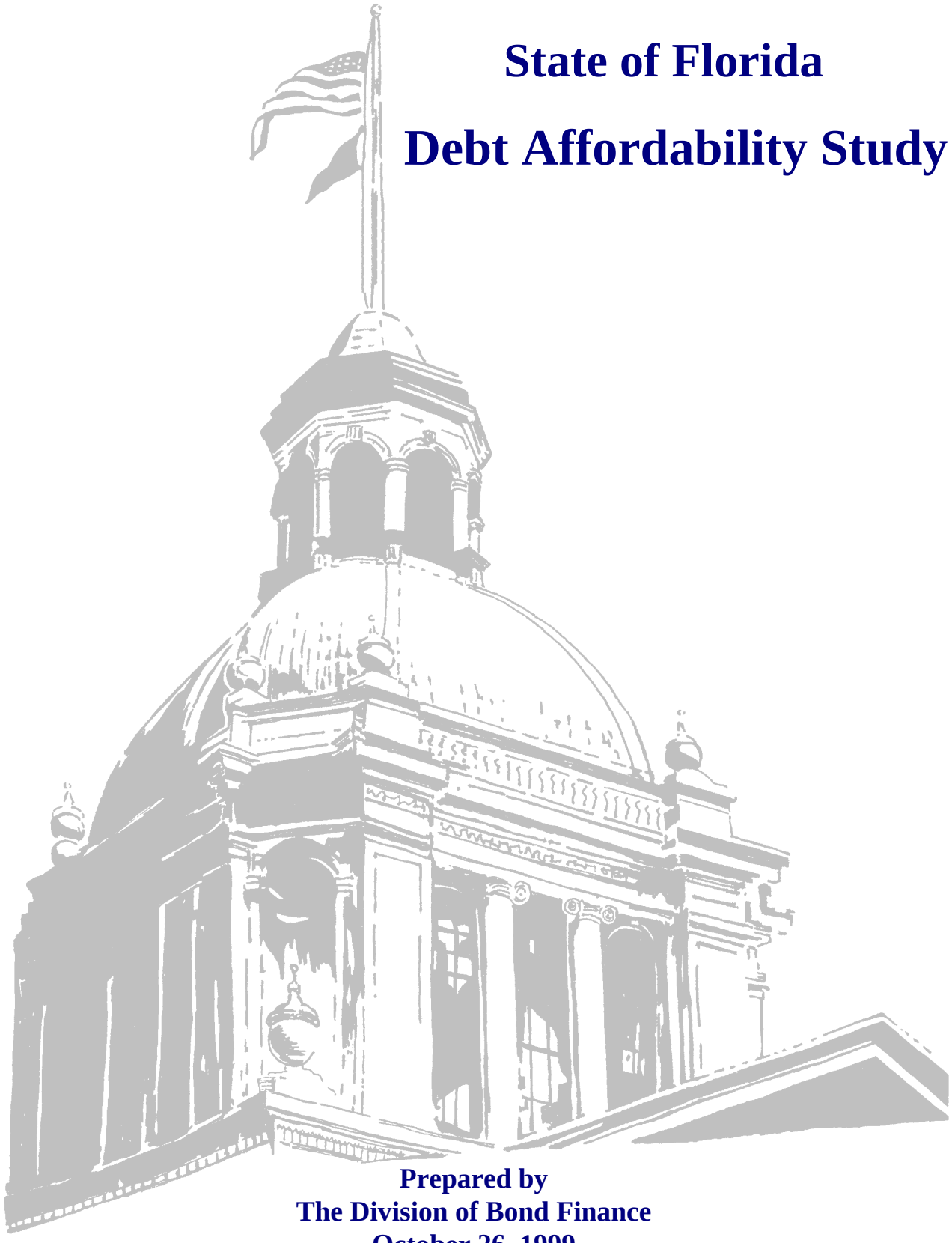
State of Florida

Debt Affordability Study



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October 26, 1999

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EXECUTIVE SUMMARY

The State of Florida has historically issued debt on an ad hoc basis to meet the infrastructure demands of its rapidly growing population rather than in a systematic manner. ***Debt affordability is a methodology for comprehensively developing capital budgets, taking into account financial and economic resources as well as infrastructure needs.*** A number of highly rated states use debt affordability as a financial management tool to manage their debt and protect their credit ratings. ***The purpose of this study is to provide policymakers with a way to assess the impact of bond programs on the State's fiscal position enabling informed decisions regarding financing proposals and capital spending priorities.*** It should also serve to protect, and perhaps enhance, Florida's bond ratings of AA/Aa2/AA+, although the State's financial condition, measured in part by the levels of reserves, is also an important rating consideration.

The State finances its infrastructure needs from two primary sources: current revenues and proceeds from debt issues. Debt issues consist of (i) general obligation debt secured by a specified tax revenue source and approved by the voters, (ii) revenue bonds secured by a specific revenue source and (iii) bonds or certificates of participation secured by a specific revenue source and subject to annual legislative appropriation. At June 30, 1999, Florida had approximately $16.8 billion of debt outstanding, of which 53% was for education, 27% for transportation projects, 16% for environmental purposes and 4% for various other projects. The amount of debt outstanding at the end of fiscal 1999 represents a 284% increase in the State's debt over the past ten years, compared to a 218% increase in total state net tax-supported debt nationally.

Of the $16.8 billion in debt outstanding at the end of fiscal 1999, $13.1 billion was net tax-supported debt and $3.7 billion was self-supporting debt. Net tax-supported debt — the amount of indebtedness payable from the tax revenues of a governmental entity — is the category of debt that most financial analysts use in determining an issuer's debt burden. While municipal analysts disagree on occasion as to the debt programs to be included in this calculation, there is general consensus that net tax-supported debt is the proper category to be analyzed. Accordingly, this study of debt affordability for the State of Florida takes the amount of net tax-supported debt currently outstanding, $13.1 billion, as the appropriate amount to be analyzed.

In evaluating the debt of a general governmental issuer like the State of Florida, financial analysts examine not only the level of indebtedness and the related debt ratios, but they also assess changes over time and compare the ratios to those of similar issuers. While total State debt increased 284% in the past decade, net tax-supported debt rose by 376% during this period, 1.72 times the rate of the national increase in state net tax-supported debt. Not surprisingly, Florida's related debt ratios rose sharply, with the ratio of debt service to revenues increasing from 3.2% in fiscal 1989 to 5.1% in fiscal 1999 and the ratio of debt to personal income rising from 1.5% to 3.3%. As a result, Florida's debt ratios are now higher than the medians for all states and the medians for our peer group of the ten most populous states, although Florida's ratios were below both medians ten years ago, as shown below:

Debt Ratios

	Debt Service to Revenues		Debt to Personal Income		Debt Per Capita	
	1989	1998	1989	1998	1989	1998
Florida	**3.2%**	**4.6%**	**1.5%**	**3.2%**	**$275**	**$787**
Peer Group Median[1]	3.3	3.3	2.4	2.7	383	679
State Median[2]	NA	3.5[3]	2.2	2.0	349	505

[1] California, Florida, Georgia, Illinois, Michigan, New Jersey, New York, Ohio, Pennsylvania and Texas.

[2] Calculated by Moody's Investors Service

[3] 1996 is the latest year the Moody's median for this ratio is available.

Although ***credit analysts consider Florida's current debt levels to be manageable*** despite the sharp rise during the 1990's, increasing the State's debt by the same relative amount over the next decade could cause the fixed payment burden to become too heavy. In particular, the ratio of debt service to revenues could rise to about the 10% level credit analysts view as excessive.

To protect Florida's credit standing while providing resources for growing infrastructure needs, this Debt Affordability Study projects the State's economic and financial resources available to meet future debt requirements and then develops the debt ratios for various levels of future debt issuance. In this way, measures of the future debt capacity can be calculated under both expected and changing economic conditions. Projections of expected economic and financial resources are based on the forecasts of these variables developed by the Office of Economic and Demographic Research ("EDR"). Sensitivity cases are also developed for faster and slower growth. In addition, scheduled retirements of debt are taken into account since debt capacity increases as outstanding indebtedness is paid-off.

The ratio of debt service to revenues is used as the most important determinant of debt capacity because both tax rates and debt service are largely within the control of the State. Based on existing debt programs, Florida's debt service ratio is currently projected to average approximately 6.0% over the next five years. If this ratio is held constant and if base case revenue forecasts of 4.4% average annual growth are realized, the State's future debt capacity over the next ten years would be $12.3 billion. The projected debt issuance under the existing bond programs over the next ten years is estimated to be $9.0 billion, leaving net debt capacity for new bonding at $3.3 billion. A higher target debt ratio or faster revenue growth would obviously increase debt capacity. Conversely, maintaining the debt ratio at the target level and slower revenue growth would decrease debt capacity. The table below shows projected debt capacity at both target and cap levels and at various rates of revenue growth.

Projected Debt Capacity: 2000-2009

	Projected Growth (4.4%)	Faster Growth (6.7%)	Slower Growth (2.2%)
6% Target Ratio	$12.3 billion	$19.4 billion	$9.0 billion[1]
8% Cap Ratio	$21.0 billion	$30.0 billion	$14.0 billion

[1] Amount represents the expected issuance for existing bond programs over the next ten years and exceeds the 6% target ratio.

By taking this approach, State policymakers can assess the impact of various capital spending alternatives under changing economic conditions. This assessment is essential to Florida's capital program because the State is dependent on access to the public credit markets at the lowest possible cost to fund ongoing capital programs and thereby meet Florida's rapidly growing infrastructure needs. For that reason, ***it is recommended that the Debt Affordability Study be implemented to prioritize capital spending and analyze the impact of financing decisions on Florida's fiscal condition*** and updated annually to take into account changing economic and financial conditions as well as changes in capital spending requirements. Other recommendations include (i) utilizing the debt affordability analysis to monitor debt position, (ii) establishing guidelines for determining future debt capacity, with the target level of the debt service to revenue ratio being set at 6% and the cap at 8% and (iii) integrating debt management into the capital budgeting process.

Another important financial measure is the ratio of reserves to general revenues as it reflects the State's ability to address economic downturns or unexpected expenditures without reducing vital services. This ratio was 7.8% at the end of fiscal year 1999, up from 2.4% ten years ago, and is viewed by financial analysts as being at an adequate level. Although this measure is not directly related to debt affordability, it is a fundamental feature in evaluating the State's financial condition. Thus, ***State policymakers should consider establishing a policy for an appropriate level of reserves in excess of the 5% mandated by the Florida Constitution.***

INTRODUCTION

Purpose

Florida frequently accesses the credit market to meet the increasing infrastructure needs of a growing population and economy. The growth in State debt generated by historically high debt issuance in recent years raises concerns relating to the lack of formalized debt practices. ***This report examines the concept of debt affordability as a management tool available to State policymakers for analyzing and controlling debt issuance.*** An overview of the State's debt position and an analysis of future bonding capacity are the basis of recommendations regarding debt management policies presented herein. The debt affordability analysis results in a model for measuring prospective debt capacity and assessing the fiscal impact of new financing programs.

Historically the State developed bond programs on an ad hoc basis to fund the acute infrastructure needs of a growing population. ***No methodology has been utilized to systematically evaluate the impact of bonding programs on the State's debt position.*** Realizing prudent financial management requires certain information be available to make informed decisions regarding financing proposals, ***the debt affordability concept is being introduced as a vehicle for enhancing State debt management practices.*** This Debt Affordability Study provides a comparison of the State's current debt position to relevant industry standards and uses a financial model to evaluate the impact on the State's debt position from issuing more debt or changing economic climates. Theoretical debt capacity is calculated to determine the availability of long-term financing to provide funding for competing infrastructure needs within defined guidelines. This data provides policymakers with information necessary for sound financial planning.

A review of the State's debt position includes information on debt outstanding for all program areas, i.e., education, environmental protection, transportation, corrections and State office buildings. Information on the growth in debt over the last ten years and debt expected to be issued over the next ten years is also presented. An analysis of the historical data with projections of future debt issuance identifies trends and provides information useful in capital planning and budgetary decision making.

Municipal credit analysts use three key ratios to assess the financial burden of outstanding debt on the State: 1) debt service as a percentage of general revenues; 2) debt as a percentage of personal income; and 3) debt per capita. A ten-year history and ten-year projection of each of the foregoing measures of debt have been included in this report.

The most important of these three measures to the debt capacity model presented herein is debt service as a percentage of general revenues, the only ratio that can be controlled by the State and considered by credit analysts to be the better judge of an entity's ability to manage debt over the long-term. Another important financial measure examines the amount of reserves available to the State as a percentage of general revenues. This financial measure reflects the State's ability to effectively deal with economic downturns or unexpected expenditures without reducing necessary services. A ten-year history of the reserves as a percentage of general revenues has been included in this report.

As with any enterprise, it is important for the State to develop strategic objectives, including prudent borrowing limits. The aforementioned debt ratios are relevant benchmarks used to measure governmental debt. Establishing an acceptable range for the selected debt ratio will allow the State to continually monitor its debt position and provide a mechanism for calculating theoretical debt capacity, assisting the capital budgeting decision process and prioritizing capital spending.

Measures of debt affordability are dynamic in the sense that they are impacted by both the absolute amount of debt outstanding and demographic and economic variability. Changes in demographic factors such as population growth and personal income affect the debt ratios. More importantly, unfavorable economic cycles can have a dramatic effect on targeted debt ratios and debt capacity due to reduced State revenue collections. This volatility demonstrates the need for assessing changes in the projected debt capacity based on various economic scenarios. Accordingly, this report includes information regarding the impact of economic cycles on both the benchmark debt ratios and the projected debt capacity.

Debt Affordability in General

A major element of financial management is determining the allocation of limited financial resources to capital needs. The evaluation of debt affordability provides a framework for utilizing resources by analyzing both the affordability and the funding priorities of State infrastructure needs. A satisfactory compromise between current infrastructure needs and future repayment obligations can be achieved by jointly analyzing prospective debt issuance and future financial resources. Paying for needed infrastructure on a pay as you go basis avoids interest costs associated with financing capital improvements over a number of years. However, many large capital improvement programs are too expensive to be paid from a single year's budget making financing necessary. Additionally, the principle of "intergenerational equity" calls for the cost of capital improvements benefitting the public over 20 to 30 years to be borne by future generations, not entirely by the current generation.

