 | 7.12\% |
| 2003-04 | 75,537,000 | -4.57 |
| 2004-05 | 80,424,000 | 6.47 |
| 2005-06 | 84,863,000 | 5.52 |
| 2006-07 | 90,085,000 | 6.15 |
| 2007-08 | 95,642,000 | 6.17 |
| 2008-09 | 101,673,000 | 6.31 |
| 2009-10 | 107,883,000 | 6.11 |
| 2010-11 | 115,342,000 | 6.91 |
| 2011-12 | 123,402,000 | 6.99 |
| 2012-13 | 132,025,226 | 6.99 |
| Source: Department of Finance, September 2002 ${ }^{(1)}$ |  |  |
| ${ }^{(1)}$ The DOF September bond issuance capacit fiscal year 2011-12 | ojections forecast vears, the growt d for fiscal year | cal year 2011-12. revenue provided |

Section II examined California's current debt level in the context of three factors: General Fund revenue, statewide personal income, and statewide population. Of the three debt ratios, the rating agencies view California's ratio of debt service to General Fund revenues as the best indicator of the State's capacity for additional debt. The State's General Fund debt capacity is analyzed assuming three different scenarios of the State's commitment of General Fund revenues for debt service, as described below.

- The first analysis assumes a target 4.25 percent ratio of annual debt service to General Fund revenues. This target is reached by moving from 2.99 percent in fiscal year 200203 and 3.35 percent in fiscal year 2003-04 to 4.25 percent in fiscal year 2004-05 and thereafter. This ratio is higher than the fiscal year 2001-02 ratio of 3.66 percent, but close to the 4.08 percent level that is the average over the last five years.
- The second analysis assumes a gradual increase in the State's ratio of annual debt service to General Fund revenues from the fiscal year 2001-02 level of 3.66 percent to 5.00 percent by fiscal year 2005-06 and then maintains the ratio at 5.00 percent. This ratio is close to the 4.90 percent level that we project as the peak annual debt service level over
the next 10 years, assuming issuance of all currently authorized but unissued bonds and issuance of the portion of proposed bonds on the November 2002 ballot that this office projects would be sold over the next 10 years, if these 2002 bond measures all are approved by the voters.
- The third analysis assumes a gradual increase in the State's ratio of annual debt service to General Fund revenues from the fiscal year 2001-02 level of 3.66 percent to 6.00 percent by fiscal year 2005-06 and then maintains the ratio at 6.00 percent.

See Appendix 9 for the assumptions supporting all estimates of debt capacity included in the Report.

Figure 5.8 presents the annual debt service supportable by projected General Fund revenues given the alternative scenarios discussed above. See Appendices 10-5 through 10-7 for additional details on these debt capacity scenarios.

Figure 5.8

| State of California Debt Service at Various Percentages of General Fund Revenues (\$ Thousands) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year |  | Revenue <br> Forecast ${ }^{(1)}$ | Scenario 1 <br> Debt Service at a Ratio of $4.25 \%$ of General Fund Revenue ${ }^{(1)}$ | Scenario 2 <br> Debt Service at a Ratio of $5.00 \%$ of General Fund Revenue ${ }^{(1)}$ | Scenario 3 <br> Debt Service at a Ratio of $6.00 \%$ of General Fund Revenue ${ }^{(1)}$ |
| 2002-03 | \$ | 79,158,000 | \$ 2,366,802 | \$ 2,366,802 | \$ 2,366,802 |
| 2003-04 |  | 75,537,000 | 2,534,141 | 2,647,416 | 2,833,716 |
| 2004-05 |  | 80,424,000 | 3,414,795 | 3,765,258 | 4,114,570 |
| 2005-06 |  | 84,863,000 | 3,609,888 | 4,241,443 | 5,094,965 |
| 2006-07 |  | 90,085,000 | 3,825,121 | 4,507,953 | 5,401,072 |
| 2007-08 |  | 95,642,000 | 4,066,992 | 4,779,776 | 5,741,029 |
| 2008-09 |  | 101,673,000 | 4,320,350 | 5,083,913 | 6,099,496 |
| 2009-10 |  | 107,883,000 | 4,583,623 | 5,397,034 | 6,472,373 |
| 2010-11 |  | 115,342,000 | 4,905,326 | 5,762,576 | 6,923,126 |
| 2011-12 |  | 123,402,000 | 5,239,932 | 6,172,167 | 7,405,196 |
| 2012-13 |  | 132,025,226 | 5,614,270 | 6,606,952 | 7,916,004 |
| Source: Department of Finance, September 2002 ${ }^{(I)}$ <br> ${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13. |  |  |  |  |  |

Given the assumptions of Scenario 1, the State's projected General Fund debt capacity over the next 10 years is approximately $\$ 52.97$ billion. This amount includes the $\$ 14.84$ billion in bonds already authorized but not yet issued pending sufficient progress on the projects to be funded with the future bonds. At this level of additional debt, the State's total annual debt service would reach $\$ 5.61$ billion in fiscal year 2012-13, representing 4.25 percent of a projected $\$ 132$ billion in General Fund revenues.

Given the assumptions of Scenario 2, the State's projected General Fund debt capacity over the next 10 years would increase by $\$ 13.67$ billion, from the $\$ 52.97$ billion in Scenario 1 to $\$ 66.64$ billion. At this level of additional debt, the State's total annual debt service would reach $\$ 6.60$ billion in fiscal year 2012-13, representing 5.00 percent of a projected $\$ 132$ billion in General Fund revenues. Similarly, given the assumptions of Scenario 3, the State General Fund debt capacity over the next 10 years would increase by $\$ 31.81$ billion, from the $\$ 52.97$ billion in Scenario 1, to $\$ 84.78$ billion. At this level of additional debt, the State's total annual debt service would reach $\$ 7.92$ billion in fiscal year 2012-13, representing 6.00 percent of a projected $\$ 132$ billion in General Fund revenues.

Figure 5.9 presents the cumulative future debt capacity supportable by projected General Fund revenues over the next 10 years, given the alternative scenarios discussed above.

Figure 5.9
State of California Cumulative Future Debt Capacity with Debt Service at Various Percentages of General Fund Revenues (\$ Thousands)


Source of General Fund Revenues: Department of Finance September 2002 Revenue Projections ${ }^{(1)}$
${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13.

Ultimately, the Legislature and the voters indirectly decide on the level of General Fund revenues to devote to debt service by approving or rejecting new bond authorizations. While this analysis shows additional debt capacity is available by committing higher levels of General Fund revenues for debt service, increasing the State's obligations through additional bond issuances still must be managed in a manner which protects the State's ability to meet its prior debt obligations and provide critical state operations and services.

Maintaining the State's ratio of debt service to General Fund revenues at recent average levels would require keeping expenditures consistent with revenue growth given that a higher rate of spending on other state goods and services would reduce the dollars available for debt service, assuming constant revenues. Increasing the State's ratio of debt service to General Fund revenues would require either new revenue, growth of existing revenues that outpaces expenditure increases, or reductions in other program expenditure levels.

The alternative scenarios used in this Report do not represent the full range of possibilities, nor are they intended to predict any particular budgetary response to changes in California's economy or the State's financial condition. All of the debt ratios considered in these scenarios would be considered moderate by traditional rating agency standards.

## Market Capacity

As an alternative way of examining the State's bonding capacity, the State Treasurer's Office has projected the State's debt capacity based on current estimates of annual market capacity for the State's competitively sold bonds, which is estimated to be $\$ 7.00$ billion. This figure exceeds the State's historic annual debt issuance volume, which has not exceeded $\$ 4.60$ billion in any of the last five years. This $\$ 7.00$ billion figure may be increased by the use of negotiated sales, as traditionally is the case for lease revenue bonds and would be the case for variable rate general obligation bonds. Figure 5.10 presents the market capacity of the State through fiscal year 201112 both in total and for newly authorized bonds after issuance of the $\$ 14.84$ billion in authorized but unissued bonds.

Figure 5.10
Figure 5.10

## State of California Market Capacity Through Fiscal Year 2011-12 (\$ Thousands)

| Fiscal Year | Annual Market <br> Capacity for General <br> Obligation and <br> Lease Bonds ${ }^{(1)}$ | Authorized but <br> Unissued General Obligation Bonds | Authorized but Unissued Lease Bonds |  | Net Market Capacity for Newly Authorized Bonds |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2002-03 ${ }^{(1)}$ | \$ 7,640,000 | \$ 2,550,000 | \$ | 640,000 | \$ 4,450,000 |
| 2003-04 | 8,188,000 | 2,100,000 |  | 1,188,000 | 4,900,000 |
| 2004-05 | 7,887,000 | 2,143,000 |  | 887,000 | 4,857,000 |
| 2005-06 | 7,557,000 | 1,225,000 |  | 557,000 | 5,775,000 |
| 2006-07 | 7,908,000 | 1,373,314 |  | 908,000 | 5,626,686 |
| 2007-08 | 7,000,000 | 500,000 |  | 0 | 6,500,000 |
| 2008-09 | 7,000,000 | 500,000 |  | 0 | 6,500,000 |
| 2009-10 | 7,000,000 | 273,000 |  | 0 | 6,727,000 |
| 2010-11 | 7,000,000 | 0 |  | 0 | 7,000,000 |
| 2011-12 | 7,000,000 | 0 |  | 0 | 7,000,000 |
| TOTAL | \$ 74,180,000 | \$ 10,664,314 | \$ | 4,180,000 | \$ 59,335,686 |

[^0]Allowing for issuance of $\$ 7.00$ billion or more per year, including both competitive and negotiated sales, would correspond with cumulative market capacity for additional state debt of $\$ 74.18$ billion over the next 10 years. Of this total, $\$ 59.34$ billion would be available for bonds not yet authorized by the Legislature or the voters, as applicable, after accounting for the $\$ 14.84$ billion in authorized but unissued bonds.

Figure 5.11 presents the market capacity of the State through fiscal year 2011-12 both in total and for bonds on the ballot in 2002 and 2004, after issuance of the $\$ 14.84$ billion in authorized but unissued bonds presented in Table 5.11.

Figure 5.11

| State of California Market Capacity for Newly Authorized |
| :---: | :---: | :---: | :---: |
| Bonds Through Fiscal Year 2011-12 (\$ Thousands) |

The State's issuance of up to its $\$ 74.18$ billion in total projected market capacity through fiscal year 2011-12 would produce ratios for debt service to General Fund revenues that would peak at 5.97 percent of General Fund revenues in fiscal year 2011-12, given the base case revenue forecast. At below 6.00 percent this is a level still considered moderate by the rating agencies.

## Implications of Revenue Volatility

The State's actual debt capacity at any given time is strongly affected by both General Fund revenue volatility and limited spending flexibility in the State's budget. The State derives its General Fund revenue primarily from its income tax and sales tax. These key revenue sources are tied closely to the health of the state economy, which is subject to periods of expansion and
contraction. In addition, the State's personal income tax revenues are closely tied to the performance of our nation's stock markets due to taxes on stock options and capital gains. The resulting volatility in General Fund revenue makes it difficult to project future debt ratios and the implied debt capacity with precision.

To address the inherent variability of long-range revenue forecasts, this section of the Report uses additional sensitivity analyses based on differing General Fund revenue scenarios to illustrate a range of estimated debt capacity. These sensitivity analyses result in an expanded estimate of debt capacity, producing both higher and lower projections of capacity for new General Fund debt over the next 10 years, as discussed in depth below.

Base Case Analysis: The "base case" is derived from the most recent 10 -year revenue forecasts from the DOF.

Sensitivity Analyses: We performed sensitivity analyses on each of our three previous debt capacity scenarios to allow for potential changes in General Fund revenues. Such changes could be the result of trends in the State's economic condition or policy changes to its revenue structure, or both. The base case was modified to show two additional revenue scenarios: one with lower General Fund revenues ( 1.00 percent less each year, compounded) and one with higher General Fund revenues ( 1.00 percent greater each year, compounded). Adjusting the DOF revenue forecast in this manner demonstrates the impact of revenue variability on estimates of General Fund debt capacity.