Florida over the past ten years has averaged 71% capital outlay funding from current revenues and 29% from financing programs. The following table shows that while debt financing has increased over the last nine years the State has maintained a healthy amount of capital funding on a pay as you go basis. The combination of pay as you go funding and bond issuance made possible the significant investment toward meeting Florida's growing infrastructure requirements.

Capital Outlay Projects by Funding Source
Fiscal Years 1990 through 1999

Fiscal Year	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**Total**
Bond Proceeds	$ 494	$ 1,060	$ 1,205	$ 1,211	$ 1,188	$ 1,209	$ 1,481	$ 1,153	$ 2,013	$ 1,712	$ 12,726
Pay as you go	1,809	2,834	3,161	3,100	3,201	3,813	2,936	3,189	3,767	3,986	31,798
Capital Outlay Projects	$ 2,304	$ 3,894	$ 4,366	$ 4,311	$ 4,390	$ 5,023	$ 4,417	$ 4,342	$ 5,780	$ 5,698	$ 44,524
Percent Funded from Bonds	**21%**	**27%**	**28%**	**28%**	**27%**	**24%**	**34%**	**27%**	**35%**	**30%**	**29%**
Percent Funded from Cash	**79%**	**73%**	**72%**	**72%**	**73%**	**76%**	**66%**	**73%**	**65%**	**70%**	**71%**

Using debt to finance needed infrastructure such as schools, roads, ports and protecting water and environmental resources requires utilizing a limited resource, i.e., debt capacity. Scarce resources can be allocated among competing capital needs by using the debt affordability analysis as a guide. The information provided from the analysis helps State policymakers strike a balance between pay as you go funding and the long-term financing of capital improvements. ***This Debt Affordability Study is intended to assist State policymakers in setting priorities for capital spending and borrowing so that the highest priority needs can be met with the limited fiscal resources available.***

Value of Debt Affordability Analysis

Several advantages are derived from evaluating debt affordability, the most important being the information provided State policymakers for use in allocating scarce resources among competing capital needs and prioritizing capital spending. Other benefits from considering debt affordability include:

- a measure for evaluating capital spending on a pay as you go basis versus financing capital improvements;
- a comprehensive overview of the State's debt position by aggregating all State debt and comparing it to standard industry benchmarks;
- debt management policies can be integrated into the capital budgeting process as the State budget is prepared;
- the State's debt position can be monitored so that prudent debt levels are not inadvertently exceeded;
- the impact of new debt programs on the State's debt position can be evaluated;
- helps focus on the long-term impact of financing decisions;
- active debt planning and management helps to maintain or improve existing credit ratings; and
- promotes the public discussion of needs and priorities to help build a consensus in a rapid growth environment.

Debt Affordability Concept as an Effective Policy Instrument

Many governmental entities have been successful in analyzing future debt issuance in terms of projected financial and economic resources. Analyses have routinely emphasized the combination of financial resources and capital needs as the foundation for building a capital program. Several states, including California, Maryland and Virginia, use the debt affordability concept to annually evaluate the fiscal health and credit quality of their state. Results from the annual analysis serve as a framework for determining both the affordability and funding priority of state infrastructure needs. By assessing available resources, the debt affordability concept provides policymakers with the opportunity to match priority needs with debt capacity. Policies can be developed and implemented to optimize resources while maintaining the financial health and credit quality of the State. ***Bonding capacity estimates can be used in the capital budgeting process to establish priorities among competing proposals. The estimates can also be used to evaluate the fiscal impact of new bonding programs on the State's financial position.***

THE STATE'S CURRENT DEBT POSITION

General

Evaluating the affordability of future debt starts with identifying and quantifying debt currently outstanding. Florida addresses the capital needs of the State both by allocating current revenues to projects and by accessing credit markets for funding ongoing capital improvement programs for education, environmental conservation, transportation and acquisition of facilities and equipment necessary for carrying out governmental services. Historically, the relative mix of debt by programmatic area has remained fairly constant. The total debt outstanding of $16.8 billion at June 30, 1999 is shown by program area in Figure 1. This analysis does not discuss details specific to State bonding programs but evaluates the State's overall debt position. Additionally, the debt of local governments such as school districts, cities, counties and water management districts are not included in this report.

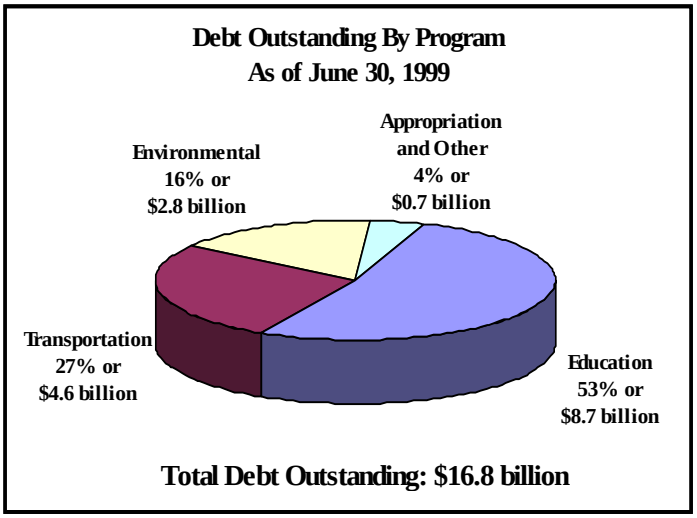


Figure 1

Debt also falls into one of three general types: general obligation bonds secured by the full faith and credit of the State; revenue bonds secured only by a specified revenue source; and bonds or certificates of participation subject to annual legislative appropriation. In Florida, general obligation bonds require voter approval and, in addition to being secured by the State's full faith and credit, are secured by a specified revenue source. A specified revenue source is used to secure revenue bonds and may be taxes, e.g., documentary stamp taxes for Preservation 2000 bonds or enterprise revenues, e.g., Florida Turnpike tolls. The third type of debt, annual appropriation bonds or certificates of participation, is secured by annual legislative appropriation. The graph in Figure 2 illustrates the amount of State debt outstanding of each type.

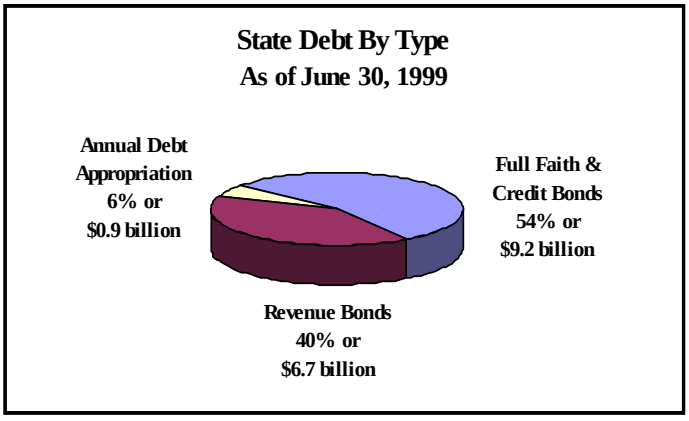


Figure 2

For purposes of analyzing debt affordability, debt is traditionally divided into two categories, net tax-supported and self-supporting, based on the revenue source repaying the bonds. Net tax-supported debt, contains all debt being paid from State revenues except the bond programs secured by user fees, even if not issued by the State Division of Bond Finance. Consequently, debt issued by the Florida Ports Financing Commission, the Correctional Privatization Commission, the Department of Corrections, the Department of Juvenile Justice and the Department of Children and Families along with the Florida Housing Finance Corporation's Affordable Housing bonds were included in net tax-supported debt. Self-supporting debt, excluded for analytical purposes, consists of bonds being repaid from revenues produced through the operation of the facility financed, such as a toll road or a

dormitory. Debt issued by the State but being repaid by local government revenue has also been categorized as self-supporting, such as pollution control and county road and bridge bonds. Single family bond programs and multifamily housing projects financed through bonds issued by the Florida Housing Finance Corporation or its predecessor, the Florida Housing Finance Agency, are excluded from this report entirely since the facilities constructed with bond proceeds are not owned or operated by the State or any other governmental entity.

Rating agencies, credit analysts and investors exclude self-supporting debt in calculating debt ratios for governmental entities. Consequently, in this report self-supporting debt has been excluded when analyzing the State debt burden. Types of projects financed and self-supporting debt outstanding is relevant for financial management purposes and evaluating the State's debt profile. Therefore, certain limited information regarding self-supporting debt has been included herein.

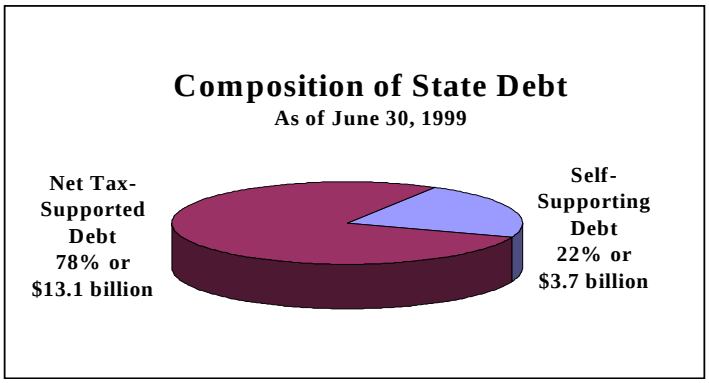


Figure 3

The debt outstanding at the end of the most current fiscal year, June 30, 1999, consisted of approximately $13.1 billion of net tax-supported debt and approximately $3.7 billion of self-supporting debt for a total of approximately $16.8 billion.

Net Tax-Supported Debt

Net tax-supported debt represents 78% of the State's total outstanding indebtedness and includes three different types of debt: general obligation bonds, revenue bonds and bonds or certificates of participation subject to annual legislative appropriation. General obligation bonds are secured by a primary revenue stream and the State's full faith and credit and include the PECO Bond program, Capital Outlay Bond program and Right-of-Way Bond program. Revenue bonds are secured only by a dedicated revenue stream and have been issued for the Lottery Bond program, Preservation 2000 and Save Our Coast Bond programs, Florida Ports Bond program and State University System Bond program. The debt subject to annual legislative appropriation includes the Facilities Management Bond program for State office buildings, the Inland Protection program for underground storage tank clean-up and the Correctional Privatization Commission's lease of prison facilities. Set forth in Figure 4 is information regarding the various debt programs included in the State's net tax-supported debt.

Net Tax-Supported Debt By Program
As of June 30, 1999
(In Million Dollars)

	Dollar Amount		% of Total
Education			
Public Education Capital Outlay	$ 6,808.5		
Capital Outlay (CO & DS)	945.3		
Lottery	546.5		
University System Improvement	204.1		
Total Education		**$ 8,504.4**	**65.0%**
Environmental			
Preservation 2000	2,324.4		
Conservation and Recreation	27.4		
Save Our Coast	206.9		
Inland Protection (Tanks)	195.0		
Total Environmental		**2,753.7**	**21.0%**
Transportation			
Right-of-Way and Bridge Acquisition	884.5		
Florida Ports	213.3		
Total Transportation		**1,097.8**	**8.4%**
Appropriated Debt / Other			
Facilities	375.6		
Master Equipment Lease	23.1		
Prisons	196.7		
Juvenile Justice	20.0		
Children & Families	38.0		
Investment Fraud	8.9		
Affordable Housing	69.0		
Total Appropriated Debt		**731.3**	**5.6%**
Total Debt Outstanding		**$13,087.2**	**100.0%**

Figure 4

Self-Supporting Debt

Self-supporting debt secured by user fees and charges comprised 22% of total State debt at June 30, 1999. The vast majority of State self-supporting debt programs are for toll roads, including Florida's Turnpike and various expressway authorities. Financing programs for certain university facilities such as student dormitories and parking garages are included as self-supporting debt. See Figure 5.

Self-Supporting Debt By Program
As of June 30, 1999
(In Million Dollars)

	Dollar Amount		% of Total
Education			
University Auxiliary Facility Revenue Bonds		**$ 263.2**	**7.0%**
Environmental			
Pollution Control		**2.0**	**0.1%**
Transportation			
Toll Facilities	$ 1,850.6		
Orlando-Orange Co. Expressway Authority	1,053.8		
Road and Bridge	574.4		
Total Transportation		**3,478.8**	**92.9%**
Total Debt Outstanding		**$ 3,744.0**	**100.0%**

Figure 5

Self-supporting debt has increased by $1.3 billion or 54% over the last ten years from $2.4 billion at June 30, 1989 to $3.7 billion at June 30, 1999. The increase resulted primarily from the financing of toll roads for Florida's Turnpike and local expressway authority systems. Specifically, Florida Turnpike issued approximately $891.6 million of revenue bonds over the last four years to fund various projects including construction for the Polk County Expressway and the Suncoast Parkway. Additionally, Orlando-Orange County Expressway Authority has issued approximately $532.8 million of revenue bonds to finance extensions to its toll road system over the past ten years.

Expressway authority systems are not entirely self-supporting in that Florida's Department of Transportation, in some cases, subsidizes the operation of such toll facilities under long-term agreements. Additional State subsidies of toll road systems have also been provided through the Toll Facilities Revolving Loan Program, the State Infrastructure Bank and State grants. These long-term obligations have not been quantified for purposes of this report.