As shown in Figure 5.12, the resulting estimates of additional debt capacity over the next 10 years range from a low of $\$ 45.10$ billion to a high of $\$ 96.90$ billion.

Figure 5.12

| State of California Debt Capacity <br> Under Alternative Revenue and Debt Ratio Scenarios (\$ Billions) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Scenario | Ratio of Debt Service to General Funds | $\begin{gathered} 10 \text {-year } \\ \text { Cumulative Debt } \\ \text { Capacity @ } \\ \text { Revenue } \\ \text { Forecast }-1 \%^{(1)} \\ \hline \end{gathered}$ | 10-year Cumulative Debt Capacity @ Base Case Revenue Forecast ${ }^{(1)}$ | 10-year Cumulative Debt Capacity @ Revenue Forecast $+1 \%)^{(1)}$ |
| 1 | 4.25\% | \$45.10 | \$52.97 | \$61.50 |
| 2 | 5.00\% | \$57.39 | \$66.64 | \$76.57 |
| 3 | 6.00\% | \$73.83 | \$84.78 | \$96.90 |
| Source: Department of Finance, September 2002 ${ }^{(I)}$ <br> ${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13. |  |  |  |  |

Figure 5.13 illustrates the range of debt capacity resulting from this final sensitivity analysis, using the lowest, middle, and highest revenue scenarios for illustrative purposes. See Appendices 10-8 through 10-13 for additional details.

Figure 5.13

## State of California Cumulative Debt Capacity Under Alternative Revenue Scenarios (\$ Billions)



Source: Department of Finance, September 2002 ${ }^{(1)}$
${ }^{(1)}$ The DOF September 2002 revenue projections forecast revenue through fiscal year 2011-12. To calculate bond issuance capacity for a full 10 years, the growth rate in General Fund revenue provided by the DOF for fiscal year 2011-12 also was assumed for fiscal year 2012-13.

The estimated levels of debt capacity shown in Figure 5.12 and Figure 5.13 have changed from a similar analysis presented in the 2001 Debt Affordability Report. For example, the 2001 debt capacity estimate assuming base case General Fund revenues and 4.25 percent debt serve ratio was projected to be $\$ 50.12$ billion in the 2001 Report, compared with $\$ 52.97$ billion in the 2002

Report. The modest increase in future capacity can be attributed to the implementation of the Strategic Debt Management Plan, in particular the shift to level debt service, which offsets the capacity reductions which otherwise would have resulted due to lower forecast of long-term state revenues in 2002, as compared to 2001.

This final comparison illustrates again how the actual amount of debt the State can afford to issue will depend on both policy decisions about debt strategies and the performance of the economy and the State's General Fund revenues, thus underscoring the need for an ongoing annual evaluation of debt capacity projections, as well as the importance of infrastructure investment strategies that sustain California's economic growth.

## APPENDIX 1

## State of California Outstanding Net Tax-Supported Bonds

as of June 30, 2002 (\$ Thousands)

| General Obligation Bonds (Non-Self Liquidating) | Voter Authorization |  | Bonds Outstanding | Unissued |
| :---: | :---: | :---: | :---: | :---: |
|  | Date | Amount |  |  |
| California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002 | 3/5/2002 | \$2,600,000 | \$0 | \$2,600,000 |
| California Earthquake Safety and Housing Rehabilitation Bond Act of 1988 | 6/7/1988 | 150,000 | 0 | 0 |
| California Library Construction and Renovation Bond Act of 1988 | 11/8/1988 | 75,000 | 48,390 | 2,595 |
| California Library Construction and Renovation Bond Act of 2000 | 3/7/2000 | 350,000 | 490 | 349,500 |
| California Park and Recreational Facilities Act of 1984 | 6/5/1984 | 370,000 | 149,805 | 1,100 |
| California Parklands Act of 1980 | 11/4/1980 | 285,000 | 38,280 | 0 |
| California Safe Drinking Water Bond Law of 1976 | 6/8/1976 | 175,000 | 46,985 | 2,500 |
| California Safe Drinking Water Bond Law of 1984 | 11/6/1984 | 75,000 | 29,540 | 0 |
| California Safe Drinking Water Bond Law of 1986 | 11/4/1986 | 100,000 | 64,485 | 0 |
| California Safe Drinking Water Bond Law of 1988 | 11/8/1988 | 75,000 | 48,000 | 8,265 |
| California Wildlife, Coastal, and Park Land Conservation Act of 1988 | 6/7/1988 | 776,000 | 447,670 | 14,980 |
| Class Size Reduction Public Education Facilities Bond Act of 1998 (Hi Ed) | 11/3/1998 | 2,500,000 | 1,011,985 | 1,465,570 |
| Class Size Reduction Public Education Facilities Bond Act of 1998 (K-12) | 11/3/1998 | 6,700,000 | 5,935,280 | 540,300 |
| Clean Air and Transportation Improvement Bond Act of 1990 | 6/5/1990 | 1,990,000 | 1,243,340 | 355,225 |
| Clean Water and Water Conservation Bond Law of 1978 | 6/6/1978 | 375,000 | 47,050 | 0 |
| Clean Water and Water Reclamation Bond Law of 1988 | 11/8/1988 | 65,000 | 46,165 | 0 |
| Clean Water Bond Law of 1970 | 11/3/1970 | 250,000 | 4,500 | 0 |
| Clean Water Bond Law of 1974 | 6/4/1974 | 250,000 | 9,725 | 0 |
| Clean Water Bond Law of 1984 | 11/6/1984 | 325,000 | 92,140 | 0 |
| Community Parklands Act of 1986 | 6/3/1986 | 100,000 | 47,255 | 0 |
| County Correctional Facility Capital Expenditure and Youth Facility Bond Act of 1988 | 11/8/1988 | 500,000 | 302,550 | 0 |
| County Correctional Facility Capital Expenditure Bond Act of 1986 | 6/3/1986 | 495,000 | 243,895 | 0 |
| County Jail Capital Expenditure Bond Act of 1981 | 11/2/1982 | 280,000 | 72,300 | 0 |
| County Jail Capital Expenditure Bond Act of 1984 | 6/5/1984 | 250,000 | 63,650 | 0 |
| Earthquake Safety and Public Buildings Rehabilitation Bond Act of 1990 | 6/5/1990 | 300,000 | 177,930 | 90,000 |
| Fish and Wildlife Habitat Enhancement Act of 1984 | 6/5/1984 | 85,000 | 30,200 | 3,000 |
| Hazardous Substance Cleanup Bond Act of 1984 | 11/6/1984 | 100,000 | 10,000 | 0 |
| Higher Education Facilities Bond Act of 1986 | 11/4/1986 | 400,000 | 151,900 | 0 |
| Higher Education Facilities Bond Act of 1988 | 11/8/1988 | 600,000 | 293,205 | 10,805 |
| Higher Education Facilities Bond Act of June 1990 | 6/5/1990 | 450,000 | 250,085 | 5,000 |
| Higher Education Facilities Bond Act of June 1992 | 6/2/1992 | 900,000 | 655,560 | 16,110 |
| Housing and Homeless Bond Act of 1988 | 11/8/1988 | 300,000 | 0 | 0 |
| Housing and Homeless Bond Act of 1990 | 6/5/1990 | 150,000 | 6,455 | 0 |
| Lake Tahoe Acquisitions Bond Act | 8/2/1982 | 85,000 | 32,400 | 0 |
| New Prison Construction Bond Act of 1981 | 6/8/1982 | 495,000 | 71,500 | 0 |
| New Prison Construction Bond Act of 1984 | 6/5/1984 | 300,000 | 52,500 | 0 |
| New Prison Construction Bond Act of 1986 | 11/4/1986 | 500,000 | 203,965 | 1,500 |
| New Prison Construction Bond Act of 1988 | 11/8/1988 | 817,000 | 401,205 | 12,260 |
| New Prison Construction Bond Act of 1990 | 6/5/1990 | 450,000 | 239,530 | 8,100 |
| Passenger Rail and Clean Air Bond Act of 1990 | 6/5/1990 | 1,000,000 | 593,505 | 13,900 |
| Public Education Facilities Bond Act of 1996 | 3/26/1996 | 3,000,000 | 2,531,960 | 130,185 |
| 1988 School Facilities Bond Act | 11/8/1988 | 800,000 | 413,495 | 7,000 |
| 1990 School Facilities Bond Act | 6/5/1990 | 800,000 | 440,395 | 3,745 |
| 1992 School Facilities Bond Act | 11/3/1992 | 900,000 | 603,592 | 12,094 |
| Safe, Clean Reliable Water Supply Act of 1996 | 11/5/1996 | 995,000 | 353,685 | 618,000 |
| Safe Drinking Water Bond Act of 2000 | 3/7/2000 | 1,970,000 | 167,000 | 1,801,000 |
| Safe Neighborhood Parks Bond Act of 2000 | 3/7/2000 | 2,100,000 | 356,000 | 1,737,500 |
| School Building and Earthquake Bond Act of 1974 | 11/5/1974 | 40,000 | 31,990 | 0 |
| School Facilities Bond Act of 1988 | 6/7/1988 | 800,000 | 369,730 | 0 |
| School Facilities Bond Act of 1990 | 11/6/1990 | 800,000 | 475,580 | 3,500 |
| School Facilities Bond Act of 1992 | 6/2/1992 | 1,900,000 | 1,204,740 | 31,400 |
| Seismic Retrofit Bond Act of 1996 | 3/26/1996 | 2,000,000 | 1,352,795 | 525,645 |
| Senior Center Bond Act of 1984 | 11/6/1984 | 50,000 | 10,000 | 0 |
| State Beach, Park, Recreational and Historical Facilities Bonds | 6/4/1974 | 250,000 | 1,115 | 0 |
| State School Building Lease-Purchase Bond Law of 1982 | 11/2/1982 | 500,000 | 49,270 | 0 |
| State School Building Lease-Purchase Bond Law of 1984 | 11/6/1984 | 450,000 | 136,250 | 0 |
| State School Building Lease-Purchase Bond Law of 1986 | 11/4/1986 | 800,000 | 328,650 | 0 |
| State, Urban, and Coastal Park Bond Act of 1976 | 11/2/1976 | 280,000 | 16,930 | 0 |
| Veterans' Homes Bond Act of 2000 | 3/7/2000 | 50,000 | 0 | 50,000 |
| Voting Modernization Bond Act of 2002 | 3/5/2002 | 200,000 | 0 | 200,000 |
| Water Conservation and Water Quality Bond Law of 1986 | 6/3/1986 | 150,000 | 75,815 | 27,600 |
| Water Conservation Bond Law of 1988 | 11/8/1988 | 60,000 | 32,950 | 15,935 |
| Total General Obligation Bonds |  | \$44,938,000 | \$22,115,362 | \$10,664,314 |

## APPENDIX 1 (Continued)

## State of California Outstanding Net Tax-Supported Bonds

as of June 30, 2002 (\$ Thousands)

| Lease-Purchase Revenue Bonds | Bonds Outstanding | Unissued |
| :---: | :---: | :---: |
| California Community Colleges | \$572,000 | \$170,468 |
| Department of the Youth Authority | 12,640 | 7,378 |
| Department of Corrections | 2,438,432 | 340,040 |
| Energy Efficiency Program (Various State Agencies) | 95,645 | 264,085 |
| The Regents of The University of California | 1,003,018 | 1,438,822 |
| Trustees of The California State University | 641,150 | 191,309 |
| Department of Forestry and Fire Protections | 0 | 27,127 |
| Various State Office Buildings | 1,579,050 | 1,740,470 |
| Total Lease-Purchase Revenue Bonds | \$6,341,935 | \$4,179,699 |
| Total Outstanding Net Tax-Supported Bonds | \$28,457,297 | \$14,844,013 |

## APPENDIX 2

| State of California Schedule of Debt Service Requirements for |  |  |  |
| :---: | :---: | :---: | :---: |
| General Obligation Bonds (Non Self-Liquidating) - as of June 30, 2002 |  |  |  |
| Fiscal <br> Year | Interest <br> Payments | Principal <br> Payments ${ }^{\text {(a) }}$ | Total Payments ${ }^{(b)}$ |
| 2002-03 ${ }^{(\mathrm{c})}$ | \$1,210,070,505 | \$506,735,000 | \$1,716,805,505 |
| 2003-04 | 1,166,530,143 | 1,330,800,000 | 2,497,330,143 |
| 2004-05 | 1,088,396,469 | 1,244,789,389 | 2,333,185,858 |
| 2005-06 | 1,014,442,271 | 1,173,910,000 | 2,188,352,271 |
| 2006-07 | 945,471,837 | 1,204,445,000 | 2,149,916,837 |
| 2007-08 | 880,313,089 | 1,149,188,078 | 2,029,501,167 |
| 2008-09 | 813,772,940 | 1,155,675,000 | 1,969,447,940 |
| 2009-10 | 746,955,164 | 1,212,415,000 | 1,959,370,164 |
| 2010-11 | 680,200,257 | 1,177,464,045 | 1,857,664,303 |
| 2011-12 | 611,456,434 | 826,085,000 | 1,437,541,434 |
| 2012-13 | 567,256,110 | 689,810,000 | 1,257,066,110 |
| 2013-14 | 533,083,390 | 559,740,000 | 1,092,823,390 |
| 2014-15 | 505,762,178 | 566,435,000 | 1,072,197,178 |
| 2015-16 | 475,884,104 | 540,820,000 | 1,016,704,104 |
| 2016-17 | 446,230,385 | 566,360,000 | 1,012,590,385 |
| 2017-18 | 416,460,591 | 578,170,000 | 994,630,591 |
| 2018-19 | 385,997,771 | 616,920,000 | 1,002,917,771 |
| 2019-20 | 353,946,634 | 635,770,000 | 989,716,634 |
| 2020-21 | 322,134,710 | 575,920,000 | 898,054,710 |
| 2021-22 | 292,355,044 | 703,080,000 | 995,435,044 |
| 2022-23 | 254,863,633 | 683,530,000 | 938,393,633 |
| 2023-24 | 220,976,793 | 585,605,000 | 806,581,793 |
| 2024-25 | 191,295,559 | 553,010,000 | 744,305,559 |
| 2025-26 | 163,025,250 | 559,215,000 | 722,240,250 |
| 2026-27 | 134,197,125 | 564,320,000 | 698,517,125 |
| 2027-28 | 105,546,654 | 534,760,000 | 640,306,654 |
| 2028-29 | 79,109,540 | 560,675,000 | 639,784,540 |
| 2029-30 | 50,684,783 | 601,065,000 | 651,749,783 |
| 2030-31 | 20,562,717 | 298,190,000 | 318,752,717 |
| 2031-32 | 7,250,083 | 160,460,000 | 167,710,083 |
| Total | \$14,684,232,162 | \$22,115,361,512 | \$36,799,593,674 |
| ${ }^{(a)}$ Includes scheduled mandatory sinking fund payments as well as serial maturities. <br> ${ }^{(b)}$ Does not include commercial paper outstanding. <br> ${ }^{(c)}$ Total represents the remaining debt service requirements from July 1, 2002 through June 30, 2003. |  |  |  |

## APPENDIX 3

| Schedule of Debt Service Requirements for |  |  |  |
| :---: | :---: | :---: | :---: |
| Fiscal <br> Year | Interest Payments | Principal <br> Payments ${ }^{\text {(a) }}$ | Total Payments |
| 2002-03 ${ }^{\text {(b) }}$ | \$338,685,197 | \$311,311,119 | \$649,996,315 |
| 2003-04 | 322,686,241 | 319,661,386 | 642,347,627 |
| 2004-05 | 307,965,900 | 333,789,507 | 641,755,408 |
| 2005-06 | 288,583,267 | 352,997,555 | 641,580,822 |
| 2006-07 | 275,591,865 | 305,363,920 | 580,955,786 |
| 2007-08 | 257,063,005 | 312,891,788 | 569,954,793 |
| 2008-09 | 244,914,681 | 334,252,732 | 579,167,413 |
| 2009-10 | 222,063,777 | 322,126,634 | 544,190,411 |
| 2010-11 | 194,052,596 | 333,970,000 | 528,022,596 |
| 2011-12 | 176,410,789 | 316,400,000 | 492,810,789 |
| 2012-13 | 159,640,730 | 324,150,000 | 483,790,730 |
| 2013-14 | 142,578,388 | 326,015,000 | 468,593,388 |
| 2014-15 | 124,937,050 | 343,350,000 | 468,287,050 |
| 2015-16 | 106,591,223 | 323,270,000 | 429,861,223 |
| 2016-17 | 88,933,511 | 326,760,000 | 415,693,511 |
| 2017-18 | 71,622,136 | 339,750,000 | 411,372,136 |
| 2018-19 | 54,100,358 | 296,390,000 | 350,490,358 |
| 2019-20 | 38,585,165 | 264,680,000 | 303,265,165 |
| 2020-21 | 26,143,433 | 196,295,000 | 222,438,433 |
| 2021-22 | 15,903,849 | 164,300,000 | 180,203,849 |
| 2022-23 | 8,977,713 | 107,325,000 | 116,302,713 |
| 2023-24 | 4,132,016 | 28,060,000 | 32,192,016 |
| 2024-25 | 2,557,980 | 29,670,000 | 32,227,980 |
| 2025-26 | 1,399,375 | 14,225,000 | 15,624,375 |
| 2026-27 | 685,250 | 14,930,000 | 15,615,250 |
| Total | \$3,474,805,494 | \$6,341,934,641 | \$9,816,740,135 |
| ${ }^{\text {(a) }}$ Includes scheduled mandatory sinking fund payments as well as serial maturities. <br> ${ }^{(b)}$ Total represents the remaining debt service requirements from July 1, 2002 through June 30, 2003. |  |  |  |

## APPENDIX 4



| Equivalent Credit Ratings <br> Major National Municipal Credit Rating Agencies |  |  |
| :---: | :---: | :---: |
| Fitch Ratings | Moody's Investors Service | Standard \& Poor's |
| AAA | Aaa | AAA |
| $\mathrm{AA}+$ | Aa 1 | $\mathrm{AA}+$ |
| AA | Aa 2 | AA |
| $\mathrm{AA}-$ | Aa 3 | $\mathrm{AA}-$ |
| $\mathrm{A}+$ | A 1 | $\mathrm{~A}+$ |
| A | A 2 | A |
| $\mathrm{~A}-$ | A 3 | $\mathrm{~A}-$ |
| Source: Fitch Ratings, Moody's Investors Service, and Standard \& Poor's |  |  |

## APPENDIX 6

## State of California Schedule of Debt Service Requirements

## For Restructuring and New Planned Bond Sales During Fiscal Years 2002-03 and 2003-04

| Fiscal Year | Existing <br> Debt Service on Outstanding Issues ${ }^{(a, b, c)}$ | Restructured Debt Service | General Obligation <br> Bonds | Lease-Purchase Revenue Bonds | Debt Service on Planned Bond Sales ${ }^{\left({ }^{(d)}\right.}$ | Debt Service on Outstanding Issues \& Planned Bond Sales |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002-03 | \$2,366,801,821 | \$2,366,801,821 |  |  |  | \$2,366,801,821 |
| 2003-04 | 3,139,677,770 | 2,257,278,909 | \$146,625,000 | \$48,880,000 | \$195,505,000 | 2,452,783,909 |
| 2004-05 | 2,974,941,265 | 3,026,095,227 | 267,375,000 | 139,620,400 | 406,995,400 | 3,433,090,627 |
| 2005-06 | 2,829,933,093 | 2,881,747,505 | 267,375,000 | 139,616,113 | 406,991,113 | 3,288,738,617 |
| 2006-07 | 2,730,872,623 | 2,795,381,022 | 267,375,000 | 139,620,675 | 406,995,675 | 3,202,376,697 |
| 2007-08 | 2,599,455,960 | 2,649,777,897 | 312,100,000 | 139,621,900 | 451,721,900 | 3,101,499,797 |
| 2008-09 | 2,548,615,353 | 2,601,719,921 | 348,933,313 | 139,622,888 | 488,556,200 | 3,090,276,121 |
| 2009-10 | 2,503,560,575 | 2,587,784,368 | 348,930,838 | 139,621,163 | 488,552,000 | 3,076,336,368 |
| 2010-11 | 2,385,686,898 | 2,545,647,297 | 348,930,350 | 139,618,963 | 488,549,313 | 3,034,196,610 |
| 2011-12 | 1,930,352,223 | 2,044,405,584 | 348,925,750 | 139,617,950 | 488,543,700 | 2,532,949,284 |
| 2012-13 | 1,740,856,840 | 1,839,213,626 | 348,925,363 | 139,619,213 | 488,544,575 | 2,327,758,201 |
| 2013-14 | 1,561,416,778 | 1,600,861,252 | 348,931,075 | 139,623,263 | 488,554,338 | 2,089,415,590 |
| 2014-15 | 1,540,484,228 | 1,573,930,452 | 348,928,625 | 139,615,038 | 488,543,663 | 2,062,474,115 |
| 2015-16 | 1,446,565,327 | 1,486,090,364 | 348,928,463 | 139,614,763 | 488,543,225 | 1,974,633,589 |
| 2016-17 | 1,428,283,895 | 1,461,211,769 | 348,929,313 | 139,615,938 | 488,545,250 | 1,949,757,019 |
| 2017-18 | 1,406,002,727 | 1,438,879,163 | 348,928,750 | 139,621,775 | 488,550,525 | 1,927,429,688 |
| 2018-19 | 1,353,408,129 | 1,414,494,522 | 348,928,200 | 139,619,625 | 488,547,825 | 1,903,042,347 |
| 2019-20 | 1,292,981,798 | 1,354,573,704 | 348,932,650 | 139,621,838 | 488,554,488 | 1,843,128,191 |
| 2020-21 | 1,120,493,143 | 1,162,512,285 | 348,930,363 | 139,619,325 | 488,549,688 | 1,651,061,973 |
| 2021-22 | 1,175,638,892 | 1,204,299,716 | 348,928,738 | 139,617,713 | 488,546,450 | 1,692,846,166 |
| 2022-23 | 1,054,696,346 | 1,122,823,914 | 348,928,163 | 139,616,475 | 488,544,638 | 1,611,368,551 |
| 2023-24 | 838,773,808 | 895,687,639 | 348,927,300 | 139,619,225 | 488,546,525 | 1,384,234,164 |
| 2024-25 | 776,533,539 | 801,819,032 | 348,928,088 | 139,618,425 | 488,546,513 | 1,290,365,544 |
| 2025-26 | 737,864,625 | 774,861,387 | 348,930,450 | 139,620,963 | 488,551,413 | 1,263,412,799 |
| 2026-27 | 698,517,125 | 753,378,837 | 348,932,300 | 139,617,288 | 488,549,588 | 1,241,928,424 |
| 2027-28 | 640,306,654 | 720,062,934 | 348,929,538 | 139,622,275 | 488,551,813 | 1,208,614,747 |
| 2028-29 | 639,784,540 | 724,172,408 | 348,931,050 | 90,738,788 | 439,669,838 | 1,163,842,245 |
| 2029-30 | 651,749,783 | 775,522,676 | 348,927,850 |  | 348,927,850 | 1,124,450,526 |
| 2030-31 | 318,752,717 | 501,360,504 | 348,928,938 |  | 348,928,938 | 850,289,442 |
| 2031-32 | 167,710,083 | 167,710,083 | 348,930,150 |  | 348,930,150 | 516,640,233 |
| 2032-33 |  |  | 348,929,738 |  | 348,929,738 | 348,929,738 |
| 2033-34 |  |  | 157,578,075 |  | 157,578,075 | 157,578,075 |
| 2034-35 |  |  |  |  |  |  |
| Total | \$46,600,718,559 | \$47,530,105,816 | \$10,141,663,425 | \$3,490,481,975 | \$13,632,145,400 | \$61,162,251,216 |