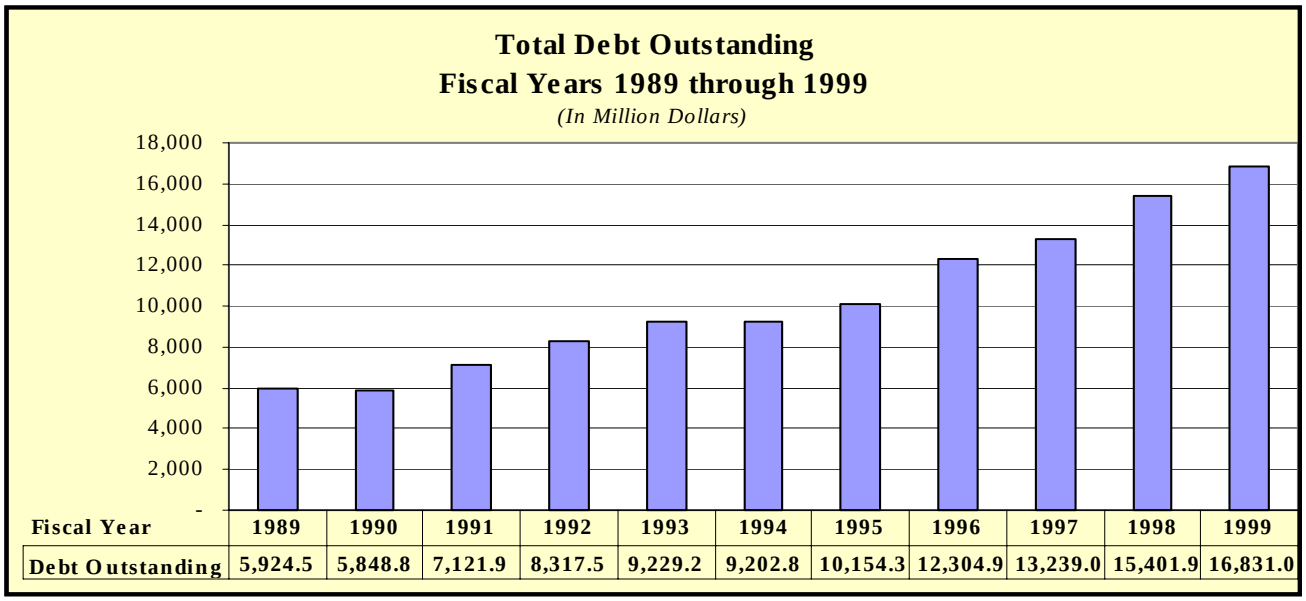
Future financings for self-supporting debt programs are determined based on the need for additional infrastructure and the ability of the enterprise operation to generate sufficient revenues to pay additional debt service. Accordingly, this report does not attempt to project future issuance of self-supporting debt or analyze the State's debt position for self-supporting debt.

Volume of Debt Issuance

The State has increasingly used bond financing to provide funding for critically needed infrastructure. Over the last ten years substantial investments have been made in providing additional educational facilities, acquiring environmentally sensitive land and building new roads and transportation infrastructure. ***Average annual issuance of new money bonds over the last ten fiscal years has been approximately $1.5 billion. During the last two years, the State has exceeded this average by issuing $2.6 billion and $1.8 billion in new money bonds for fiscal years 1998 and 1999, respectively.*** The increased debt issuance during the past two years consisted of: 1) approximately $965 million new money borrowings for transportation facilities, primarily toll roads for expressway authorities and Florida's Turnpike; 2) approximately $253 million in bonds for the reimbursement of clean-up costs for leaking underground storage tanks in 1998; and 3) approximately $565 million in Lottery bonds to begin funding construction of educational facilities pursuant to the legislatively authorized program. Without any additional new financing programs, the volume of annual new bond issuance should decrease slightly in future years from the 1998 and 1999 levels.

Growth in Debt Outstanding

The State's total debt outstanding has nearly tripled over the last ten years from approximately $5.9 billion at June 30, 1989, to approximately $16.8 billion at June 30, 1999. Approximately $1.3 billion of the $10.9 billion increase in total debt was due to increases in self-supporting debt. Net tax-supported debt increased $9.6 billion from $3.5 billion at June 30, 1989, to $13.1 billion at June 30, 1999. Figure 6 below shows the growth in total State debt outstanding over the last ten years.



Fiscal Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Debt Outstanding	5,924.5	5,848.8	7,121.9	8,317.5	9,229.2	9,202.8	10,154.3	12,304.9	13,239.0	15,401.9	16,831.0

Figure 6

The largest increase in debt during this period is attributable to increased issuance of PECO bonds for funding the investment in educational facilities throughout the State. The PECO program uses a combination of pay as you go and bond financed projects. Over the last ten years, the PECO Bond program debt increased approximately $4.6 billion. Over the same period, total PECO funded projects totaled $7.2 billion. The increase in PECO bonds is largely attributable to a 1% gross receipts tax rate increase passed in 1990 and phased in over the next three years. The increased tax rate generated increased debt capacity under the PECO Bond program which was largely utilized in the mid 1990s to increase funding for school construction. Future PECO bond capacity will be limited to growth in the gross receipts tax base which is not expected to generate the debt capacity utilized over the last ten years.

As indicated, increased financing for transportation projects was related primarily to toll roads. Of the $2.9 billion increase in bonds outstanding for transportation projects, $2.0 billion was for funding toll road projects for Florida's Turnpike or other expressway authority projects. The remaining increase, approximately $885 million, was from bonds issued under the Right-of-Way Bond program authorized by the State voters in 1988.

Environmental purpose debt increased due to the implementation of the Preservation 2000 Bond program which involved annual debt issuance of $300 million since 1991. Nine series of Preservation 2000 new money bonds totaling $2.7 billion have been issued since the program was authorized. The tenth and final installment of Preservation 2000 Bonds has been authorized but not yet issued. Additional debt is also expected to be issued over the next ten years under the recently enacted Florida Forever bonding program.

Over the last ten years there has been an 11% average annual increase in the total State debt outstanding. Assuming the historical growth rate, the amount of net tax-supported debt that would be outstanding over the next ten years has been projected to increase to an estimated $36.1 billion, over twice the amount currently outstanding.

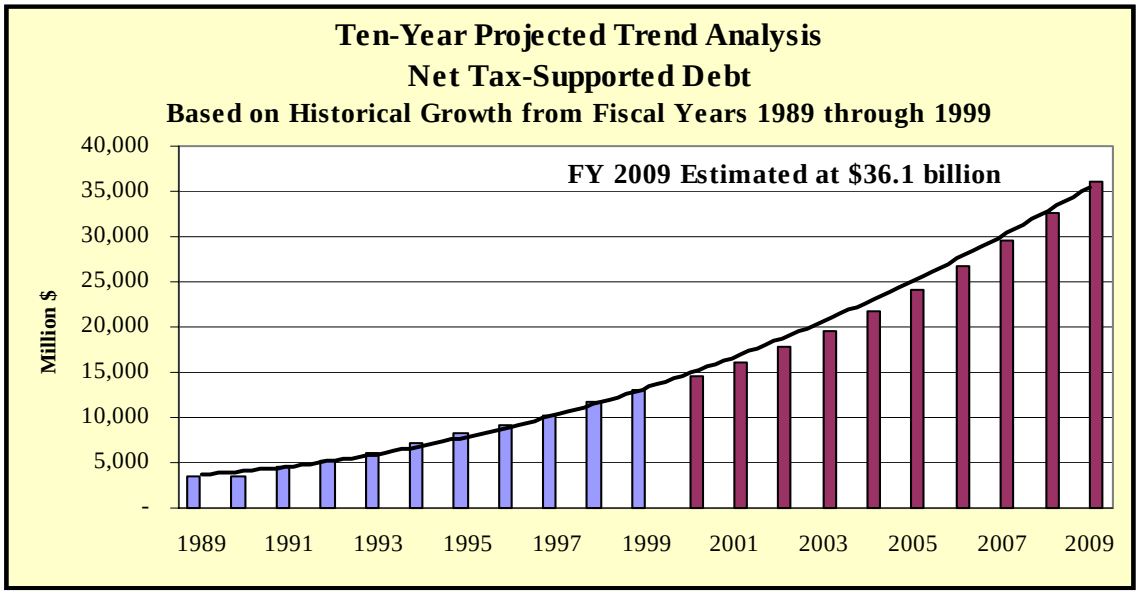


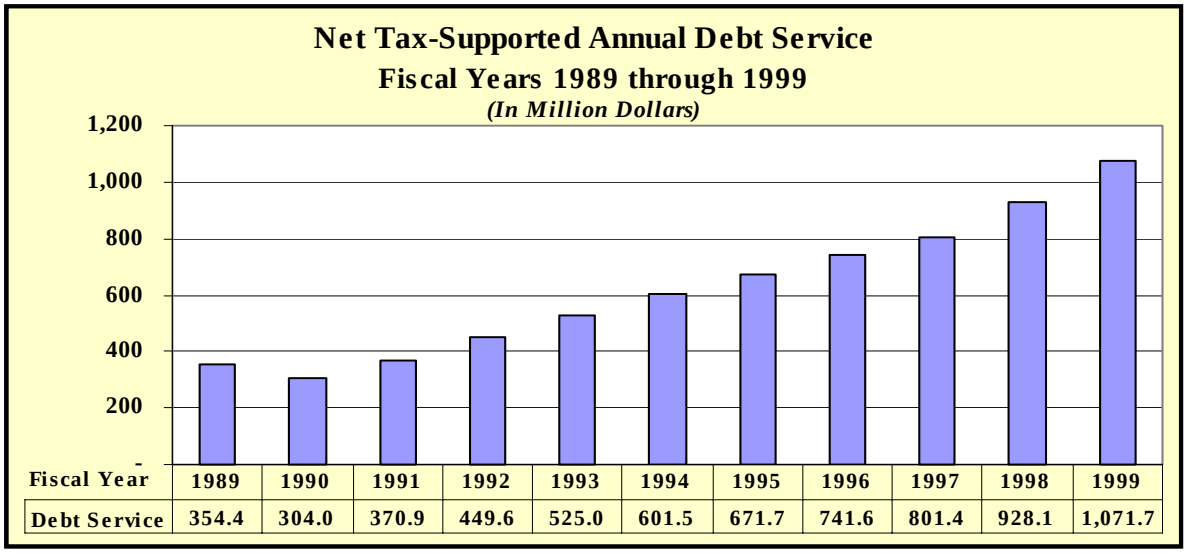
Figure 7

The foregoing information is not intended to be a prediction of the future. This simplistic projection demonstrates the need for a more sophisticated analytical approach to evaluating the financial impact and affordability of future debt issuance. It is unlikely that debt will be issued at the same rate it has been over the last ten years for several reasons. Most importantly, existing bonding programs contain constitutional and statutory limitations as well as bond document provisions regarding the amount of additional debt that may be incurred with a given revenue stream.

Debt Service Payment Obligation

In analyzing the State debt position it is critical to evaluate the increase in annual debt service payments resulting from additional debt issuance as these payments represent the annual obligations incurred by bonding. Annual debt service payments measure the State's financial obligation considering two very important variables, the interest rate and the repayment term or maturity of the debt. ***Required annual debt service payments furnish policymakers with the annual recurring financial impact of the State's debt burden, a more meaningful measure than total debt outstanding from a budgetary perspective.***

The State's total annual debt service payments for self-supporting and net tax-supported debt have nearly doubled from approximately $687 million in 1989 to approximately $1.3 billion in 1999. The annual debt service requirements on net tax-supported debt more than tripled, increasing by $717 million over the last ten years from $354 million for Fiscal Year 1989, to $1.07 billion for Fiscal Year 1999. ***The debt service requirement from each new issuance of debt is a recurring budgetary item for the duration of the bonds usually 20 to 30 years and as illustrated by the cumulative budgetary impact from the past ten years of bond issuance can be substantial.***



Fiscal Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Debt Service	354.4	304.0	370.9	449.6	525.0	601.5	671.7	741.6	801.4	928.1	1,071.7

Figure 8

The required annual debt service payments on existing net tax-supported debt is fairly constant at approximately $1.1 billion through 2013. In 2014, the State's annual debt service payments will decrease approximately $300 million annually due to retirement of the Preservation 2000 bonds.

Projecting future debt service requirements is important for long-term financial planning because of the fixed cost nature of the obligation on future budgets. The budgetary impact of additional borrowing can be analyzed based on the duration and structure of future debt service requirements. State bond issues are normally structured for level debt service payments over the life of the bond issue. As multiple series of bonds are issued over time, the aggregate debt service payments in the early years are more than the aggregate debt service payments required in later years. Annual debt service for the next 20 years is illustrated below for existing debt and the estimated future issuance.

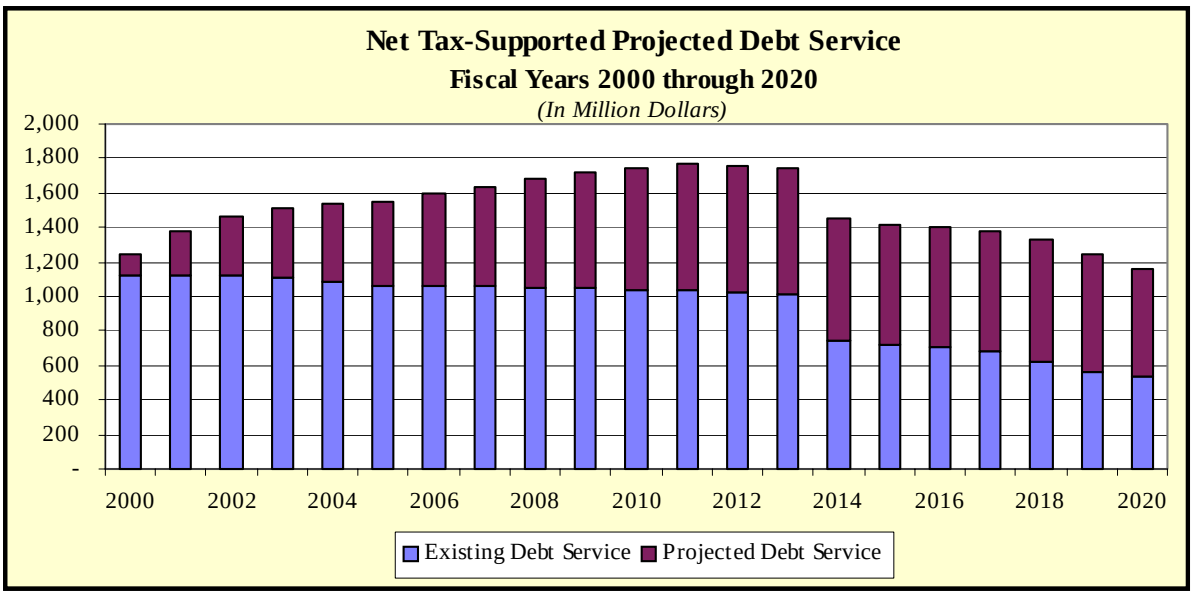


Figure 9

In order to evaluate the potential budgetary impact of future debt issuance, the historical ten-year growth rate for debt service was used to project the increase in annual debt service. Based on this trend analysis, annual debt service requirements would increase by $1.7 billion to a total annual payment of $2.7 billion for fiscal 2009. Set forth below is a graphic depiction of the continued increase in annual debt service requirements for another ten years.