${ }^{(a)}$ Includes scheduled mandatory sinking fund payments as well as serial maturities.
${ }^{(b)}$ Total represents the remaining debt service requirements from July 1, 2002 through June 30, 2003.
${ }^{(\text {c) }}$ Does not include commercial paper outstanding.
${ }^{(d)}$ Assumes: General Obligation Bond Issues - $\$ 2.55$ billion in FY 2002-03, $\$ 2.10$ billion in FY 2003-04; Lease-Purchase Bond Issues - $\$ 640$ million in FY 2002-03, $\$ 1.188$ billion in FY 2003-04

|  |  | His | ic and |  |  | Sta | te of Cal | iforni | a |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal <br> Year | Population | $\begin{gathered} \% \\ \text { Change } \end{gathered}$ | Personal <br> Income | $\%$ <br> Change | General Fund <br> Revenues | $\%$ <br> Change | General Fund <br> Revenues ${ }^{\left({ }^{( }\right)}$ | $\%$ <br> Change | General Fund Reverues ${ }^{(6)}$ | $\begin{gathered} \% \\ \text { Change } \\ \hline \end{gathered}$ | Existing Net <br> Tax-Supported Debt | $\%$ <br> Change | Debt Service on Existing <br> Net Tax-Supported Debt | $\%$ <br> Change |
| 1989-90 | 29,828 | $\mathrm{n} / \mathrm{a}$ | \$655,567,167 | $\mathrm{n} / \mathrm{a}$ | \$38,546,178 | n/a |  |  |  |  | \$6,615,190 | n/a | \$758,147 | $\mathrm{n} / \mathrm{a}$ |
| 1990-91 | 30,458 | 2.11\% | 669,842,266 | 2.18\% | 40,563,041 | 5.23\% |  |  |  |  | 9,651,951 | 45.91\% | 955,294 | 26.00\% |
| 1991-92 | 30,987 | 1.74 | 701,571,581 | 4.74 | 42,925,671 | 5.82 |  |  |  |  | 14,283,908 | 47.99 | 1,365,450 | 42.94 |
| 1992-93 | 31,314 | 1.06 | 714,107,358 | 1.79 | 42,757,910 | -0.39 |  |  |  |  | 17,334,904 | 21.36 | 1,749,095 | 28.10 |
| 1993-94 | 31,523 | 0.67 | 735,104,437 | 2.94 | 40,527,732 | -5.22 |  |  |  |  | 19,465,014 | 12.29 | 2,112,544 | 20.78 |
| 199495 | 31,711 | 0.60 | 771,470,153 | 4.95 | 44,547,812 | 9.92 |  |  |  |  | 20,468,488 | 5.16 | 2,327,205 | 10.16 |
| 1995-96 | 31,962 | 0.79 | 812,404,210 | 5.31 | 46,731,104 | 4.90 |  |  |  |  | 20,167,323 | -1.47 | 2,443,354 | 4.99 |
| 1996-97 | 32,452 | 1.53 | 861,557,437 | 6.05 | 49,831,217 | 6.63 |  |  |  |  | 20,425,580 | 1.28 | 2,479,116 | 1.46 |
| 1997-98 | 32,862 | 1.26 | 931,626,971 | 8.13 | 55,261,557 | 10.90 |  |  |  |  | 21,572,386 | 5.61 | 2,456,013 | -0.93 |
| 1998-99 | 33,417 | 1.69 | 997,292,832 | 7.05 | 58,510,860 | 5.88 |  |  |  |  | 22,873,745 | 6.03 | 2,586,759 | 5.32 |
| 1999-00 | 34,040 | 1.86 | 1,094,769,896 | 9.77 | 72,226,473 | 23.44 |  |  |  |  | 24,497,560 | 7.10 | 2,700,051 | 4.38 |
| 2000-01 | 34,730 | 2.03 | 1,116,602,172 | 1.99 | 71,428,000 | -1.11 |  |  |  |  | 26,886,153 | 9.75 | 2,949,863 | 9.25 |
| 2001-02 | 35,345 | 1.77 | 1,133,472,112 | 1.51 | 73,898,000 | 3.46 |  |  |  |  | 28,457,296 | 5.84 | 2,706,272 | -8.26 |
| 2002-03 | 35,920 | 1.63 | 1,201,332,920 | 5.99 | 79,158,000 | 7.12 | 78,419,000 | 6.12 | 79,897,000 | 8.12 | 27,624,320 | -2.93 | 2,366,802 | $-12.54$ |
| 2003-04 | 36,480 | 1.56 | 1,284,109,658 | 6.89 | 75,537,000 | -4.57 | 74,048,000 | -5.57 | 77,041,000 | -3.57 | 25,973,859 | -5.97 | 3,139,678 | 32.65 |
| 200405 | 37,029 | 1.50 | 1,367,222,054 | 6.47 | 80,424,000 | 6.47 | 78,098,000 | 5.47 | 82,796,000 | 7.47 | 24,395,280 | -6.08 | 2,974,941 | -5.25 |
| 2005-06 | 37,581 | 1.49 | 1,455,303,672 | 6.44 | 84,863,000 | 5.52 | 81,628,000 | 4.52 | 88,194,000 | 6.52 | 22,868,372 | -6.26 | 2,829,933 | -4.87 |
| 2006-07 | 38,139 | 1.48 | 1,547,386,577 | 6.33 | 90,085,000 | 6.15 | 85,835,000 | 5.15 | 94,503,000 | 7.15 | 21,358,563 | -6.60 | 2,730,873 | -3.50 |
| 2007-08 | 38,701 | 1.47 | 1,644,430,860 | 6.27 | 95,642,000 | 6.17 | 90,271,000 | 5.17 | 101,278,000 | 7.17 | 19,896,483 | -6.85 | 2,599,456 | -4.81 |
| 2008-09 | 39,269 | 1.47 | 1,746,662,151 | 6.22 | 101,673,000 | 6.31 | 95,061,000 | 5.31 | 108,677,000 | 7.31 | 18,406,556 | -7.49 | 2,548,615 | -1.96 |
| 2009-10 | 39,837 | 1.45 | 1,854,292,972 | 6.16 | 107,883,000 | 6.11 | 99,917,000 | 5.11 | 116,402,000 | 7.11 | 16,872,014 | -8.34 | 2,503,561 | -1.77 |
| 2010-11 | 40,415 | 1.45 | 1,968,232,310 | 6.14 | 115,342,000 | 6.91 | 105,826,000 | 5.91 | 125,614,000 | 7.91 | 15,360,580 | -8.96 | 2,385,687 | -4.71 |
| 2011-12 | 41,001 | 1.45 | 2,089,252,441 | 6.15 | 123,402,000 | 6.99 | 112,163,000 | 5.99 | 135,648,000 | 7.99 | 14,218,095 | -7.44 | 1,930,352 | -19.09 |
| Projected Anuual Average (FY 2002-03 to FY 2011-12) |  | 150\% |  | 631\% | - | 532\% |  | 432\% |  | 632\% |  |  |  |  |
| Sources: | Pers | pulation <br> Income <br> Revenues | artment of Fina partment of Fina ice of the State partment of Fina rojected annual rojected annual |  | 02 Estimate (FY ns <br> 1989-90 to FY 20 <br> ber 2002 Revenue of GF Revenues <br> of GF Revenues | 989-90 to <br> 000-01) <br> Projection minus 1.00 <br> plus 1.00 | FY 2009-10; FY 20 <br> (FY 2001-02 thr $0 \%$ per annum \% per annum | 10-11 and <br> ough FY | FY 2011-12 extra $011-12)$ | olated fro | FY 2009-10) |  |  |  |

## Projected Cash flow Needs for Projects Funded by

Bond Authorizations in 2002 and 2004 (\$ Millions)

| Fiscal Year | Housing 2002 | K-12 2002 | Hi-Ed 2002 | Water 2002 | K-12 2004 | Hi-Ed 2004 | Hi-Speed Rail 2004 | Sales |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002-03 | \$0 | \$500 | \$0 | \$0 | \$0 | \$0 | \$0 | \$500 |
| 2003-04 | 525 | 3,100 | 0 | 50 | 0 | 0 | 0 | 3,675 |
| 2004-05 | 525 | 3,400 | 412 | 105 | 430 | 0 | 0 | 4,872 |
| 2005-06 | 525 | 3,400 | 413 | 50 | 2,700 | 0 | 59 | 7,147 |
| 2006-07 | 525 | 1,000 | 412 | 85 | 3,000 | 800 | 118 | 5,940 |
| 2007-08 | 0 | 0 | 413 | 90 | 3,000 | 500 | 156 | 4,159 |
| 2008-09 | 0 | 0 | 0 | 110 | 870 | 500 | 215 | 1,695 |
| 2009-10 | 0 | 0 | 0 | 134 |  | 500 | 255 | 889 |
| 2010-11 | 0 | 0 | 0 | 164 |  | 0 | 1,190 | 1,354 |
| 2011-12 | 0 | 0 | 0 | 200 |  | 0 | 1,390 | 1,590 |
| Total Sales | \$2,100 | \$11,400 | \$1,650 | \$988 | \$10,000 | \$2,300 | \$3,383 | \$31,821 |
| 2002 and 2004 Bonds expected to be issued after fiscal year 2011-12 Total Bond Authorizations, 2002 and 2004 |  |  |  |  |  |  |  | 9,019 |
|  |  |  |  |  |  |  |  | \$40,840 |

## APPENDIX 9

## Bond Financing Assumptions

The assumptions found below are incorporated into the calculations of bond financing capacity contained in this Report. Please see Appendix 7 for historic and projected figures for population, personal income and General Fund revenues.

1. Projected annual growth rates of General Fund revenues are from the September Department of Finance (DOF) forecast. The projections have an average annual growth rate of 5.32 percent through fiscal year 2011-12.
2. To determine a range of bond financing capacity for the General Fund over the next 10 fiscal years, the projected annual growth rates of General Fund revenues produced by the DOF have been subjected to a sensitivity analysis. The DOF projected annual growth rates for General Fund revenues from fiscal years 2002-03 through 2012-13 have been increased and decreased, in turn, by 1 percent from forecast to produce two additional scenarios of bond financing capacity.
3. Population projections are from the DOF. The projections have an average annual growth rate of 1.50 percent.
4. Personal income projections are from the DOF. The projections have an average annual growth rate of 6.31 percent.
5. Interest cost of 5.75 percent on all projected bond issues.
6. 30-year final maturity for all general obligation bonds and 25-year final maturity for all lease revenue bonds.
7. Level annual debt service payment.
8. Annual bond issuances from FY 2002-03 through FY 2012-13 ramp up to produce a constant ratio of debt service to general fund revenues of 4.25 percent from FY 2004-05 through FY 2012-13, (except for two alternative analyses assuming growth to 5 percent and 6.00 percent, respectively.