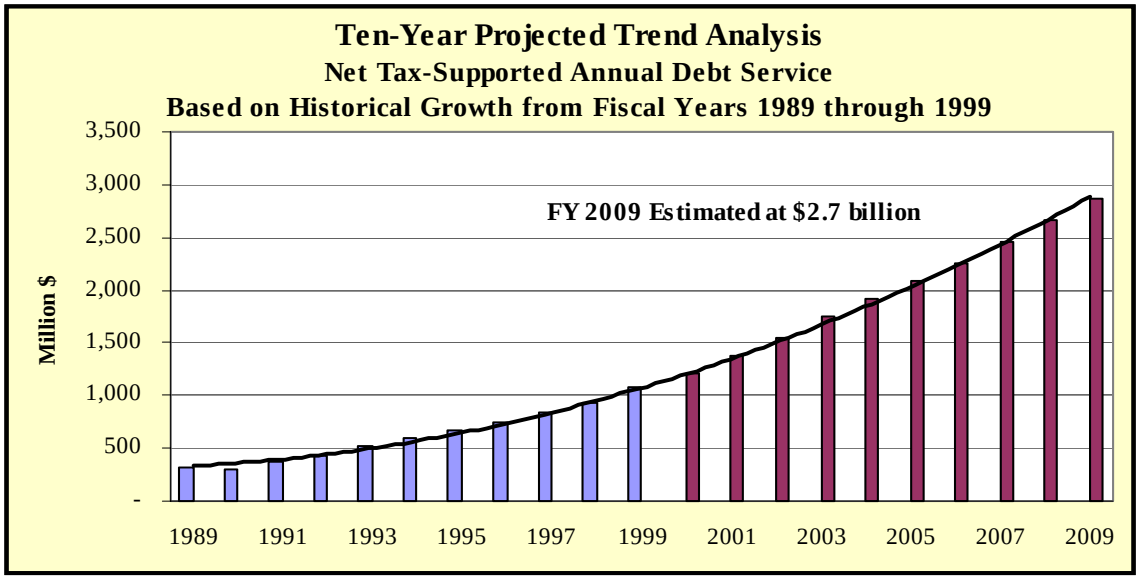


Figure 10

Such a level of increase in debt service, while not intended as a projection of future debt service requirements, demonstrates the need to carefully evaluate the financial impact of new debt proposals to guard against potential deterioration of credit quality particularly if debt service should increase faster than revenue growth. ***The cumulative budgetary impact of bond issuance is a factor to be considered when issuing debt and takes on added importance when considered in light of the many competing demands for Florida's limited discretionary general revenues. An inordinate amount of debt limits the State's ability to provide adequate funding for changing Legislative priorities and initiatives such as education reform.***

Interest Cost of Long-Term Debt

One important financial consideration of using debt to fund infrastructure needs is the interest cost which can be significant for long-term financings. Based on prevailing interest rates and level debt service payments, the interest cost on a 20-year level issue such as Lottery bonds or Florida Forever bonds is approximately 0.75 times the principal amount borrowed. Interest cost on a 30-year bond issue such as PECO bonds or Right-of-Way bonds is approximately 1.25 times the principal amount borrowed. These general guidelines are based on interest rates that have been at historical lows over much of the last ten years. Using additional pay as you go funding of infrastructure improvements avoids the interest cost associated with debt.

The short-term financial impact of issuing debt is not significant because the debt service cost is spread over the duration of the issue. Therefore, there is a tendency to rely on debt when expenditures for capital improvements are too large to be funded in a single budget year or funding is otherwise not available. However, the interest cost of debt over the life of the loan is substantial. ***The estimated total interest cost on State debt currently outstanding is $12.2 billion. Obviously, interest paid on borrowed money reduces the money available to fund future capital improvements and other service deliveries, making the long-term cost of issuing debt an important consideration for State policymakers.***

Rate of Retirement of Debt

In assessing debt burden, credit analysts also examine the rapidity at which long-term obligations are repaid as it measures the extent to which repayments create capacity for future debt issuance. The general rule for this ratio is the retirement of 25% of principal in five years and 50% of principal retired in ten years. Based on the State's current debt service schedules, approximately $2.8 billion or 17% of net tax-supported debt will be amortized over the next five years and approximately $6.2 billion or 37% of net tax-supported debt will be amortized over the next ten years. According to both measures, the State's net tax-supported debt is being repaid slightly slower than the standard used by municipal credit analysts. This is a reflection of the level debt structure used by the State as well as the 30-year maturity structure of the PECO and Right-of-Way bonds, which together represent 59% of net tax-supported debt.

Credit Ratings

Credit ratings are the rating agencies' assessment of a governmental entity's ability and willingness to repay debt on a timely basis. ***Credit ratings are an important indicator in the credit markets and can influence interest rates a borrower must pay. Each of the rating agencies believes that debt management is a positive factor in evaluating issuers and assigning credit ratings.*** Therefore, implementing debt management practices will be viewed positively by the rating agencies and could influence the State's credit rating and ultimately lower borrowing cost.

There are several factors which rating agencies analyze in assigning credit ratings: financial factors, economic factors, debt factors, and administrative/ management factors. Weakness in one area may well be offset by strength in another. However, significant variations in any single factor can influence a bond rating. Each of the factors is summarized below with an indication of how the State is generally perceived by the rating agencies in these areas:

State of Florida General Obligation Credit Ratings

Fitch IBCA, Inc.	AA
Moody's Investors Service	Aa2
Standard & Poor's Ratings Services	AA+

Figure 11

Financial Factors: Rating agencies evaluate the results of operations including a review of actual fiscal performance versus planned budget performance. The general fund financial statement is examined with emphasis on current financial position and fund balances, as well as trends in planned expenditures. Financial results have perhaps the most significant impact on the rating process.

The rating agencies view Florida's financial position as sound with strong budgetary controls, a fully funded budget stabilization reserve and for the most part keeping the growth in expenditures in check.

Economic Factors: This evaluation includes the economic strength of the tax base which is reflected in employment and income. Economic vitality and adequate tax structure are key determinants in the ability to repay debt.

The State's ratings reflect sustained rapid growth, economic broadening and increasing diversification of the State's economy. Fitch IBCA, Inc. indicates that Florida's economy continues its transformation from a narrow base of agriculture and seasonal tourism into a service and trade economy with substantial insurance, banking and export participation bringing with it pressure for more infrastructure.

Debt Factors: The total overall debt burden, debt history, debt trends and type of security pledged to support debt repayment is considered in this evaluation. States are also evaluated on their ability to effectively plan and implement programs for capital improvements.

Florida's debt burden, while considered manageable by the rating agencies, has increased more rapidly than the economy over the last five years. Although the increase in debt is explained by the States's economy and demographics, Moody's Investors Service notes that Florida has increased debt burden more significantly than any other state over the same period.

Administrative/Management Factors: An examination of the form of government and an assessment of an issuer's ability to implement plans as well as fulfill legal requirements are evaluated. The capabilities of managers are seen as vital ingredients in assessing credit quality. The willingness to make hard decisions, the development of financial policies and the reliability and continuity of accounting and financial information that are regularly updated are key elements.

Moody's Investors Service considers Florida's well-managed finances over the course of economic cycles a relevant credit factor and expects State management will continue to confront difficult budgetary choices that may challenge budget stability.

DEBT RATIOS AND COMPARISON TO OTHER STATES

General

Debt ratios are the key analytical measures used by rating agencies, credit analysts and investors to evaluate a governmental entity's debt position on a relative basis. The three key debt ratios for evaluating net tax-supported debt are 1) debt service as a percentage of general revenues, 2) debt as a percentage of personal income and 3) debt per capita. This section explains the significance of these ratios and includes a comparison of the ratios for Florida to national medians and to our peer group consisting of the ten most populous states.

Debt Ratios

Debt Service as a Percentage of General Revenues: Debt service as a percentage of general revenues measures the percentage of the State's budget devoted to debt service, i.e., a long-term fixed cost. The higher the percentage of budget required by debt service the less financial flexibility available for responding to economic slowdowns, unexpected expenditures or changes in budget priorities for operational or fixed capital outlay expenditures.

Debt as a Percentage of Personal Income: Debt as a percentage of personal income is another standard measure of debt used by credit analysts and rating agencies. The measure is simply debt divided by the personal income. The capability of a state's populace to absorb the financial obligation associated with governmental debt can be determined using this ratio. The ability of governments to transform personal income into governmental revenues through taxation makes personal income a strong indicator of a governmental borrower's potential to repay debt obligations.

Debt Per Capita: Debt per capita is the third standard measure used by the rating agencies, credit analysts and investors to evaluate debt burden. The amount of net tax-supported debt is divided by the State population resulting in the dollar amount of debt per person.

Reserves as a Percentage of General Revenues: Reserves available to a government are *not* dependent on the amount of debt outstanding and indicate financial stability and the ability to meet financial obligations, including debt service payments, in a timely manner. The standard benchmark used to measure available reserves is unencumbered reserves as a percentage of general revenues. A government's financial flexibility to absorb the impact of economic cycles and unanticipated expenditures is reflected by this measure.

Comparison to Other States

Comparing Florida's debt ratios to those of other states and to national medians is useful in evaluating the State's debt position. Such a comparison provides insight regarding our ranking relative to our peer group and to national medians. Evaluating the change in our relative ranking over the last ten years also indicates a strengthening or weakening debt position relative to other states.

Comparison of Florida to Peer Group and National Medians						
	Debt Service to Revenues		Debt to Personal Income		Debt Per Capita	
	1989	1998	1989	1998	1989	1998
Florida	**3.2%**	**4.6%**	**1.5%**	**3.2%**	**$275**	**$787**
Peer Group Median*	3.3	3.3	2.4	2.7	383	679
Moody's State Median	NA	3.5**	2.2	2.0	349	505

* California, Florida, Georgia, Illinois, Michigan, New Jersey, New York, Ohio, Pennsylvania and Texas.
** 1996 is the latest year the Moody's median for this ratio is available.

Figure 12

Florida's debt ratios are higher than the national medians and higher than the peer group medians. Additionally, the growth rate in Florida's debt ratios has exceeded the national medians and peer group medians. The rising debt ratios reflect greater borrowing to fund the infrastructure needs of a growing population.

Florida's debt service to revenue ratio increased from 3.2% to 4.6% over the last nine years reflecting the increase in the amount of State debt outstanding. The last year in which this ratio was calculated for all fifty states (1996), Florida ranked 16th nationally with a debt service to revenue ratio of 4.1% compared with a national median of 3.5%. Florida's debt service as a percentage of general fund revenues was 4.6% at June 30, 1998, which was significantly higher than the peer group median of 3.3%, ranking Florida 2nd in the peer group. Florida's debt service to revenue ratio increased again in 1999 to 5.1% at June 30, 1999, with total annual debt service on all net tax-supported debt exceeding $1 billion for the first time at $1.07 billion for fiscal 1999.

Credit analysts and rating agencies consider the debt burden to be moderate when debt service as a percentage of general revenues is 5%. Although there is no articulated outside limit on this ratio, the debt burden is considered excessive when debt service as a percentage of general revenues exceeds 10%. The upward trend in this ratio should be closely monitored to avoid adversely affecting the State's financial flexibility during less favorable economic environments.

The table below compares Florida's debt ratios to those of each state in the peer group. As can be seen, Florida's ratios are generally higher than the mean and median for the peer group and above those of all states but New York and New Jersey, demonstrating the need to monitor Florida's debt position.

1998 Comparison of Florida to Ten Most Populous States							
		Net Tax-Supported Debt		Net Tax-Supported		Net Tax-Supported Debt	General Obligation Ratings
	Rank	as a % of Revenues[2]	Rank	Debt Per Capita	Rank	as a % of Personal Income	Fitch/Moody's/S&P[3]
New York	1	7.4%	1	$1,986	1	6.6%	A+/A2/A
Florida[1]	2	**4.6%**	3	**$787**	3	**3.2%**	**AA/Aa2/AA+**
California	3	4.5%	5	$679	6	2.6%	AA-/Aa3/A+
Ohio	4	3.8%	7	$649	5	2.7%	AA+/Aa1/AA+
Georgia	5	3.5%	5	$679	4	2.9%	AAA/Aaa/AAA
Illinois	6	3.1%	4	$723	6	2.6%	AA/Aa2/AA
New Jersey	7	2.9%	2	$1,660	2	5.2%	AA+/Aa1/AA+
Pennsylvania	8	2.1%	8	$581	8	2.3%	AA/Aa3/AA
Michigan	9	1.4%	9	$434	9	1.7%	AA+/Aa1/AA+
Texas	10	1.3%	10	$296	10	1.3%	AA+/Aa2/AA+
Median		**3.3%**		**$679**		**2.7%**	
Mean		**3.5%**		**$847**		**3.1%**	

Source: Moody's Investors Service *1999 State Debt Medians*

[1] Florida's ratios calculated internally as more specifically discussed herein.

[2] Computed using 1998 comprehensive annual financial reports of each of the respective states, except for Florida.

[3] Source: Fitch IBCA, Moody's Investors Service and Standard & Poor's Rating Group as of May 1, 1999.

Figure 13

Florida's debt to personal income of 3.2% for 1998 was higher than our peer group median of 2.7% and the national median of 2.0%. According to this ratio, Florida ranked 3rd in the peer group and 13th nationally for 1998 up from 16th for 1989. During fiscal year 1999, State debt increased to 3.3% of personal income. According to Standard & Poor's benchmark, the ratio for debt to income is "low" at 0% - 3%, "moderate" at 3% - 6% and "high" at more than 6%. Therefore, the State is in the lower part of the "moderate" range for the ratio.

The State's debt per capita in 1998 (the date of the medians for the other states) was $787 which is moderately higher than the median for our peer group of $679 with Florida ranking 3rd in the peer group. Comparing all fifty states, Florida ranks 11th in debt per capita for 1998 up from 16th for 1989. It should be noted that State debt per capita has risen fairly dramatically over the last year to $861 at June 30, 1999, due to the volume of debt issued in 1999. Standard & Poor's benchmark ratios for debt per capita are "low" at less than $1,000, "moderate" at $1,000 - $2,500, and "high" at more than $2,500. Therefore, the State's debt per capita is considered "low" according to the Standard & Poor's benchmark.