Computation of Debt Ratios for Total Net Tax-Supported Debt as of June 30, 2002 Plus $\$ 14.844$ billion in Projected Bond Financings ( $\$$ thousands) - Authorized but Unissued Bonds General Fund Revenues Growth @ DOF Forecast

| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | $\underline{2012}$ |  | 2013 |  | 2014-2041 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Fund Debt - Existing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds | \$ | 21,644,727 | \$ | 21,185,727 | \$ | 19,940,937 | \$ | 18,766,347 | \$ | 17,548,112 | \$ | 16,398,924 | \$ | 15,240,384 | \$ | 13,992,894 | \$ | 12,700,300 | \$ | 11,799,535 | \$ | 11,046,785 |  |  |  |
| Lease Purchase Financings |  | 6,030,624 |  | 5,710,962 |  | 5,377,173 |  | 5,024,175 |  | 4,718,811 |  | 4,405,919 |  | 4,071,667 |  | 3,749,540 |  | 3,415,570 |  | 3,099,170 |  | 2,775,020 |  |  |  |
| Sub-Total |  | 27,675,350 |  | 26,896,689 |  | 25,318,110 |  | 23,790,522 |  | 22,266,923 |  | 20,804,843 |  | 19,312,051 |  | 17,742,434 |  | 16,115,870 |  | 14,898,705 |  | 13,821,805 |  |  |  |
| General Fund Debt - Projected |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 2,550,000 |  | 4,650,000 |  | 6,793,000 |  | 7,989,680 |  | 9,316,855 |  | 9,705,190 |  | 10,043,655 |  | 10,139,230 |  | 9,947,995 |  | 9,745,770 |  | 9,531,910 |  |  |  |
| Lease Purchase Financings |  | 640,000 |  | 1,815,920 |  | 2,667,715 |  | 3,170,745 |  | 4,011,150 |  | 3,922,530 |  | 3,828,805 |  | 3,729,700 |  | 3,624,900 |  | 3,514,075 |  | 3,396,875 |  |  |  |
| Sub-Total |  | 3,190,000 |  | 6,465,920 |  | 9,460,715 |  | 11,160,425 |  | 13,328,005 |  | 13,627,720 |  | 13,872,460 |  | 13,868,930 |  | 13,572,895 |  | 13,259,845 |  | 12,928,785 |  |  |  |
| TOTAL |  | 30,865,350 |  | 33,362,609 |  | 34,778,825 |  | 34,950,947 |  | 35,594,928 |  | 34,432,563 |  | 33,184,511 |  | 31,611,364 |  | 29,688,765 |  | 28,158,550 |  | 26,750,590 |  |  |  |
| Principal Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 506,735 |  | 459,000 |  | 1,244,789 |  | 1,174,590 |  | 1,218,235 |  | 1,149,188 |  | 1,158,540 |  | 1,247,490 |  | 1,292,594 |  | 900,765 |  | 752,750 | \$ | 11,046,785 | \$ 22,151,462 |
| Lease Purchase Financings |  | 311,311 |  | 319,661 |  | 333,790 |  | 352,998 |  | 305,364 |  | 312,892 |  | 334,253 |  | 322,127 |  | 333,970 |  | 316,400 |  | 324,150 |  | 2,775,020 | 6,341,935 |
| Sub-Total |  | 818,046 |  | 778,661 |  | 1,578,579 |  | 1,527,588 |  | 1,523,599 |  | 1,462,080 |  | 1,492,793 |  | 1,569,617 |  | 1,626,564 |  | 1,217,165 |  | 1,076,900 |  | 13,821,805 | 28,493,396 |
| Principal Repayments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  |  |  |  |  | 28,320 |  | 46,140 |  | 111,665 |  | 161,535 |  | 177,425 |  | 191,235 |  | 202,225 |  | 213,860 |  | 9,531,910 | 10,664,315 |
| Lease Purchase Financings |  | - |  | 12,080 |  | 35,205 |  | 53,970 |  | 67,595 |  | 88,620 |  | 93,725 |  | 99,105 |  | 104,800 |  | 110,825 |  | 117,200 |  | 3,396,875 | 4,180,000 |
| Sub-Total |  |  |  | 12,080 |  | 35,205 |  | 82,290 |  | 113,735 |  | 200,285 |  | 255,260 |  | 276,530 |  | 296,035 |  | 313,050 |  | 331,060 |  | 12,928,785 | 14,844,315 |
| TOTAL |  | 818,046 |  | 790,741 |  | 1,613,784 |  | 1,609,878 |  | 1,637,334 |  | 1,662,365 |  | 1,748,053 |  | 1,846,147 |  | 1,922,599 |  | 1,530,215 |  | 1,407,960 |  | 26,750,590 | 43,337,711 |
| Interest Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 146,625 |  | 267,375 |  | 390,598 |  | 459,407 |  | 535,719 |  | 558,048 |  | 577,510 |  | 583,006 |  | 572,010 |  | 560,382 |  | 7,585,957 | 12,236,636 |
| Lease Purchase Financings |  | - |  | 36,800 |  | 104,415 |  | 153,394 |  | 182,318 |  | 230,641 |  | 225,545 |  | 220,156 |  | 214,458 |  | 208,432 |  | 202,059 |  | 2,023,305 | 3,801,524 |
| TOTAL |  | - |  | 183,425 |  | 371,790 |  | 543,991 |  | 641,724 |  | 766,360 |  | 783,594 |  | 797,666 |  | 797,463 |  | 780,441 |  | 762,441 |  | 9,609,262 | 16,038,160 |
| Debt Service Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 1,716,806 |  | 1,614,931 |  | 2,384,340 |  | 2,240,167 |  | 2,214,425 |  | 2,079,823 |  | 2,022,553 |  | 2,043,594 |  | 2,017,625 |  | 1,551,595 |  | 1,355,423 |  | 16,472,085 | 37,713,366 |
| Lease Purchase Financings |  | 649,996 |  | 642,348 |  | 641,755 |  | 641,581 |  | 580,956 |  | 569,955 |  | 579,167 |  | 544,190 |  | 528,023 |  | 492,811 |  | 483,791 |  | 4,429,749 | 10,784,322 |
| Sub-Total |  | 2,366,802 |  | 2,257,279 |  | 3,026,095 |  | 2,881,748 |  | 2,795,381 |  | 2,649,778 |  | 2,601,720 |  | 2,587,784 |  | 2,545,647 |  | 2,044,406 |  | 1,839,214 |  | 20,901,834 | 48,497,687 |
| Debt Service Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 146,625 |  | 267,375 |  | 418,918 |  | 505,547 |  | 647,384 |  | 719,583 |  | 754,935 |  | 774,241 |  | 774,235 |  | 774,242 |  | 17,117,867 | 22,900,951 |
| Lease Purchase Financings |  | - |  | 48,880 |  | 139,620 |  | 207,364 |  | 249,913 |  | 319,261 |  | 319,270 |  | 319,261 |  | 319,258 |  | 319,257 |  | 319,259 |  | 5,420,180 | 7,981,524 |
| Sub-Total |  | - |  | 195,505 |  | 406,995 |  | 626,281 |  | 755,459 |  | 966,645 |  | 1,038,854 |  | 1,074,196 |  | 1,093,498 |  | 1,093,491 |  | 1,093,501 |  | 22,538,047 | 30,882,475 |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,452,784 |  | 3,433,091 |  | 3,508,029 |  | 3,550,840 |  | 3,616,423 |  | 3,640,574 |  | 3,661,981 |  | 3,639,146 |  | 3,137,897 |  | 2,932,715 |  | 43,439,881 | 79,380,162 |
| Projected Bond Financings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 2,550,000 |  | 2,100,000 |  | 2,143,000 |  | 1,225,000 |  | 1,373,315 |  | 500,000 |  | 500,000 |  | 273,000 |  | - |  | - |  | - |  | - | 10,664,315 |
| Lease Purchase Financings |  | 640,000 |  | 1,188,000 |  | 887,000 |  | 557,000 |  | 908,000 |  |  |  |  |  |  |  | - |  | - |  | - |  | - | 4,180,000 |
| TOTAL |  | 3,190,000 |  | 3,288,000 |  | 3,030,000 |  | 1,782,000 |  | 2,281,315 |  | 500,000 |  | 500,000 |  | 273,000 |  | - |  | - |  | - |  | - | 14,844,315 |
| CUMULATIVE TOTAL |  | 3,190,000 |  | 6,478,000 |  | 9,508,000 |  | 11,290,000 |  | 13,571,315 |  | 14,071,315 |  | 14,571,315 |  | 14,844,315 |  | 14,844,315 |  | 14,844,315 |  | 14,844,315 |  |  |  |
| Computation of Debt Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  |
| GF Revenues |  | \$79,158,000 |  | \$75,537,000 |  | \$80,424,000 |  | \$84,863,000 |  | \$90,085,000 |  | \$95,642,000 |  | \$101,673,000 |  | \$107,883,000 |  | \$115,342,000 |  | \$123,402,000 |  | \$132,025,226 | \$ | 132,025,226 |  |
| Growth Rate of General Fund Revenues |  | 7.12\% |  | -4.57\% |  | 6.47\% |  | 5.52\% |  | 6.15\% |  | 6.17\% |  | 6.31\% |  | 6.11\% |  | 6.91\% |  | 6.99\% |  | 6.99\% |  | 0.00\% |  |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,452,784 |  | 3,433,091 |  | 3,508,029 |  | 3,550,840 |  | 3,616,423 |  | 3,640,574 |  | 3,661,981 |  | 3,639,146 |  | 3,137,897 |  | 2,932,715 |  | 2,694,366 |  |
| Debt Service to General Fund Revenues |  | 2.99\% |  | 3.25\% |  | 4.27\% |  | 4.13\% |  | 3.94\% |  | 3.78\% |  | 3.58\% |  | 3.39\% |  | 3.16\% |  | 2.54\% |  | 2.22\% |  | 2.04\% |  |