Reserves as a Percentage of General Revenue Expenditures

The State's reserves or unencumbered general fund balance as a percentage of general revenues increased from 2.4% at the end of fiscal 1989 to an estimated 7.8% at the end of fiscal 1999. Standard & Poor's benchmarks for this ratio indicate that 5% - 15% is "adequate" and above 15% is "strong." Florida's ratio of 7.8% is below the midpoint of the adequate range. Figure 14 shows the current strong financial position which resulted from the funding of the Budget Stabilization Fund with tax growth dollars.

At the end of fiscal 1991, the general fund balance was less than $100 million. This represented less than 1% of the State's general revenue appropriations during that fiscal year. During such time, the State was in a very precarious financial position and was forced to implement mid-year spending reductions to avoid deficit spending.

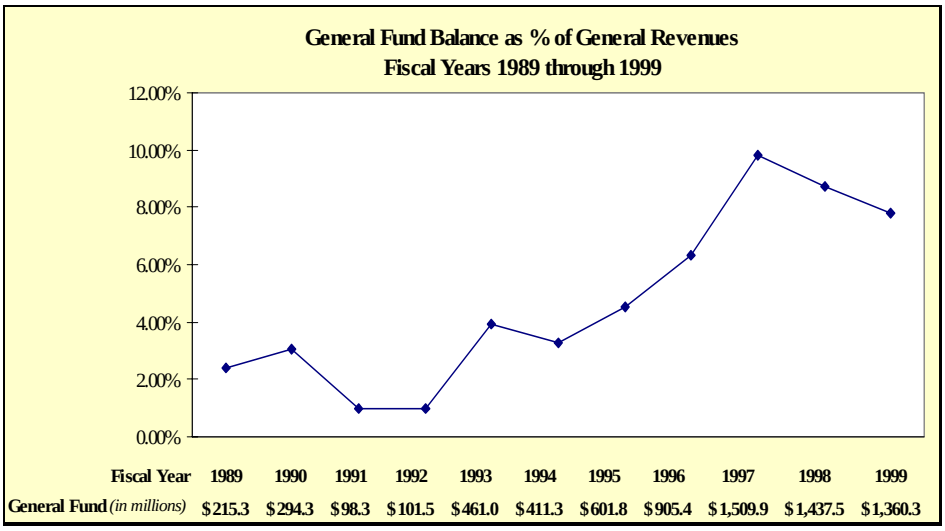


Figure 14

Since that time, the general fund balance has increased to approximately $1.4 billion at June 30, 1999. The increase of approximately $1.2 billion in State general fund reserves was the single most important reason for the Standard & Poor's Ratings Services' upgrade of the State's credit rating from AA to AA+ in April of 1997. The phenomenal increase in the State's general fund reserves is attributable to two factors. First, a Constitutional Amendment passed by the Florida voters in 1992 mandated the creation and funding of a Budget Stabilization Fund equal to 5% of State general revenues. Funding of the Budget Stabilization Fund was implemented over five years from 1993 through 1998. Second, the State's economy, much like the national economy, has experienced an unprecedented expansion over the last eight years which has resulted in increased tax revenues for the State.

Fiscal vulnerability has been addressed to a large extent through the funding of the Budget Stabilization Fund. However, prudent financial management requires evaluation of the State's levels of reserves as a measure of fiscal soundness. Even though the State's general fund balances are a healthy 7.8% of general revenue appropriations, it represents only about one month of the State's general fund expenditures. Although this measure is not directly related to debt affordability, it is an integral component of evaluating the State's financial durability during less favorable economic climates and should not be overlooked by policymakers.

PROJECTIONS OF DEBT RATIOS AND DEBT CAPACITY

General

The comparison of debt ratios to national medians and other large states only provides a snapshot of relative debt position at a single point in time. To fully understand the State's debt position, it is important to evaluate these ratios over a longer time horizon allowing trends to be identified and analyzed. The data presented in this section includes ten years of historical data along with ten years of projections. The 20-year time horizon provides a proper frame of reference for making long-term financial planning decisions.

Projections presented herein are based on net tax-supported debt currently outstanding plus debt expected to be issued for existing State bond programs over the next ten years. The projections do not include any new bond programs or the expansion of existing bond programs which may be enacted by the Legislature. These projections are intended only to provide a methodology for assessing the impact of issuing more debt. The debt affordability analysis helps ensure that anticipated future financial obligations are manageable from a fiscal and budgetary perspective and ensures that the State will not inadvertently exceed acceptable debt ratios causing potential credit rating downgrades, thereby increasing the State's borrowing costs.

The impact on State debt ratios of expected future bond issuance is shown under three different economic scenarios. The first, the base case scenario, was developed from revenue estimating conference assumptions and forecasts provided by EDR. The base case has been modified to show two additional economic scenarios: one with greater economic growth and one with slower economic growth. The use of alternative economic scenarios demonstrates the impact of economic variability on the key debt ratios. The sensitivity of debt ratios to economic variability helps to establish appropriate guidelines for calculating future debt capacity.

The final step in the debt affordability analysis is to determine estimated debt capacity under each scenario by establishing and applying guidelines to the debt capacity calculation. The ratio of debt service as a percentage of revenues has been used as the most appropriate criteria for estimating debt capacity since the State has some control over both components of the ratio. Guidelines were established to provide policymakers with a sensitivity to the relationship between debt capacity and the percent of revenues available for debt service by designating both a target and cap level for examining debt capacity available. The guidelines used for this debt capacity analysis were a 6% target ratio and an 8% limit. See ***"Establishing Guidelines for Debt Ratios"*** herein for a discussion of the relevant considerations in determining these benchmarks.

Economic Assumptions Underlying Projections

The following information outlines the assumptions underlying each of the economic scenarios and then depicts graphically the impact of future debt issuance on the key debt ratios under the different economic scenarios. The base case scenario was developed from economic assumptions provided by EDR. These economic assumptions were then modified as more specifically described below to create a more optimistic scenario and a pessimistic scenario.

The economic estimates provided by the EDR indicate that over the next ten years revenues available to pay debt service are expected to grow at an average annual rate of 4.4%, per capita personal income to grow at 4.1% and population at 1.5%. The second scenario reduces the growth rate of the economic variables by one-half resulting in revenue growth of 2.2%, personal income growth of 2.85% and population growth of 0.75%. The third scenario is based on the historical average annual growth rate over the last ten years for each of the economic variables or revenue growth of 6.66% per annum, personal income growth of 5.40% per annum and population growth of 1.85% per annum. See Appendix C for detailed information regarding the economic assumptions underlying each of the economic scenarios presented.

An analysis of various economic alternatives illustrates the advantage of having a management tool to provide insight into the impact of economic fluctuations on debt ratios. This information is relevant to monitoring the State's debt position to avoid any adverse credit rating changes potentially increasing the State's borrowing cost.

Estimated Revenues Available for Debt Service

Debt service as a percentage of revenues should reflect the relationship of debt payments to all revenue sources available for making the payments. Florida's debt structure is unique in that general obligation bonds are secured primarily by a dedicated revenue stream and secondarily by the State's full faith and credit. To properly measure the portion of State revenues available for debt service, we added trust fund revenues available for debt service payments to the State's estimated general revenues. See Appendix C hereto for the detailed calculations of estimated revenues available to pay debt service used in calculating this debt ratio.

Projected Debt Issuance

Approximately $9.0 billion of debt is expected to be authorized and issued over the next ten years without any statutory changes to the existing bond programs. Future expected issuance includes:

- $3.5 billion in PECO bonds based on projections provided by the PECO Revenue Estimating Conference long-term forecast;
- $1.5 billion of Lottery bonds to complete funding of K-12 school construction;
- $3.0 billion of environmental purpose revenue bonds, including the last $300 million installment of Preservation 2000 bonds and an estimated $2.7 billion of the recently enacted Florida Forever bonds; and
- $649 million of Right-of-Way bonds based on forecasts provided by the Department of Transportation.

These are the significant financing programs historically used by the State to provide funding for education, environmental protection and transportation programs. Figure 15 details the expected issuance of bonds over the next ten years. The projections shown do not include debt for the State University System because such financings are project specific and are unique to the capital needs of each university. The following debt issuance projections do not include State debt which is not issued through the State Division of Bond Finance such as financings of the Prison Privatization Commission, the Department of Juvenile Justice or the Department of Children and Families. The State debt incurred by the foregoing commissions and agencies are generally not ongoing financing programs based on a dedicated revenue stream but tend to be legislative responses to particular infrastructure needs. Accordingly, the amount of debt to be issued by these entities is not predictable and has not been included in the following projections except for the pending issuance of approximately $140 million Florida Ports Financing Commission bonds and $50 million of Florida Housing Finance Corporation Affordable Housing bonds.

Projected Debt Issuance By Program Fiscal Years 2000 through 2009

(In Thousands)

	PECO	Lottery	P2000-FF	ROW	Facilities	Florida Ports	Master Lease	Affordable Hsg.	Total Issuance
2000	$ 567,200	$ 980,540	$ 300,000	$190,000	$32,500	$ 140,240	$ 25,000	$ 50,000	$ 2,285,480
2001	329,200	441,180	300,000	197,000	30,000	-	25,000	-	1,322,380
2002	302,100	162,305	300,000	158,000	-	-	25,000	-	947,405
2003	350,400	-	300,000	72,000	-	-	-	-	722,400
2004	324,300	-	300,000	32,000	-	-	-	-	656,300
2005	291,900	-	300,000	-	-	-	-	-	591,900
2006	307,900	-	300,000	-	-	-	-	-	607,900
2007	315,300	-	300,000	-	-	-	-	-	615,300
2008	324,200	-	300,000	-	-	-	-	-	624,200
2009	338,200	-	300,000	-	-	-	-	-	638,200
	$3,450,700	$1,584,025	$3,000,000	$649,000	$62,500	$ 140,240	$ 75,000	$ 50,000	$ 9,011,465

Figure 15

In order to calculate the projected debt service as a percentage of revenues ratio, it is necessary to estimate debt service for the projected debt issuance as set forth above. Projected debt service was calculated using estimated interest rates on May 6, 1999, plus 100 basis points and normal program structure for each series of bonds anticipated. It should be noted that increases in interest rates would increase the estimated debt service used to calculate the debt ratio set forth below. Appendix C details the interest rates and bond structure assumptions used. Figure 16 shows the relationship between existing and projected debt service and the corresponding percentage of estimated revenues for the fiscal year 2000 through 2009 period.

Projected Revenues and Debt Service
Fiscal Years 2000 through 2009

Fiscal Year	Base Case Scenario Adjusted Revenues *(In Millions)*	Debt Service *(In Millions)* Existing	Projected	Total	Debt Service As % of Revenues
1999(Actual)	$21,050	$1,072	$ -	$1,072	5.09%
2000	21,521	1,123	120	1,243	5.78%
2001	22,578	1,125	250	1,375	6.09%
2002	23,487	1,123	335	1,459	6.21%
2003	24,569	1,114	395	1,509	6.14%
2004	25,710	1,088	448	1,536	5.97%
2005	26,951	1,063	490	1,553	5.76%
2006	28,263	1,062	532	1,594	5.64%
2007	29,562	1,062	575	1,637	5.54%
2008	30,867	1,053	624	1,677	5.43%
2009	32,315	1,046	674	1,720	5.32%

Figure 16

Historical and Projected Debt Ratios

Set forth below are the State's key historical debt ratios over the last ten years along with projections calculated using the three different economic scenarios previously described. The projections were prepared for the purpose of assessing the volatility of the key debt ratios under varying economic scenarios and not as a prediction of future activity.

The impact of the expected debt issuance on the key debt ratios appears affordable based upon the current economic assumptions and expected debt issuance. However, these assumptions are based on continued economic prosperity and no new financing programs. Therefore, as facts and circumstances change over time it is important to reassess the State's debt ratios by updating these projections.

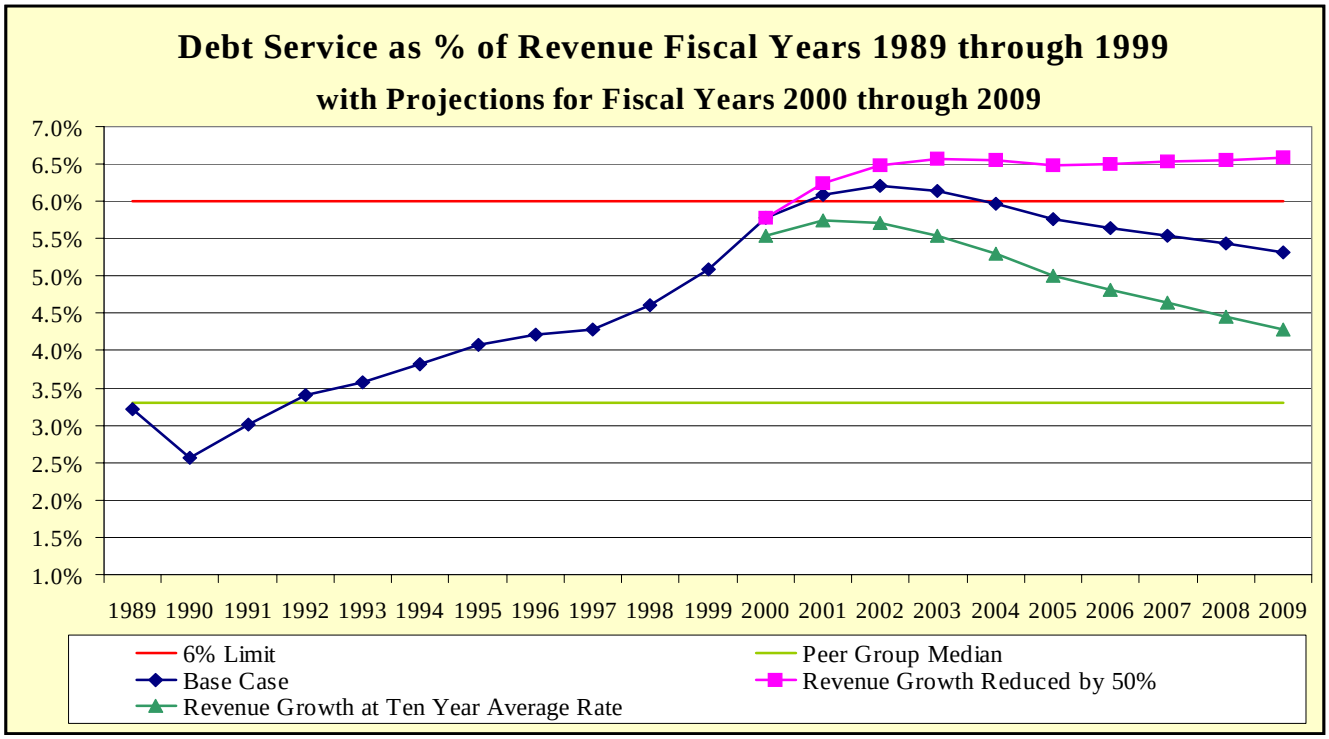


Figure 17

Debt service as a percentage of revenues has increased from 3.21% at June 30, 1989 to 5.09% at June 30, 1999. The high growth rate in State revenues (approximately 6.66% annually) has held down the increase in this ratio that would have been realized due to the volume of debt issuance. Additionally, the increase in annual debt service requirements was mitigated due to historically low interest rates over much of the last ten years and to debt service savings attributable to significant refundings of State debt implemented during this low interest rate environment. These mitigating factors probably will not be present during the next ten years making an annual reassessment of this ratio critically important.