 General Fund Revenues Growth @ DOF Forecast

| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | $\underline{2011}$ |  | 2012 | 2013 |  | 2014-2041 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Fund Debt - Existing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds | \$ | 21,644,727 | \$ | 21,185,727 | \$ | 19,940,937 | \$ | 18,766,347 | \$ | 17,548,112 | \$ | 16,398,924 | \$ | 15,240,384 |  | 13,992,894 |  | 12,700,300 | \$ | 11,799,535 | \$ 11,046,785 |  |  |  |
| Lease Purchase Financings |  | 6,030,624 |  | 5,710,962 |  | 5,377,173 |  | 5,024,175 |  | 4,718,811 |  | 4,405,919 |  | 4,071,667 |  | $3,749,540$ $17,742,434$ |  | 3,415,570 |  | 3,099, 170 | 2,775,020 |  |  |  |
| General Fund Debt - Projected Sub-Total |  | 27,675,350 |  | 26,896,689 |  | 25,318,110 |  | 23,790,522 |  | 22,266,923 |  | 20,804,843 |  | 19,312,051 |  | 17,742,434 |  | 16,115,870 |  | 14,898,705 | 13,821,805 |  |  |  |
| General Obligation Bonds |  | 2,550,000 |  | 4,650,000 |  | 4,650,000 |  | 4,650,000 |  | 4,650,000 |  | 4,605,275 |  | 4,521,145 |  | 4,432,180 |  | 4,338,100 |  | 4,238,615 | 4,133,410 |  |  |  |
| Lease Purchase Financings |  | 640,000 |  | 1,815,920 |  | 1,780,715 |  | 1,743,490 |  | 1,704,120 |  | 1,662,485 |  | 1,618,455 |  | 1,571,895 |  | 1,522,660 |  | 1,470,595 | 1,415,535 |  |  |  |
| Sub-Total |  | 3,190,000 |  | 6,465,920 |  | 6,430,715 |  | 6,393,490 |  | 6,354,120 |  | 6,267,760 |  | 6,139,600 |  | 6,004,075 |  | 5,860,760 |  | 5,709,210 | 5,548,945 |  |  |  |
| TOTAL |  | 30,865,350 |  | 33,362,609 |  | 31,748,825 |  | 30,184,012 |  | 28,621,043 |  | 27,072,603 |  | 25,451,651 |  | 23,746,509 |  | 21,976,630 |  | 20,607,915 | 19,370,750 |  |  |  |
| Principal Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 506,735 |  | 459,000 |  | 1,244,789 |  | 1,174,590 |  | 1,218,235 |  | 1,149,188 |  | 1,158,540 |  | 1,247,490 |  | 1,292,594 |  | 900,765 | 752,750 | \$ | 11,046,785 | 22,151,462 |
| Lease Purchase Financings |  | 311,311 |  | 319,661 |  | 333,790 |  | 352,998 |  | 305,364 |  | 312,892 |  | 334,253 |  | 322,127 |  | 333,970 |  | 316,400 | 324,150 |  | 2,775,020 | 6,341,935 |
| Sub-Total |  | 818,046 |  | 778,661 |  | 1,578,579 |  | 1,527,588 |  | 1,523,599 |  | 1,462,080 |  | 1,492,793 |  | 1,569,617 |  | 1,626,564 |  | 1,217,165 | 1,076,900 |  | 13,821,805 | 28,493,396 |
| Principal Repayments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  |  |  |  |  |  |  |  |  | 44,725 |  | 84,130 |  | 88,965 |  | 94,080 |  | 99,485 | 105,205 |  | 4,133,410 | 4,650,000 |
| Lease Purchase Financings |  | - |  | 12,080 |  | 35,205 |  | 37,225 |  | 39,370 |  | 41,635 |  | 44,030 |  | 46,560 |  | 49,235 |  | 52,065 | 55,060 |  | 1,415,535 | 1,828,000 |
| Sub-Total |  |  |  | 12,080 |  | 35,205 |  | 37,225 |  | 39,370 |  | 86,360 |  | 128,160 |  | 135,525 |  | 143,315 |  | 151,550 | 160,265 |  | 5,548,945 | 6,478,000 |
| TOTAL |  | 818,046 |  | 790,741 |  | 1,613,784 |  | 1,564,813 |  | 1,562,969 |  | 1,548,440 |  | 1,620,953 |  | 1,705,142 |  | 1,769,879 |  | 1,368,715 | 1,237,165 |  | 19,370,750 | 34,971,396 |
| Interest Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 146,625 |  | 267,375 |  | 267,375 |  | 267,375 |  | 267,375 |  | 264,803 |  | 259,966 |  | 254,850 |  | 249,441 | 243,720 |  | 3,002,758 | 5,491,663 |
| Lease Purchase Financings |  | - |  | 36,800 |  | 104,415 |  | 102,391 |  | 100,251 |  | 97,987 |  | 95,593 |  | 93,061 |  | 90,384 |  | 87,553 | 84,559 |  | 769,488 | 1,662,482 |
| TOTAL |  |  |  | 183,425 |  | 371,790 |  | 369,766 |  | 367,626 |  | 365,362 |  | 360,396 |  | 353,027 |  | 345,234 |  | 336,994 | 328,280 |  | 3,772,246 | 7,154,145 |
| Debt Service Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 1,716,806 |  | 1,614,931 |  | 2,384,340 |  | 2,240,167 |  | 2,214,425 |  | 2,079,823 |  | 2,022,553 |  | 2,043,594 |  | 2,017,625 |  | 1,551,595 | 1,355,423 |  | 16,472,085 | 37,713,366 |
| Lease Purchase Financings |  | 649,996 |  | 642,348 |  | 641,755 |  | 641,581 |  | 580,956 |  | 569,955 |  | 579,167 |  | 544,190 |  | 528,023 |  | 492,811 | 483,791 |  | 4,429,749 | 10,784,322 |
| Sub-Total |  | 2,366,802 |  | 2,257,279 |  | 3,026,095 |  | 2,881,748 |  | 2,795,381 |  | 2,649,778 |  | 2,601,720 |  | 2,587,784 |  | 2,545,647 |  | 2,044,406 | 1,839,214 |  | 20,901,834 | 48,497,687 |
| Debt Service Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 146,625 |  | 267,375 |  | 267,375 |  | 267,375 |  | 312,100 |  | 348,933 |  | 348,931 |  | 348,930 |  | 348,926 | 348,925 |  | 7,136,168 | 10,141,663 |
| Lease Purchase Financings |  | - |  | 48,880 |  | 139,620 |  | 139,616 |  | 139,621 |  | 139,622 |  | 139,623 |  | 139,621 |  | 139,619 |  | 139,618 | 139,619 |  | 2,185,023 | 3,490,482 |
| Sub-Total |  |  |  | 195,505 |  | 406,995 |  | 406,991 |  | 406,996 |  | 451,722 |  | 488,556 |  | 488,552 |  | 488,549 |  | 488,544 | 488,545 |  | 9,321,191 | 13,632,145 |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,452,784 |  | 3,433,091 |  | 3,288,739 |  | 3,202,377 |  | 3,101,500 |  | 3,090,276 |  | 3,076,336 |  | 3,034,197 |  | 2,532,949 | 2,327,758 |  | 30,223,025 | 62,129,833 |
| Projected Bond Financings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 2,550,000 |  | 2,100,000 |  | - |  | - |  | - |  |  |  | - |  | - |  |  |  |  | - |  | - | 4,650,000 |
| Lease Purchase Financings |  | 640,000 |  | 1,188,000 |  |  |  | - |  |  |  |  |  | - |  | - |  |  |  | - | - |  |  | 1,828,000 |
| TOTAL |  | 3,190,000 |  | 3,288,000 |  |  |  | - |  |  |  |  |  | - |  | - |  |  |  | - | - |  | - | 6,478,000 |
| CUMULATIVE TOTAL |  | 3,190,000 |  | 6,478,000 |  | 6,478,000 |  | 6,478,000 |  | 6,478,000 |  | 6,478,000 |  | 6,478,000 |  | 6,478,000 |  | 6,478,000 |  | 6,478,000 | 6,478,000 |  |  |  |
| Computation of Debt Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 | 2013 |  | 2014 |  |
| GF Revenues |  | \$79,158,000 |  | \$75,537,000 |  | \$80,424,000 |  | \$84,863,000 |  | \$90,085,000 |  | \$95,642,000 |  | \$101,673,000 |  | \$107,883,000 |  | \$115,342,000 |  | \$123,402,000 | \$132,025,226 | \$ | 132,025,226 |  |
| Growth Rate of General Fund Revenues |  | 7.12\% |  | -4.57\% |  | 6.47\% |  | 5.52\% |  | 6.15\% |  | 6.17\% |  | 6.31\% |  | 6.11\% |  | 6.91\% |  | 6.99\% | 6.99\% |  | 0.00\% |  |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,452,784 |  | 3,433,091 |  | 3,288,739 |  | 3,202,377 |  | 3,101,500 |  | 3,090,276 |  | 3,076,336 |  | 3,034,197 |  | 2,532,949 | 2,327,758 |  | 2,089,416 |  |
| Debt Service to General Fund Revenues |  | 2.99\% |  | 3.25\% |  | 4.27\% |  | 3.88\% |  | 3.55\% |  | 3.24\% |  | 3.04\% |  | 2.85\% |  | 2.63\% |  | 2.05\% | 1.76\% |  | 1.58\% |  |

Computation of Debt Ratios for Total Net Tax-Supported Debt as of June 30, 2002 Plus $\$ 30.982$ billion in Projected Bond Financings (\$ thousands) - $\$ 14.844$ billion Authorized but Unissued Bonds and $\$ 16.138$ billion November 2002 Ballot Bonds
General Fund Revenues Growth @ DOF Forecast

| FYE June 30 |  | 2003 |  | 2004 |  | $\underline{2005}$ |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014-2041 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Fund Debt - Existing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds | \$ | 21,644,727 | \$ | 21,185,727 | \$ | 19,940,937 | \$ | 18,766,347 | \$ | 17,548,112 | \$ | 16,398,924 | \$ | 15,240,384 | \$ | 13,992,894 | \$ | 12,700,300 | \$ | 11,799,535 | \$ | 11,046,785 |  |  |  |
| Lease Purchase Financings |  | 6,030,624 |  | 5,710,962 |  | 5,377,173 |  | 5,024,175 |  | 4,718,811 |  | 4,405,919 |  | 4,071,667 |  | 3,749,540 |  | 3,415,570 |  | 3,099,170 |  | 2,775,020 |  |  |  |
| Sub-Total |  | 27,675,350 |  | 26,896,689 |  | 25,318,110 |  | 23,790,522 |  | 22,266,923 |  | 20,804,843 |  | 19,312,051 |  | 17,742,434 |  | 16,115,870 |  | 14,898,705 |  | 13,821,805 |  |  |  |
| General Fund Debt - Projected |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 3,050,000 |  | 8,825,000 |  | 15,410,000 |  | 20,935,970 |  | 24,165,070 |  | 24,893,930 |  | 25,099,480 |  | 25,070,720 |  | 24,768,520 |  | 24,473,345 |  | 23,947,055 |  |  |  |
| Lease Purchase Financings |  | 640,000 |  | 1,815,920 |  | 2,667,715 |  | 3,170,745 |  | 4,011,150 |  | 3,922,530 |  | 3,828,805 |  | 3,729,700 |  | 3,624,900 |  | 3,514,075 |  | 3,396,875 |  |  |  |
| Sub-Total |  | 3,690,000 |  | 10,640,920 |  | 18,077,715 |  | 24,106,715 |  | 28,176,220 |  | 28,816,460 |  | 28,928,285 |  | 28,800,420 |  | 28,393,420 |  | 27,987,420 |  | 27,343,930 |  |  |  |
| TOTAL |  | 31,365,350 |  | 37,537,609 |  | 43,395,825 |  | 47,897,237 |  | 50,443,143 |  | 49,621,303 |  | 48,240,336 |  | 46,542,854 |  | 44,509,290 |  | 42,886,125 |  | 41,165,735 |  |  |  |
| Principal Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 506,735 |  | 459,000 |  | 1,244,789 |  | 1,174,590 |  | 1,218,235 |  | 1,149,188 |  | 1,158,540 |  | 1,247,490 |  | 1,292,594 |  | 900,765 |  | 752,750 | \$ | 11,046,785 | \$ 22,151,462 |
| Lease Purchase Financings |  | 311,311 |  | 319,661 |  | 333,790 |  | 352,998 |  | 305,364 |  | 312,892 |  | 334,253 |  | 322,127 |  | 333,970 |  | 316,400 |  | 324,150 |  | 2,775,020 | 6,341,935 |
| Sub-Total |  | 818,046 |  | 778,661 |  | 1,578,579 |  | 1,527,588 |  | 1,523,599 |  | 1,462,080 |  | 1,492,793 |  | 1,569,617 |  | 1,626,564 |  | 1,217,165 |  | 1,076,900 |  | 13,821,805 | 28,493,396 |
| Principal Repayments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  |  |  |  |  | 87,030 |  | 166,215 |  | 274,140 |  | 404,450 |  | 435,760 |  | 466,200 |  | 495,175 |  | 526,290 |  | 23,947,055 | 26,802,315 |
| Lease Purchase Financings |  | - |  | 12,080 |  | 35,205 |  | 53,970 |  | 67,595 |  | 88,620 |  | 93,725 |  | 99,105 |  | 104,800 |  | 110,825 |  | 117,200 |  | 3,396,875 | 4,180,000 |
| Sub-Total |  |  |  | 12,080 |  | 35,205 |  | 141,000 |  | 233,810 |  | 362,760 |  | 498,175 |  | 534,865 |  | 571,000 |  | 606,000 |  | 643,490 |  | 27,343,930 | 30,982,315 |
| TOTAL |  | 818,046 |  | 790,741 |  | 1,613,784 |  | 1,668,588 |  | 1,757,409 |  | 1,824,840 |  | 1,990,968 |  | 2,104,482 |  | 2,197,564 |  | 1,823,165 |  | 1,720,390 |  | 41,165,735 | 59,475,711 |
| Interest Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 175,375 |  | 507,438 |  | 886,075 |  | 1,203,818 |  | 1,389,492 |  | 1,431,401 |  | 1,443,220 |  | 1,441,566 |  | 1,424,190 |  | 1,407,217 |  | 19,273,886 | 30,583,678 |
| Lease Purchase Financings |  | - |  | 36,800 |  | 104,415 |  | 153,394 |  | 182,318 |  | 230,641 |  | 225,545 |  | 220,156 |  | 214,458 |  | 208,432 |  | 202,059 |  | 2,023,305 | 3,801,524 |
| TOTAL |  | - |  | 212,175 |  | 611,853 |  | 1,039,469 |  | 1,386,136 |  | 1,620,133 |  | 1,656,946 |  | 1,663,376 |  | 1,656,024 |  | 1,632,622 |  | 1,609,277 |  | 21,297,192 | 34,385,202 |
| Debt Service Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 1,716,806 |  | 1,614,931 |  | 2,384,340 |  | 2,240,167 |  | 2,214,425 |  | 2,079,823 |  | 2,022,553 |  | 2,043,594 |  | 2,017,625 |  | 1,551,595 |  | 1,355,423 |  | 16,472,085 | 37,713,366 |
| Lease Purchase Financings |  | 649,996 |  | 642,348 |  | 641,755 |  | 641,581 |  | 580,956 |  | 569,955 |  | 579,167 |  | 544,190 |  | 528,023 |  | 492,811 |  | 483,791 |  | 4,429,749 | 10,784,322 |
| Sub-Total |  | 2,366,802 |  | 2,257,279 |  | 3,026,095 |  | 2,881,748 |  | 2,795,381 |  | 2,649,778 |  | 2,601,720 |  | 2,587,784 |  | 2,545,647 |  | 2,044,406 |  | 1,839,214 |  | 20,901,834 | 48,497,687 |
| Debt Service Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 175,375 |  | 507,438 |  | 973,105 |  | 1,370,033 |  | 1,663,632 |  | 1,835,851 |  | 1,878,980 |  | 1,907,766 |  | 1,919,365 |  | 1,933,507 |  | 43,220,941 | 57,385,993 |
| Lease Purchase Financings |  | - |  | 48,880 |  | 139,620 |  | 207,364 |  | 249,913 |  | 319,261 |  | 319,270 |  | 319,261 |  | 319,258 |  | 319,257 |  | 319,259 |  | 5,420,180 | 7,981,524 |
| Sub-Total |  | - |  | 224,255 |  | 647,058 |  | 1,180,469 |  | 1,619,946 |  | 1,982,893 |  | 2,155,121 |  | 2,198,241 |  | 2,227,024 |  | 2,238,622 |  | 2,252,767 |  | 48,641,122 | 65,367,517 |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,481,534 |  | 3,673,153 |  | 4,062,216 |  | 4,415,327 |  | 4,632,671 |  | 4,756,841 |  | 4,786,026 |  | 4,772,671 |  | 4,283,027 |  | 4,091,980 |  | 69,542,956 | 113,865,204 |
| Projected Bond Financings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 3,050,000 |  | 5,775,000 |  | 6,585,000 |  | 5,613,000 |  | 3,395,315 |  | 1,003,000 |  | 610,000 |  | 407,000 |  | 164,000 |  | 200,000 |  | - |  | - | 26,802,315 |
| Lease Purchase Financings |  | 640,000 |  | 1,188,000 |  | 887,000 |  | 557,000 |  | 908,000 |  |  |  |  |  |  |  |  |  |  |  | - |  | - | 4,180,000 |
| TOTAL |  | 3,690,000 |  | 6,963,000 |  | 7,472,000 |  | 6,170,000 |  | 4,303,315 |  | 1,003,000 |  | 610,000 |  | 407,000 |  | 164,000 |  | 200,000 |  | - |  | - | 30,982,315 |
| CUMULATIVE TOTAL |  | 3,690,000 |  | 10,653,000 |  | 18,125,000 |  | 24,295,000 |  | 28,598,315 |  | 29,601,315 |  | 30,211,315 |  | 30,618,315 |  | 30,782,315 |  | 30,982,315 |  | 30,982,315 |  |  |  |
| Computation of Debt Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  |
| GF Revenues |  | \$79,158,000 |  | \$75,537,000 |  | \$80,424,000 |  | \$84,863,000 |  | \$90,085,000 |  | \$95,642,000 |  | \$101,673,000 |  | \$107,883,000 |  | \$115,342,000 |  | \$123,402,000 |  | \$132,025,226 | \$ | 132,025,226 |  |
| Growth Rate of General Fund Revenues |  | 7.12\% |  | -4.57\% |  | 6.47\% |  | 5.52\% |  | 6.15\% |  | 6.17\% |  | 6.31\% |  | 6.11\% |  | 6.91\% |  | 6.99\% |  | 6.99\% |  | 0.00\% |  |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,481,534 |  | 3,673,153 |  | 4,062,216 |  | 4,415,327 |  | 4,632,671 |  | 4,756,841 |  | 4,786,026 |  | 4,772,671 |  | 4,283,027 |  | 4,091,980 |  | 3,853,627 |  |
| Debt Service to General Fund Revenues |  | 2.99\% |  | 3.29\% |  | 4.57\% |  | 4.79\% |  | 4.90\% |  | 4.84\% |  | 4.68\% |  | 4.44\% |  | 4.14\% |  | 3.47\% |  | 3.10\% |  | 2.92\% |  |

Computation of Debt Ratios for Total Net Tax-Supported Debt as of June 30, 2002 Plus $\$ 46.665$ billion in Projected Bond Financings ( $\$$ thousands) - $\$ 14.844$ billion Authorized but Unissued Bonds, $\$ 16.138$ billion November 2002 Ballot Bonds and $\$ 15.683$ billion November 2004 Ballot Bonds
General Fund Revenues Growth @ DOF Forecast

| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014-2041 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Fund Debt - Existing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds | \$ | 21,644,727 | \$ | 21,185,727 | \$ | 19,940,937 | \$ | 18,766,347 | \$ | 17,548,112 | \$ | 16,398,924 | \$ | 15,240,384 | \$ | 13,992,894 | \$ | 12,700,300 | \$ | 11,799,535 | \$ | 11,046,785 |  |  |  |
| Lease Purchase Financings |  | 6,030,624 |  | 5,710,962 |  | 5,377,173 |  | 5,024,175 |  | 4,718,811 |  | 4,405,919 |  | 4,071,667 |  | 3,749,540 |  | 3,415,570 |  | 3,099,170 |  | 2,775,020 |  |  |  |
| Sub-Total |  | 27,675,350 |  | 26,896,689 |  | 25,318,110 |  | 23,790,522 |  | 22,266,923 |  | 20,804,843 |  | 19,312,051 |  | 17,742,434 |  | 16,115,870 |  | 14,898,705 |  | 13,821,805 |  |  |  |
| General Fund Debt - Projected |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 3,050,000 |  | 8,825,000 |  | 15,840,000 |  | 24,119,290 |  | 31,223,915 |  | 35,512,080 |  | 37,152,060 |  | 37,698,120 |  | 38,385,395 |  | 39,252,450 |  | 38,466,910 |  |  |  |
| Lease Purchase Financings |  | 640,000 |  | 1,815,920 |  | 2,667,715 |  | 3,170,745 |  | 4,011,150 |  | 3,922,530 |  | 3,828,805 |  | 3,729,700 |  | 3,624,900 |  | 3,514,075 |  | 3,396,875 |  |  |  |
| Sub-Total |  | 3,690,000 |  | 10,640,920 |  | 18,507,715 |  | 27,290,035 |  | 35,235,065 |  | 39,434,610 |  | 40,980,865 |  | 41,427,820 |  | 42,010,295 |  | 42,766,525 |  | 41,863,785 |  |  |  |
| TOTAL |  | 31,365,350 |  | 37,537,609 |  | 43,825,825 |  | 51,080,557 |  | 57,501,988 |  | 60,239,453 |  | 60,292,916 |  | 59,170,254 |  | 58,126,165 |  | 57,665,230 |  | 55,685,590 |  |  |  |
| Principal Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 506,735 |  | 459,000 |  | 1,244,789 |  | 1,174,590 |  | 1,218,235 |  | 1,149,188 |  | 1,158,540 |  | 1,247,490 |  | 1,292,594 |  | 900,765 |  | 752,750 | \$ | 11,046,785 | \$ 22,151,462 |
| Lease Purchase Financings |  | 311,311 |  | 319,661 |  | 333,790 |  | 352,998 |  | 305,364 |  | 312,892 |  | 334,253 |  | 322,127 |  | 333,970 |  | 316,400 |  | 324,150 |  | 2,775,020 | 6,341,935 |
| Sub-Total |  | 818,046 |  | 778,661 |  | 1,578,579 |  | 1,527,588 |  | 1,523,599 |  | 1,462,080 |  | 1,492,793 |  | 1,569,617 |  | 1,626,564 |  | 1,217,165 |  | 1,076,900 |  | 13,821,805 | 28,493,396 |
| Principal Repayments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | - |  |  |  | 92,710 |  | 208,690 |  | 370,835 |  | 555,020 |  | 615,940 |  | 666,725 |  | 722,945 |  | 785,540 |  | 38,466,910 | 42,485,315 |
| Lease Purchase Financings |  | - |  | 12,080 |  | 35,205 |  | 53,970 |  | 67,595 |  | 88,620 |  | 93,725 |  | 99,105 |  | 104,800 |  | 110,825 |  | 117,200 |  | 3,396,875 | 4,180,000 |
| Sub-Total |  |  |  | 12,080 |  | 35,205 |  | 146,680 |  | 276,285 |  | 459,455 |  | 648,745 |  | 715,045 |  | 771,525 |  | 833,770 |  | 902,740 |  | 41,863,785 | 46,665,315 |
| TOTAL |  | 818,046 |  | 790,741 |  | 1,613,784 |  | 1,674,268 |  | 1,799,884 |  | 1,921,535 |  | 2,141,538 |  | 2,284,662 |  | 2,398,089 |  | 2,050,935 |  | 1,979,640 |  | 55,685,590 | 75,158,711 |
| Interest Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 175,375 |  | 507,438 |  | 910,800 |  | 1,386,859 |  | 1,795,375 |  | 2,041,945 |  | 2,136,243 |  | 2,167,642 |  | 2,207,160 |  | 2,257,016 |  | 32,586,116 | 48,171,969 |
| Lease Purchase Financings |  | - |  | 36,800 |  | 104,415 |  | 153,394 |  | 182,318 |  | 230,641 |  | 225,545 |  | 220,156 |  | 214,458 |  | 208,432 |  | 202,059 |  | 2,023,305 | 3,801,524 |
| TOTAL |  | - |  | 212,175 |  | 611,853 |  | 1,064,194 |  | 1,569,177 |  | 2,026,016 |  | 2,267,490 |  | 2,356,400 |  | 2,382,100 |  | 2,415,592 |  | 2,459,075 |  | 34,609,421 | 51,973,492 |
| Debt Service Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 1,716,806 |  | 1,614,931 |  | 2,384,340 |  | 2,240,167 |  | 2,214,425 |  | 2,079,823 |  | 2,022,553 |  | 2,043,594 |  | 2,017,625 |  | 1,551,595 |  | 1,355,423 |  | 16,472,085 | 37,713,366 |
| Lease Purchase Financings |  | 649,996 |  | 642,348 |  | 641,755 |  | 641,581 |  | 580,956 |  | 569,955 |  | 579,167 |  | 544,190 |  | 528,023 |  | 492,811 |  | 483,791 |  | 4,429,749 | 10,784,322 |
| Sub-Total |  | 2,366,802 |  | 2,257,279 |  | 3,026,095 |  | 2,881,748 |  | 2,795,381 |  | 2,649,778 |  | 2,601,720 |  | 2,587,784 |  | 2,545,647 |  | 2,044,406 |  | 1,839,214 |  | 20,901,834 | 48,497,687 |
| Debt Service Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 175,375 |  | 507,438 |  | 1,003,510 |  | 1,595,549 |  | 2,166,210 |  | 2,596,965 |  | 2,752,183 |  | 2,834,367 |  | 2,930,105 |  | 3,042,556 |  | 71,053,026 | 90,657,284 |
| Lease Purchase Financings |  | - |  | 48,880 |  | 139,620 |  | 207,364 |  | 249,913 |  | 319,261 |  | 319,270 |  | 319,261 |  | 319,258 |  | 319,257 |  | 319,259 |  | 5,420,180 | 7,981,524 |
| Sub-Total |  |  |  | 224,255 |  | 647,058 |  | 1,210,874 |  | 1,845,462 |  | 2,485,471 |  | 2,916,235 |  | 3,071,445 |  | 3,153,625 |  | 3,249,362 |  | 3,361,815 |  | 76,473,206 | 98,638,807 |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,481,534 |  | 3,673,153 |  | 4,092,621 |  | 4,640,843 |  | 5,135,249 |  | 5,517,955 |  | 5,659,229 |  | 5,699,272 |  | 5,293,768 |  | 5,201,029 |  | 97,375,040 | 147,136,495 |
| Projected Bond Financings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 3,050,000 |  | 5,775,000 |  | 7,015,000 |  | 8,372,000 |  | 7,313,315 |  | 4,659,000 |  | 2,195,000 |  | 1,162,000 |  | 1,354,000 |  | 1,590,000 |  | - |  | - | 42,485,315 |
| Lease Purchase Financings |  | 640,000 |  | 1,188,000 |  | 887,000 |  | 557,000 |  | 908,000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4,180,000 |
| TOTAL |  | 3,690,000 |  | 6,963,000 |  | 7,902,000 |  | 8,929,000 |  | 8,221,315 |  | 4,659,000 |  | 2,195,000 |  | 1,162,000 |  | 1,354,000 |  | 1,590,000 |  | - |  | - | 46,665,315 |
| CUMULATIVE TOTAL |  | 3,690,000 |  | 10,653,000 |  | 18,555,000 |  | 27,484,000 |  | 35,705,315 |  | 40,364,315 |  | 42,559,315 |  | 43,721,315 |  | 45,075,315 |  | 46,665,315 |  | 46,665,315 |  |  |  |
| Computation of Debt Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  |
| GF Revenues |  | \$79,158,000 |  | \$75,537,000 |  | \$80,424,000 |  | \$84,863,000 |  | \$90,085,000 |  | \$95,642,000 |  | \$101,673,000 |  | \$107,883,000 |  | \$115,342,000 |  | \$123,402,000 |  | \$132,025,226 | \$ | 132,025,226 |  |
| Growth Rate of General Fund Revenues |  | 7.12\% |  | -4.57\% |  | 6.47\% |  | 5.52\% |  | 6.15\% |  | 6.17\% |  | 6.31\% |  | 6.11\% |  | 6.91\% |  | 6.99\% |  | 6.99\% |  | 0.00\% |  |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,481,534 |  | 3,673,153 |  | 4,092,621 |  | 4,640,843 |  | 5,135,249 |  | 5,517,955 |  | 5,659,229 |  | 5,699,272 |  | 5,293,768 |  | 5,201,029 |  | 4,962,669 |  |
| Debt Service to General Fund Revenues |  | 2.99\% |  | 3.29\% |  | 4.57\% |  | 4.82\% |  | 5.15\% |  | 5.37\% |  | 5.43\% |  | 5.25\% |  | 4.94\% |  | 4.29\% |  | 3.94\% |  | 3.76\% |  |