The base case debt service as a percentage of revenues increases to a high of 6.21% in 2002 before declining annually to an estimated 5.32% in 2009. Under the more pessimistic scenario, debt service as a percentage of revenues increases to a high of 6.57% in 2003 before leveling off through 2009. This is in contrast to the optimistic scenario showing an increase to a high of 5.74% in 2001 before declining annually through 2009 to 4.29%.

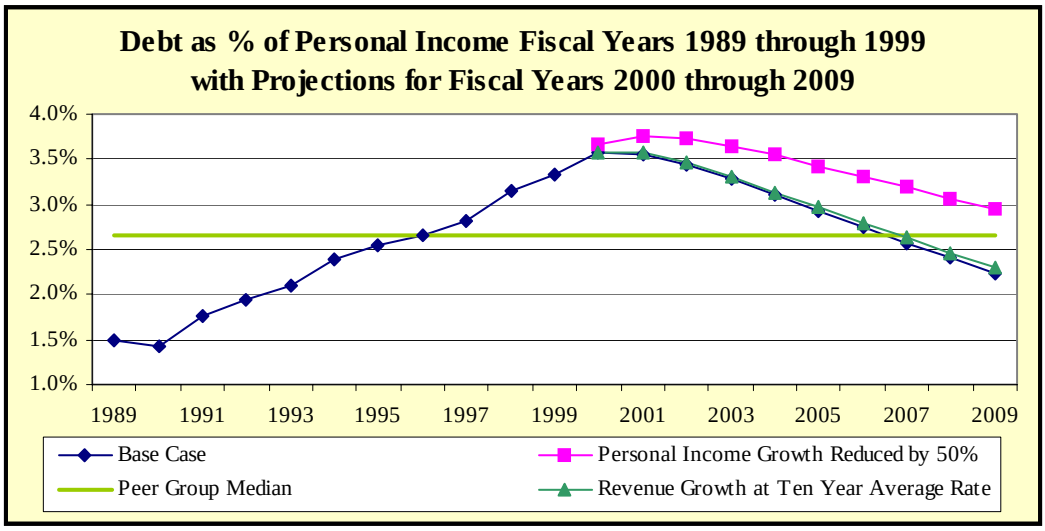


Figure 18

State net tax-supported debt as a percentage of personal income has increased from 1.49% at June 30, 1989 to 3.32% at June 30, 1999. Based on estimated increases in personal income and expected debt service over the next ten years, the debt ratio increases to 3.57% in 2000 before decreasing annually through 2009 to an estimated 2.24%. The pessimistic scenario indicates the ratio reaching a high of 3.76% in 2001 before declining annually through 2009 to 2.94% whereas the optimistic scenario shows a high of 3.58% in 2000 before declining to 2.30% in 2009.

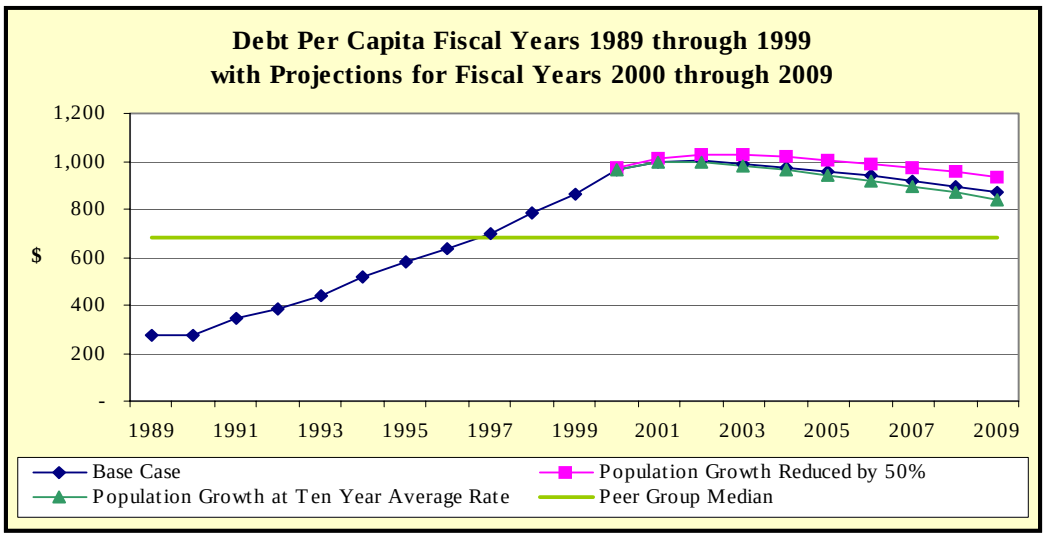


Figure 19

The State's net tax-supported debt per capita has increased from $275 at the end of fiscal 1989 to $861 at the end of fiscal 1999, representing an increase of $586 of additional debt per person over the last ten years. Based on estimated population growth and expected debt issuance over the next ten years, this trend continues reaching a peak in 2002 at $1,002 and decreasing annually through 2009 to an estimated $870. Coincidentally, this approximates the current debt per capita ratio of $861 at June 30, 1999. Under the more pessimistic scenario, debt per capita reaches a maximum of $1,029 in 2002 before declining to an estimated $937 in 2009 while under the more optimistic scenario debt per capita never exceeds $1,000.

Establishing Guidelines for Debt Ratios

The historical trend in the State's key debt ratios is not consistent with the projected trend in such ratios because projected economic growth exceeds expected debt issuance. The State cannot control the economic variables affecting the debt ratios but it does control the amount of debt to be issued. One of the purposes of this Debt Affordability Study is to measure debt capacity within an acceptable range. Even though economic variables could adversely affect debt ratios, the State would have the ability to monitor the impact and consider such changes in formulating borrowing plans.

Establishing guidelines for future debt issuance is a critical part of prudent debt management. Infrastructure requirements and financial resources should be reflected in the levels set. Guidelines that are too low or restrictive will not provide enough debt capacity to finance needed infrastructure. Relaxing the constraints to impose no limit on debt capacity could reduce future budgetary flexibility due to the excessive debt service burden and lead to a deteriorating credit position. Further complicating the process is the uncertainty inherent in projections. It is difficult to objectively determine the appropriate level of debt. Accordingly, the impact on the State's key debt ratios under the three economic scenarios has been evaluated to assess the volatility of the debt ratios in arriving at the guidelines used for calculating future debt capacity.

The debt service as a percentage of revenues ratio was determined to be the most appropriate measure for estimating State bonding capacity because State policymakers control both variables affecting the ratio. Tax revenues available to pay debt service are determined to a large extent by tax rates set by the Legislature or by exemptions from the tax base, and additional debt service requirements are determined by authorizing additional bonds through the appropriations process. ***This debt ratio also reflects the State's budgetary flexibility to reprioritize spending and respond to economic downturns by measuring what portion of the State's budget is consumed by long-term fixed cost.*** Since the attributes of this ratio make it subject to internally controlled variables, it is the measure selected for the basis of determining available debt capacity and debt affordability.

Debt Capacity as a Financial Management Tool

An approximate amount of debt available for future financing provides decisionmakers with key information on the long-term impact of bond issuance, determined here using the debt service to revenues ratio. ***The use of both target and cap benchmarks for the selected ratio permits theoretical bonding capacity to be calculated at both levels providing guidelines for determining the availability of debt as a funding source.*** For purposes of estimating bonding capacity, a target ratio of 6% and a cap of 8% has been used in the analysis.

The 6% target for the debt service as a percentage of revenues ratio maintains the expected debt burden over the next ten years at approximately the same level as currently contemplated. The portion of the budget dedicated to debt service is neither increased nor decreased. This target ratio ties additional debt capacity to revenue growth indicating more debt is affordable when the revenues are available to pay for such debt. The 8% cap was established since 10%, representing an excessive debt burden, would significantly limit future budgetary flexibility and could raise serious credit rating issues, especially during adverse economic cycles. The 8% cap provides a margin of safety from such concerns and provides sufficient flexibility regarding debt capacity, even during weak economic climates. Establishing a cap is somewhat subjective and based on our best judgment. It is not intended to be an absolute limit but rather a guide for determining debt levels which would not be prudent to exceed.

A target of 6% and cap of 8% has been used for determining potential bond capacity within each scenario assuming the projected issuance of debt as previously discussed. Set forth in Figure 20 below is the estimated bonding capacity available under each of the three economic scenarios for the 6% target and the 8% cap. Bonding capacity is available incrementally over the next ten years as revenues increase to support additional debt.

Debt Capacity Analysis

(In Billions)

	2000	2001-2003	2004-2006	2007-2009	Total
Base Case Assumption:					
Projected Bond Issuance	$ 2.29	$ 2.99	$ 1.86	$ 1.88	$ 9.01
Additional Capacity:					
Current Revenue Conference Projections[1]					
Debt Service Target of 6% of Revenues	-	-	1.80	1.50	3.30
Debt Service Cap of 8% of Revenues	2.00	4.00	3.00	3.00	12.00
Revenue Growth Reduced by 50% [2]					
Debt Service Target of 6% of Revenues	-	-	-	-	-
Debt Service Cap of 8% of Revenues	2.00	1.50	0.75	0.75	5.00
Revenue Growth at Ten Year Average Rate[3]					
Debt Service Target of 6% of Revenues	0.80	1.60	3.50	4.50	10.40
Debt Service Cap of 8% of Revenues	3.00	7.00	5.10	5.90	21.00

[1] Revenue base developed using the Revenue Conference, March 1999 forecast as provided by Economic and Demographic Research.

[2] Revenue base developed using 50% of the annual growth provided by Economic and Demographic Research.

[3] Revenue base developed by applying the average revenue growth rate from Fiscal Year 1989 to Fiscal Year 1999 to the actual Fiscal Year 1999 revenue amounts and each subsequent year.

Figure 20

The base case scenario provides estimated additional bond capacity of approximately $3.3 billion over the next ten years, using the most recent revenue projections provided by EDR and maintaining a 6% debt service to revenues ratio. Since debt service is anticipated to grow faster than revenues due to the expected $9 billion bond issuance, the 6% target ratio is exceeded in fiscal years 2001 through 2003. The base case scenario maintains the current level of expected debt burden for the next ten years since the target ratio will exceed 6% based on expected debt service until 2003. Therefore, the theoretical additional capacity of $3.3 billion would not become available until fiscal year 2004.

The economic sensitivity analysis based on the pessimistic scenario of one-half the expected growth in revenues shows the State would have no additional bonding capacity available through 2009 without increasing the debt service to revenues ratio beyond the 6% current level. This illustrates how a reduction in expected revenues could significantly impact the estimated bonding capacity. Under the optimistic scenario, however, based on the ten years historical revenue growth rate, the State would have an estimated $10.4 billion in additional bonding capacity without increasing this debt ratio.

The additional bonding capacity available under the 8% limit has also been estimated under the three economic scenarios. Under the most current EDR revenue estimates using an 8% limit, the estimated bonding capacity over the next ten years is $12 billion in addition to the $9 billion of expected debt under the existing bond programs. The estimated bonding capacity under the reduced revenue growth scenario is $5 billion and under the historical growth rate scenario is $21 billion. It should be noted that this is the maximum that could be borrowed without the ratio exceeding 8%.

Planning to issue debt up to the theoretical maximum debt capacity available is never advisable however. Bonding capacity should be kept in reserve to guard against exceeding prudent debt levels during less favorable economic climates or in response to unusual circumstances such as financing catastrophic losses from a hurricane. As the sensitivity analysis shows, changes in economic assumptions reflecting slower growth have a dramatic impact on estimated debt capacity. ***The significant impact of changing economic assumptions demonstrates the need for an ongoing annual evaluation of debt capacity estimates.***

As can be seen from Figure 20, the estimated debt capacity is not available at any one time. The debt capacity is accessible over the ten-year projection period based on the assumed revenue growth. If the revenue growth does not materialize, then no additional debt capacity is generated. Conversely, if revenue growth is greater than anticipated, more debt capacity is generated. Once the debt capacity due to revenue growth is used, however, it is not available again until the debt is amortized, usually 20 to 30 years. The analysis highlights the need for a conservative approach to utilizing debt capacity when incurring additional debt.

The estimated debt capacity is not intended to be an absolute limit on the amount of debt that can be incurred. It should be used as a guide to better long-term financial planning and more rigorous capital budgeting. Debt capacity estimates can assist long-term capital planning by showing the resources potentially available to fund critically needed infrastructure. The estimates can then be used to allocate this scarce resource to priority projects.

CONCLUSION AND RECOMMENDATIONS

The preceding analysis demonstrates the benefits gained from implementing an ongoing process for evaluating debt affordability and actively managing State debt. Florida's debt has risen sharply over the last ten years but is manageable at its current level. The sharp rise in debt indicates the need to implement the debt affordability analysis to monitor the State's debt position and to safeguard the State's strong credit ratings. Accordingly, the Division of Bond Finance recommends that the debt capacity model developed in this study be used to evaluate the future financial impact of new financing programs and to assess changing economic climates. The financial impact of new financing programs can be evaluated by projecting future debt service requirements and calculating the resulting debt ratios. The impact of changing economic climates can be assessed by using revised financial and economic estimates provided through the Revenue Estimating Conference process to periodically update the information generated from debt capacity analysis. Debt capacity estimates should be updated annually to include 1) current economic and revenue projections, 2) the current debt position, and 3) expected bond issuance.

Florida's debt ratios although high relative to national and peer group medians are at an acceptable level. Guideline debt ratios should be used to establish an acceptable range for the State's debt burden. It is recommended that debt service as a percentage of revenues be used as the debt ratio for determining available debt capacity. The guideline benchmarks should include a target ratio of 6% and a limit or cap ratio of 8%. The debt capacity estimates generated from the analysis should be used to integrate debt management with the capital budgeting process. Information provided by this analysis should be used by policymakers to prioritize capital spending and to determine the appropriate level of bonding in the capital budget.

The State's financial reserves have increased significantly due to the funding of the Budget Stabilization Fund and strong revenue collections. The level of reserves reflected by the ratio of reserves to general revenues stands at 7.8% and is viewed by financial analysts as being adequate. Although not directly related to debt affordability, the level of reserves is an important element of the State's credit rating. Accordingly, policymakers should consider establishing a policy for the appropriate level of reserves in excess of the 5% mandated by the Florida Constitution.

APPENDIX A

DEBT SERVICE SCHEDULES

Total State Debt Outstanding As of June 30, 1999

Fiscal Year	Self-Supporting Debt			Net Tax-Supported Debt			Total Existing Debt		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2000	$ 80,195,000	$ 203,257,633	$ 283,452,633	$ 436,225,396	$ 687,453,245	$ 1,123,678,641	$ 516,420,396	$ 890,710,877	$ 1,407,131,273
2001	84,430,000	198,422,543	282,852,543	458,746,011	666,088,269	1,124,834,280	543,176,011	864,510,811	1,407,686,823
2002	95,985,000	193,660,153	289,645,153	480,501,999	642,919,178	1,123,421,177	576,486,999	836,579,330	1,413,066,330
2003	105,240,000	188,281,685	293,521,685	495,583,051	618,370,737	1,113,953,788	600,823,051	806,652,422	1,407,475,473
2004	109,205,000	182,641,495	291,846,495	495,126,815	593,094,288	1,088,221,102	604,331,815	775,735,783	1,380,067,597
2005	113,270,000	176,647,070	289,917,070	495,206,010	568,226,255	1,063,432,265	608,476,010	744,873,325	1,353,349,335
2006	118,790,000	170,451,664	289,241,664	520,730,048	541,738,578	1,062,468,626	639,520,048	712,190,242	1,351,710,290
2007	123,310,000	163,669,329	286,979,329	548,176,405	513,613,172	1,061,789,577	671,486,405	677,282,500	1,348,768,906
2008	130,525,000	156,585,211	287,110,211	568,240,205	484,984,413	1,053,224,618	698,765,205	641,569,624	1,340,334,829
2009	139,190,000	149,085,795	288,275,795	590,611,575	455,710,659	1,046,322,234	729,801,575	604,796,454	1,334,598,029
2010	143,155,000	141,323,718	284,478,718	613,845,650	424,849,802	1,038,695,453	757,000,650	566,173,520	1,323,174,170
2011	149,985,000	133,156,345	283,141,345	640,767,575	391,984,930	1,032,752,504	790,752,575	525,141,275	1,315,893,849
2012	157,305,000	124,680,884	281,985,884	666,152,498	357,585,065	1,023,737,563	823,457,498	482,265,949	1,305,723,447
2013	163,250,000	115,838,710	279,088,710	692,855,577	321,694,153	1,014,549,730	856,105,577	437,532,863	1,293,638,440
2014	171,265,000	106,578,358	277,843,358	463,761,979	284,141,579	747,903,558	635,026,979	390,719,937	1,025,746,916
2015	164,250,000	96,760,143	261,010,143	459,856,879	259,765,780	719,622,659	624,106,879	356,525,922	980,632,801
2016	163,180,000	87,751,343	250,931,343	470,060,461	235,717,782	705,778,244	633,240,461	323,469,125	956,709,586
2017	169,800,000	78,881,381	248,681,381	467,112,919	211,860,354	678,973,274	636,912,919	290,741,736	927,654,655
2018	177,885,000	70,073,885	247,958,885	437,659,457	188,005,872	625,665,329	615,544,457	258,079,757	873,624,214
2019	185,815,000	60,817,728	246,632,728	388,910,291	166,094,914	555,005,205	574,725,291	226,912,642	801,637,932
2020	175,270,000	51,258,116	226,528,116	393,635,000	145,414,217	539,049,217	568,905,000	196,672,334	765,577,334
2021	170,640,000	42,289,919	212,929,919	437,035,000	124,097,684	561,132,684	607,675,000	166,387,603	774,062,603
2022	160,420,000	33,667,113	194,087,113	459,955,000	100,260,704	560,215,704	620,375,000	133,927,816	754,302,816
2023	149,615,000	24,969,944	174,584,944	444,165,000	74,884,975	519,049,975	593,780,000	99,854,919	693,634,919
2024	87,120,000	16,985,000	104,105,000	358,795,000	50,686,029	409,481,029	445,915,000	67,671,029	513,586,029
2025	91,680,000	12,538,338	104,218,338	298,055,000	31,608,397	329,663,397	389,735,000	44,146,735	433,881,735
2026	69,030,000	7,883,075	76,913,075	144,350,000	15,109,994	159,459,994	213,380,000	22,993,069	236,373,069
2027	70,620,000	4,525,806	75,145,806	101,735,000	7,809,469	109,544,469	172,355,000	12,335,275	184,690,275
2028	23,515,000	1,134,525	24,649,525	45,005,000	2,863,063	47,868,063	68,520,000	3,997,588	72,517,588
2029	-	-	-	5,305,000	729,000	6,034,000	5,305,000	729,000	6,034,000
2030	-	-	-	2,000,000	467,500	2,467,500	2,000,000	467,500	2,467,500
2031	-	-	-	2,000,000	357,500	2,357,500	2,000,000	357,500	2,357,500
2032	-	-	-	2,000,000	247,500	2,247,500	2,000,000	247,500	2,247,500
2033	-	-	-	2,000,000	137,500	2,137,500	2,000,000	137,500	2,137,500
2034	-	-	-	1,000,000	27,500	1,027,500	1,000,000	27,500	1,027,500
	$ 3,743,940,000	$ 2,993,816,904	$ 6,737,756,904	$ 13,087,165,801	$ 9,168,600,056	$ 22,255,765,857	$ 16,831,105,801	$ 12,162,416,959	$ 28,993,522,761

Net Tax-Supported Debt

Fiscal Year	Existing Debt Outstanding As of June 30, 1999			Projected Additional Debt			Total Existing and Projected Additional Debt		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2000	$ 436,225,396	$ 687,453,245	$ 1,123,678,641	$ 54,455,000	$ 65,800,880	$ 120,255,880	$ 490,680,396	$ 753,254,125	$ 1,243,934,521
2001	458,746,011	666,088,269	1,124,834,280	92,460,000	157,399,930	249,859,930	551,206,011	823,488,199	1,374,694,210
2002	480,501,999	642,919,178	1,123,421,177	121,800,000	213,469,027	335,269,027	602,301,999	856,388,205	1,458,690,204
2003	495,583,051	618,370,737	1,113,953,788	143,280,000	251,958,905	395,238,905	638,863,051	870,329,642	1,509,192,693
2004	495,126,815	593,094,288	1,088,221,102	163,705,000	283,866,715	447,571,715	658,831,815	876,961,002	1,535,792,817
2005	495,206,010	568,226,255	1,063,432,265	178,700,000	311,129,152	489,829,152	673,906,010	879,355,407	1,553,261,417
2006	520,730,048	541,738,578	1,062,468,626	194,720,000	337,132,950	531,852,950	715,450,048	878,871,528	1,594,321,576
2007	548,176,405	513,613,172	1,061,789,577	211,830,000	362,980,278	574,810,278	760,006,405	876,593,450	1,636,599,855
2008	568,240,205	484,984,413	1,053,224,618	235,415,000	388,389,201	623,804,201	803,655,205	873,373,614	1,677,028,819
2009	590,611,575	455,710,659	1,046,322,234	260,590,000	413,215,842	673,805,842	851,201,575	868,926,501	1,720,128,076
2010	613,845,650	424,849,802	1,038,695,453	282,500,000	427,107,943	709,607,943	896,345,650	851,957,745	1,748,303,395
2011	640,767,575	391,984,930	1,032,752,504	305,835,000	426,180,266	732,015,266	946,602,575	818,165,195	1,764,767,770
2012	666,152,498	357,585,065	1,023,737,563	321,145,000	410,565,709	731,710,709	987,297,498	768,150,774	1,755,448,272
2013	692,855,577	321,694,153	1,014,549,730	337,920,000	393,889,430	731,809,430	1,030,775,577	715,583,583	1,746,359,160
2014	463,761,979	284,141,579	747,903,558	322,850,000	376,097,455	698,947,455	786,611,979	660,239,034	1,446,851,013
2015	459,856,879	259,765,780	719,622,659	339,975,000	359,071,274	699,046,274	799,831,879	618,837,054	1,418,668,933
2016	470,060,461	235,717,782	705,778,244	358,105,000	340,911,219	699,016,219	828,165,461	576,629,001	1,404,794,462
2017	467,112,919	211,860,354	678,973,274	377,470,000	321,555,527	699,025,527	844,582,919	533,415,881	1,377,998,801
2018	437,659,457	188,005,872	625,665,329	398,160,000	300,926,255	699,086,255	835,819,457	488,932,126	1,324,751,584
2019	388,910,291	166,094,914	555,005,205	413,080,000	278,933,318	692,013,318	801,990,291	445,028,232	1,247,018,523
2020	393,635,000	145,414,217	539,049,217	366,185,000	255,843,215	622,028,215	759,820,000	401,257,433	1,161,077,433
2021	437,035,000	124,097,684	561,132,684	352,865,000	234,570,888	587,435,888	789,900,000	358,668,572	1,148,568,572
2022	459,955,000	100,260,704	560,215,704	335,230,000	213,520,440	548,750,440	795,185,000	313,781,144	1,108,966,144
2023	444,165,000	74,884,975	519,049,975	329,720,000	193,265,844	522,985,844	773,885,000	268,150,819	1,042,035,819
2024	358,795,000	50,686,029	409,481,029	324,045,000	173,244,415	497,289,415	682,840,000	223,930,444	906,770,444
2025	298,055,000	31,608,397	329,663,397	318,015,000	153,474,799	471,489,799	616,070,000	185,083,196	801,153,196
2026	144,350,000	15,109,994	159,459,994	311,655,000	133,989,696	445,644,696	456,005,000	149,099,690	605,104,690
2027	101,735,000	7,809,469	109,544,469	305,080,000	114,818,829	419,898,829	406,815,000	122,628,297	529,443,297
2028	45,005,000	2,863,063	47,868,063	298,070,000	95,993,165	394,063,165	343,075,000	98,856,227	441,931,227
2029	5,305,000	729,000	6,034,000	290,660,000	77,559,668	368,219,668	295,965,000	78,288,668	374,253,668
2030	2,000,000	467,500	2,467,500	217,805,000	59,555,744	277,360,744	219,805,000	60,023,244	279,828,244
2031	2,000,000	357,500	2,357,500	162,275,000	46,208,482	208,483,482	164,275,000	46,565,982	210,840,982
2032	2,000,000	247,500	2,247,500	138,915,000	36,156,527	175,071,527	140,915,000	36,404,027	177,319,027
2033	2,000,000	137,500	2,137,500	116,590,000	27,549,888	144,139,888	118,590,000	27,687,388	146,277,388
2034	1,000,000	27,500	1,027,500	97,785,000	20,325,600	118,110,600	98,785,000	20,353,100	119,138,100
2035	-	-	-	82,485,000	14,266,280	96,751,280	82,485,000	14,266,280	96,751,280
2036	-	-	-	65,290,000	9,155,970	74,445,970	65,290,000	9,155,970	74,445,970
2037	-	-	-	46,300,000	5,114,078	51,414,078	46,300,000	5,114,078	51,414,078
2038	-	-	-	25,420,000	2,252,108	27,672,108	25,420,000	2,252,108	27,672,108
2039	-	-	-	2,340,000	687,638	3,027,638	2,340,000	687,638	3,027,638
2040	-	-	-	2,470,000	557,150	3,027,150	2,470,000	557,150	3,027,150
2041	-	-	-	2,605,000	419,513	3,024,513	2,605,000	419,513	3,024,513
2042	-	-	-	2,755,000	274,175	3,029,175	2,755,000	274,175	3,029,175
2043	-	-	-	2,910,000	120,588	3,030,588	2,910,000	120,588	3,030,588
	$ 13,087,165,801	$ 9,168,600,056	$ 22,255,765,857	$ 9,311,465,000	$ 8,289,505,969	$ 17,600,970,969	$ 22,398,630,801	$ 17,458,106,025	$ 39,856,736,826

APPENDIX B

HISTORICAL DEBT RATIOS

State Taxes Supporting Debt - Historical Revenue Available

Fiscal Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Revenue Available *(In Millions)*:											
General Revenue	$ 9,259.5	$ 9,906.9	$10,114.7	$10,911.5	$12,058.6	$13,042.9	$13,639.7	$14,651.4	$15,700.2	$16,951.8	$17,861.7
Less: Doc Stamp Distribution	(271.4)	(261.1)	(305.8)	(359.1)	(369.9)	(431.8)	(359.3)	(329.7)	(349.4)	(429.6)	(458.4)
Net General Revenue	8,988.1	9,645.8	9,808.9	10,552.4	11,688.7	12,611.1	13,280.4	14,321.7	15,350.8	16,522.2	17,403.3
Dedicated Trust Fund Revenue											
Gross Receipts	227.6	290.0	333.6	391.4	447.8	459.4	508.4	543.3	575.7	634.2	629.1
Motor Vehicle License	347.8	351.4	342.5	362.4	365.7	379.3	387.3	412.8	425.6	442.3	472.0
Lottery	693.8	806.8	876.6	845.3	850.1	851.0	870.4	817.9	818.4	801.7	773.5
Documentary Stamp Tax	313.6	301.1	371.4	425.5	517.5	653.6	586.5	591.5	644.1	797.6	873.7
Severance Tax-CARL TF	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Motor Fuel Tax	410.8	411.7	492.4	530.5	574.8	605.4	639.3	669.9	694.2	732.3	672.9
Tax on Pollutants-IPTF	41.6	36.5	40.8	64.8	170.2	174.2	176.1	180.7	181.7	185.4	191.0
SUS Net Bldg Fees & Cap. Impr.Fees	15.6	18.6	18.0	18.4	19.7	20.6	21.5	22.6	22.6	23.5	24.3
Total Revenue Available for Debt Service	**$11,048.9**	**$11,871.9**	**$12,294.2**	**$13,200.6**	**$14,644.5**	**$15,764.7**	**$16,479.8**	**$17,570.4**	**$18,723.3**	**$20,149.2**	**$21,049.8**