 General Fund Revenues Growth @ DOF Forecast

| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | $\underline{2009}$ |  | $\underline{2010}$ |  | 2011 |  | 2012 |  | 2013 |  | 2014-2041 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Fund Debt - Existing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds | \$ | 21,644,727 | \$ | 21,185,727 | \$ | 19,940,937 | \$ | 18,766,347 | \$ | 17,548,112 | \$ | 16,398,924 | \$ | 15,240,384 | \$ | 13,992,894 | \$ | 12,700,300 | \$ | 11,799,535 | \$ | 11,046,785 |  |  |  |
| Lease Purchase Financings |  | 6,030,624 |  | 5,710,962 |  | 5,377,173 |  | 5,024,175 |  | 4,718,811 |  | 4,405,919 |  | 4,071,667 |  | 3,749,540 |  | 3,415,570 |  | 3,099,170 |  | 2,775,020 |  |  |  |
| Sub-Total |  | 27,675,350 |  | 26,896,689 |  | 25,318,110 |  | 23,790,522 |  | 22,266,923 |  | 20,804,843 |  | 19,312,051 |  | 17,742,434 |  | 16,115,870 |  | 14,898,705 |  | 13,821,805 |  |  |  |
| General Fund Debt - Projected |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 4,815,000 |  | 6,760,000 |  | 11,560,000 |  | 15,761,560 |  | 19,923,110 |  | 23,431,475 |  | 26,980,155 |  | 31,680,675 |  | 42,962,635 |  | 50,432,460 |  | 49,557,270 |  |  |  |
| Lease Purchase Financings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sub-Total TOTAL |  | $\begin{array}{r} 4,815,000 \\ 32.490 .350 \end{array}$ |  | $6,760,000$ |  | $11,560,000$ |  | $15,761,560$ |  | $\begin{aligned} & 19,923,110 \\ & 42100 \end{aligned}$ |  | $23,431,475$ |  | $26,980,155$ |  | $31,680,675$ $49.423 .109$ |  | $42,962,635$ |  | $50,432,460$ |  | $49,557,270$ |  |  |  |
| TOTAL |  | 32,490,350 |  | 33,656,689 |  | 36,878,110 |  | 39,552,082 |  | 42,190,033 |  | 44,236,318 |  | 46,292,206 |  | $49,423,109$ |  | 59,078,505 |  | $65,331,165$ |  | 63,379,075 |  |  |  |
| Principal Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 506,735 |  | 459,000 |  | 1,244,789 |  | 1,174,590 |  | 1,218,235 |  | 1,149,188 |  | 1,158,540 |  | 1,247,490 |  | 1,292,594 |  | 900,765 |  | 752,750 | \$ | 11,046,785 | \$ 22,151,462 |
| Lease Purchase Financings |  | 311,311 |  | 319,661 |  | 333,790 |  | 352,998 |  | 305,364 |  | 312,892 |  | 334,253 |  | 322,127 |  | 333,970 |  | 316,400 |  | 324,150 |  | 2,775,020 | 6,341,935 |
| Sub-Total |  | 818,046 |  | 778,661 |  | 1,578,579 |  | 1,527,588 |  | 1,523,599 |  | 1,462,080 |  | 1,492,793 |  | 1,569,617 |  | 1,626,564 |  | 1,217,165 |  | 1,076,900 |  | 13,821,805 | 28,493,396 |
| Principal Repayments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  |  |  | - |  | - |  | 63,440 |  | 123,450 |  | 271,635 |  | 371,320 |  | 444,480 |  | 538,040 |  | 725,175 |  | 875,190 |  | 49,557,270 | 52,970,000 |
| Lease Purchase Financings |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sub-Total |  |  |  |  |  |  |  | 63,440 |  | 123,450 |  | 271,635 |  | 371,320 |  | 444,480 |  | 538,040 |  | 725,175 |  | 875,190 |  | 49,557,270 | 52,970,000 |
| TOTAL |  | 818,046 |  | 778,661 |  | 1,578,579 |  | 1,591,028 |  | 1,647,049 |  | 1,733,715 |  | 1,864,113 |  | 2,014,097 |  | 2,164,604 |  | 1,942,340 |  | 1,952,090 |  | 63,379,075 | 81,463,396 |
| Interest Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 276,863 |  | 388,700 |  | 664,700 |  | 906,290 |  | 1,145,579 |  | 1,347,310 |  | 1,551,359 |  | 1,821,639 |  | 2,470,352 |  | 2,899,866 |  | 46,334,853 | 59,807,509 |
| Lease Purchase Financings |  |  |  | 276,863 |  | 388,700 |  | 664,700 |  | 906,290 |  | 1,145,579 |  | 1,347,310 |  | 1,551,359 |  | 1,821,639 |  | 2,470,352 |  | 2,899,866 |  | 46,334,853 | 59,807,509 |
| Debt Service Payments - Existing Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | 1,716,806 |  | 1,614,931 |  | 2,384,340 |  | 2,240,167 |  | 2,214,425 |  | 2,079,823 |  | 2,022,553 |  | 2,043,594 |  | 2,017,625 |  | 1,551,595 |  | 1,355,423 |  | 16,472,085 | 37,713,366 |
| Lease Purchase Financings |  | 649,996 |  | 642,348 |  | 641,755 |  | 641,581 |  | 580,956 |  | 569,955 |  | 579,167 |  | 544,190 |  | 528,023 |  | 492,811 |  | 483,791 |  | 4,429,749 | 10,784,322 |
| Sub-Total |  | 2,366,802 |  | 2,257,279 |  | 3,026,095 |  | 2,881,748 |  | 2,795,381 |  | 2,649,778 |  | 2,601,720 |  | 2,587,784 |  | 2,545,647 |  | 2,044,406 |  | 1,839,214 |  | 20,901,834 | 48,497,687 |
| Debt Service Payments - Projected Debt |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Obligation Bonds |  | - |  | 276,863 |  | 388,700 |  | 728,140 |  | 1,029,740 |  | 1,417,214 |  | 1,718,630 |  | 1,995,839 |  | 2,359,679 |  | 3,195,527 |  | 3,775,056 |  | 95,892,123 | 112,777,509 |
| Lease Purchase Financings |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sub-Total |  |  |  | 276,863 |  | 388,700 |  | 728,140 |  | 1,029,740 |  | 1,417,214 |  | 1,718,630 |  | 1,995,839 |  | 2,359,679 |  | 3,195,527 |  | 3,775,056 |  | 95,892,123 | 112,777,509 |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,534,141 |  | 3,414,795 |  | 3,609,888 |  | 3,825,121 |  | 4,066,992 |  | 4,320,350 |  | 4,583,623 |  | 4,905,326 |  | 5,239,932 |  | 5,614,270 |  | 116,793,957 | 161,275,196 |
| Projected Bond Financings General Obligation Bonds |  | 4,815,000 |  | 1,945,000 |  | 4,800,000 |  | 4,265,000 |  | 4,285,000 |  | 3,780,000 |  | 3,920,000 |  | 5,145,000 |  | 11,820,000 |  | 8,195,000 |  | - |  | - | 52,970,000 |
| Lease Purchase Financings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |
| TOTAL |  | 4,815,000 |  | 1,945,000 |  | 4,800,000 |  | 4,265,000 |  | 4,285,000 |  | 3,780,000 |  | 3,920,000 |  | 5,145,000 |  | 11,820,000 |  | 8,195,000 |  | - |  | - | 52,970,000 |
| CUMULATIVE TOTAL |  | 4,815,000 |  | 6,760,000 |  | 11,560,000 |  | 15,825,000 |  | 20,110,000 |  | 23,890,000 |  | 27,810,000 |  | 32,955,000 |  | 44,775,000 |  | 52,970,000 |  | 52,970,000 |  |  |  |
| Computation of Debt Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FYE June 30 |  | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  |
| GF Revenues |  | \$79,158,000 |  | \$75,537,000 |  | \$80,424,000 |  | \$84,863,000 |  | \$90,085,000 |  | \$95,642,000 |  | \$101,673,000 |  | \$107,883,000 |  | \$115,342,000 |  | \$123,402,000 |  | \$132,025,226 | \$ | 132,025,226 |  |
| Growth Rate of General Fund Revenues |  | 7.12\% |  | -4.57\% |  | 6.47\% |  | 5.52\% |  | 6.15\% |  | 6.17\% |  | 6.31\% |  | 6.11\% |  | 6.91\% |  | 6.99\% |  | 6.99\% |  | 0.00\% |  |
| TOTAL D/S PMTS (Existing \& Projected) |  | 2,366,802 |  | 2,534,141 |  | 3,414,795 |  | 3,609,888 |  | 3,825,121 |  | 4,066,992 |  | 4,320,350 |  | 4,583,623 |  | 4,905,326 |  | 5,239,932 |  | 5,614,270 |  | 5,375,919 |  |
| Debt Service to General Fund Revenues |  | 2.99\% |  | 3.35\% |  | 4.25\% |  | 4.25\% |  | 4.25\% |  | 4.25\% |  | 4.25\% |  | 4.25\% |  | 4.25\% |  | 4.25\% |  | 4.25\% |  | 4.07\% |  |

 General Fund Revenues Growth @ DOF Forecast

 General Fund Revenues Growth @ DOF Forecast


Computation of Debt Ratios for Total Net Tax-Supported Debt as of June 30, 2002 Plus $\$ 45.095$ billion in Projected Bond Financings ( $\$$ thousands)
General Fund Revenues Growth @ DOF Forecast Minus 1\%


Computation of Debt Ratios for Total Net Tax-Supported Debt as of June 30, 2002 Plus $\$ 61.500$ billion in Projected Bond Financings ( $\$$ thousands) General Fund Revenues Growth @ DOF Forecast Plus 1\%

 General Fund Revenues Growth @ DOF Forecast Minus 1\%

 General Fund Revenues Growth @ DOF Forecast Plus 1\%

 General Fund Revenues Growth @ DOF Forecast Minus 1\%

 General Fund Revenues Growth @ DOF Forecast Plus 1\%



[^0]:    ${ }^{(1)}$ The State Treasurer's Office projects that approximately $\$ 7$ billion in general obligation bonds and other competitively sold state bonds can be issued annually, without negative impact on borrowing rates. This figure can be increased by the use of negotiated sales. As a result, annual market capacity also includes projected lease revenue bonds through year 2006-07 that are to be sold on a negotiated basis, which increases the annual market capacity in the first five years.