Historical Statistics and Debt Ratios

Fiscal Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Revenue Available *(In Millions)*	$11,048.9	$11,871.9	$12,294.2	$13,200.6	$14,644.5	$15,764.7	$16,479.8	$17,570.4	$18,723.3	$20,149.2	$21,049.8
Annual Growth Rate of Revenues	-	7.45%	3.56%	7.37%	10.94%	7.65%	4.54%	6.62%	6.56%	7.62%	4.47%
Debt Service *(In Millions)*	$ 354.4	$ 304.0	$ 370.9	$ 449.6	$ 525.0	$ 601.5	$ 671.7	$ 741.6	$ 801.4	$ 928.1	$ 1,071.7
Total Debt *(In Millions)*	$ 3,477.4	$ 3,524.3	$ 4,517.7	$ 5,202.7	$ 5,991.0	$ 7,232.7	$ 8,190.1	$ 9,130.6	$10,270.1	$11,754.1	$13,087.2
Debt Service % of Revenue	3.21%	2.56%	3.02%	3.41%	3.58%	3.82%	4.08%	4.22%	4.28%	4.61%	5.09%
Population *(In Thousands)*	12,651	12,937	13,196	13,424	13,609	13,879	14,149	14,412	14,713	14,930	15,200
Per Capita Personal Income	$ 18,405	$ 19,128	$ 19,457	$ 19,912	$ 21,081	$ 21,758	$ 22,665	$ 23,833	$ 24,795	$ 24,955	$ 25,925
Debt Per Capita	$ 275	$ 272	$ 342	$ 388	$ 440	$ 521	$ 579	$ 634	$ 698	$ 787	$ 861
Debt as % of Personal Income	1.49%	1.42%	1.76%	1.95%	2.09%	2.40%	2.55%	2.66%	2.82%	3.15%	3.32%
General Fund Balance *(In Millions)*	$ 215.3	$ 294.3	$ 98.3	$ 101.5	$ 461.0	$ 411.3	$ 601.8	$ 905.4	$ 1,509.9	$ 1,437.5	$ 1,360.3
General Fund Balance as a % of Revenue	2.39%	3.05%	1.00%	0.96%	3.94%	3.26%	4.53%	6.32%	9.84%	8.70%	7.82%

APPENDIX C

ECONOMIC AND INTEREST RATE ASSUMPTIONS FOR PROJECTIONS

Projected Revenue Available for State Tax-Supported Debt

(In Millions)

Fiscal Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Base Case Scenario:											
Revenue Available:											
General Revenue[1]	$17,861.7	$18,228.4	$19,116.4	$19,935.4	$20,928.9	$21,983.1	$23,129.4	$24,346.2	$25,547.5	$26,751.6	$28,097.3
Less: Doc Stamp Distribution	(458.4)	(425.6)	(406.8)	(429.0)	(454.4)	(482.9)	(510.7)	(541.3)	(571.3)	(603.1)	(635.6)
Net General Revenue	17,403.3	17,802.8	18,709.6	19,506.4	20,474.5	21,500.2	22,618.7	23,804.9	24,976.2	26,148.5	27,461.7
Dedicated Trust Fund Revenue											
Gross Receipts	629.1	642.9	667.5	694.1	714.9	736.4	758.9	781.7	805.2	830.3	856.3
Motor Vehicle License	472.0	478.7	486.5	494.4	502.7	510.5	518.4	525.2	532.5	540.2	547.2
Lottery	773.5	777.8	786.1	792.5	798.7	804.9	810.8	816.7	822.4	827.9	833.5
Documentary Stamp Tax	873.7	883.4	954.2	984.7	1,019.1	1,057.7	1,095.9	1,137.5	1,178.4	1,222.1	1,266.9
Severance Tax-CARL TF	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Motor Fuel Tax	672.9	704.8	737.6	773.0	811.9	848.0	891.5	935.3	980.6	1,026.0	1,072.6
Tax on Pollutants-IPTF	191.0	195.5	200.0	204.4	208.7	212.9	217.2	221.3	225.5	229.6	233.7
SUS Net Bldg Fees & Cap. Impr.Fees[2]	24.3	25.2	26.1	27.1	28.0	28.9	29.8	30.7	31.6	32.5	33.4
Total Revenue Available for Debt Service	**$21,049.8**	**$21,521.1**	**$22,577.7**	**$23,486.6**	**$24,568.5**	**$25,709.6**	**$26,951.2**	**$28,263.3**	**$29,562.5**	**$30,867.1**	**$32,315.3**
Revenue Growth Reduced by 50%	**$21,049.8**	**$21,510.8**	**$21,981.9**	**$22,463.3**	**$22,955.2**	**$23,457.9**	**$23,971.7**	**$24,496.7**	**$25,033.1**	**$25,581.4**	**$26,141.6**
Revenue Growth at Ten Year Average Rate	**$21,049.8**	**$22,451.7**	**$23,947.0**	**$25,541.9**	**$27,243.0**	**$29,057.3**	**$30,992.6**	**$33,056.7**	**$35,258.2**	**$37,606.4**	**$40,111.0**

[1] Provided by Economic and Demographic Research

[2] Projections after Fiscal Year 2004 are estimated based on average annual growth dollars

Projected Per Capita Personal Income

Fiscal Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Base Case Scenario[1]	**$25,925**	**$26,957**	**$27,992**	**$29,068**	**$30,192**	**$31,429**	**$32,736**	**$34,170**	**$35,670**	**$37,211**	**$38,891**
Revenue Growth Reduced by 50%	**$25,925**	**$26,465**	**$27,017**	**$27,579**	**$28,155**	**$28,741**	**$29,341**	**$29,953**	**$30,577**	**$31,215**	**$31,865**
Revenue Growth at Ten Year Average Rate	**$25,925**	**$26,829**	**$27,763**	**$28,732**	**$29,734**	**$30,769**	**$31,842**	**$32,952**	**$34,100**	**$35,289**	**$36,519**

[1] Provided by Economic and Demographic Research

Projected Population

(In Thousands)

Fiscal Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Base Case Scenario[1]	**15,200.1**	**15,460.0**	**15,716.7**	**15,970.9**	**16,222.1**	**16,469.9**	**16,713.2**	**16,951.3**	**17,185.6**	**17,418.1**	**17,650.2**
Revenue Growth Reduced by 50%	**15,200.1**	**15,314.0**	**15,429.0**	**15,545.0**	**15,661.0**	**15,779.0**	**15,897.0**	**16,016.0**	**16,136.0**	**16,257.0**	**16,379.0**
Revenue Growth at Ten Year Average Rate	**15,200.1**	**15,481.0**	**15,768.0**	**16,059.0**	**16,356.0**	**16,659.0**	**16,967.0**	**17,281.0**	**17,601.0**	**17,926.0**	**18,258.0**

[1] Provided by Economic and Demographic Research

Interest Rate Assumptions for Debt Service Projections

The assumed interest rates were calculated for each bond program based on the applicable Municipal Market Data ("MMD") scale on May 6, 1999 plus 100 basis points. A hypothetical bond issue was structured for each bond program reflecting the appropriate maturity. The following is a summary of the true interest cost calculation, maturity and applicable interest scale for each bond program.

Assumed True Interest Cost (TIC), maturity structure and interest scale used for debt service projections

	TIC	Maturity	Scale Used
Variable Rate Programs:			
Master Equipment Lease Program	5.00%	5 year	Insured Revenue
Affordable Housing Program	5.50%	40 year	Insured Revenue
Fixed Rate Programs:			
Lottery Revenue Bonds (Maximum annual debt service of $180 million)	4.75%	20 year	Insured Revenue
Florida Ports Bonds (Maximum annual debt service of $10 million)	6.10%	30 year	Insured Revenue
Preservation 2000 Bonds	5.52%	13 year	Insured Revenue
Florida Forever Bonds	5.82%	20 year	Insured Revenue
PECO Bonds	6.04%	30 year	Florida GO
Right-of-Way Bonds	6.04%	30 year	Florida GO
Florida Facilities Pool Bonds	6.05%	30 year	Insured Revenue

Set forth below are the interest rate scales used for the projections compared with MMD scales as of October 12, 1999. Due to rising interest rates a portion the 100 basis point cushion has eroded. The following is not intended to be a projection of future interest rates but was used to estimate future debt service.

Interest Scales

Year	5/6/1999 MMD FL GO Plus 100bpts.	10/12/1999 MMD FL GO
1	4.18	3.73
2	4.53	4.11
3	4.66	4.28
4	4.78	4.41
5	4.93	4.51
6	5.03	4.64
7	5.13	4.74
8	5.23	4.84
9	5.31	4.94
10	5.41	5.02
11	5.55	5.13
12	5.65	5.23
13	5.73	5.33
14	5.78	5.47
15	5.83	5.51
16	5.93	5.57
17	6.01	5.62
18	6.06	5.67
19	6.11	5.70
20	6.13	5.73
21	6.15	5.76
22	6.16	5.77
23	6.17	5.78
24	6.18	5.79
25	6.19	5.80
26	6.20	5.81
27	6.21	5.82
28	6.21	5.82
29	6.21	5.82
30	6.21	5.82

Year	5/6/1999 MMD Ins Rev Plus 100bpts.	10/12/1999 MMD Ins Rev
1	4.20	3.80
2	4.60	4.18
3	4.73	4.35
4	4.85	4.48
5	5.00	4.58
6	5.10	4.73
7	5.20	4.83
8	5.30	4.93
9	5.38	5.03
10	5.51	5.10
11	5.63	5.20
12	5.73	5.30
13	5.81	5.40
14	5.86	5.50
15	5.91	5.60
16	5.98	5.67
17	6.06	5.72
18	6.11	5.77
19	6.16	5.80
20	6.18	5.81
21	6.20	5.83
22	6.21	5.84
23	6.22	5.85
24	6.23	5.86
25	6.24	5.87
26	6.25	5.88
27	6.26	5.89
28	6.26	5.89
29	6.26	5.89
30	6.24	5.91

APPENDIX D

PROJECTED DEBT RATIOS

THE STATE OF FLORIDA
1999 Debt Affordability Report
Base Case

Assumptions to the Base Case:

(1) Provided by the State.
(2) Includes General Revenues (less Documentary Stamp Distribution) and Specific Tax Revenues dedicated to bond issues.
(3) Total Personal Income - source: State of Florida Economic and Demographic Research.
(4) Population - source: State of Florida Economic and Demographic Research.

	Moody's Median 1998	Actual 1999	Projected 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL 2000-2009
Net Tax-Supported Debt (000's)													
Beginning Outstanding		$13,489,125	$13,087,166	$14,881,965	$15,653,139	$15,998,242	$16,081,779	$16,079,248	$15,997,242	$15,889,691	$15,744,985	$15,565,530	
Issuances			2,285,480	1,322,380	947,405	722,400	656,300	591,900	607,900	615,300	624,200	638,200	9,011,465
Retirements: Existing Debt		401,959	436,225	458,746	480,502	495,583	495,127	495,206	520,730	548,176	568,240	590,612	5,089,148
New Debt (1)			54,455	92,460	121,800	143,280	163,705	178,700	194,720	211,830	235,415	260,590	1,656,955
Total Retirements		401,959	490,680	551,206	602,302	638,863	658,832	673,906	715,450	760,006	803,655	851,202	6,746,103
Net New Debt		(401,959)	1,794,800	771,174	345,103	83,537	(2,532)	(82,006)	(107,550)	(144,706)	(179,455)	(213,002)	2,265,362
Ending Outstanding		13,087,166	14,881,965	15,653,139	15,998,242	16,081,779	16,079,248	15,997,242	15,889,691	15,744,985	15,565,530	15,352,528	
Existing Debt Service (000's)		1,071,739	1,123,679	1,124,834	1,123,421	1,113,954	1,088,221	1,063,432	1,062,469	1,061,790	1,053,225	1,046,322	
New Debt Service (000's) (1)		0	120,256	249,860	335,269	395,239	447,572	489,829	531,853	574,810	623,804	673,806	
Total Debt Service (000's)		1,071,739	1,243,935	1,374,694	1,458,690	1,509,193	1,535,793	1,553,261	1,594,322	1,636,600	1,677,029	1,720,128	
Revenues (000's) (2)		21,049,800	21,521,100	22,577,700	23,486,600	24,568,500	25,709,600	26,951,200	28,263,300	29,562,500	30,867,100	32,315,300	
Annual Growth Rate			2.24%	4.91%	4.03%	4.61%	4.64%	4.83%	4.87%	4.60%	4.41%	4.69%	4.38%
Debt Service as a Percent of Revenues	10.00% *	5.09%	5.78%	6.09%	6.21%	6.14%	5.97%	5.76%	5.64%	5.54%	5.43%	5.32%	
Total Personal Income (000,000's) (3)		$394,060	$416,755	$439,950	$464,245	$489,775	$504,468	$547,117	$579,216	$613,025	$648,141	$686,426	
Annual Growth Rate			5.76%	5.57%	5.52%	5.50%	3.00%	8.45%	5.87%	5.84%	5.73%	5.91%	5.71%
Debt to Personal Income	1.90%	3.32%	3.57%	3.56%	3.45%	3.28%	3.19%	2.92%	2.74%	2.57%	2.40%	2.24%	
Population (000's) (4)		15,200	15,460	15,717	15,971	16,222	16,470	16,713	16,951	17,186	17,418	17,650	
Annual Growth Rate			1.71%	1.66%	1.62%	1.57%	1.53%	1.48%	1.42%	1.39%	1.35%	1.33%	1.51%
Debt Per Capita	$446	$861	$963	$996	$1,002	$991	$976	$957	$937	$916	$894	$870	

* Rule of thumb used by financial analysts as a warning level that should not be exceeded, as greater relative amount would place too heavy a fixed cost burden on the budget, thereby limiting fiscal flexibility. The last time Moody's provided median debt service as a percent of revenues ratio was in 1996 when the ratio was 3.50%.

Base Case Scenario

THE STATE OF FLORIDA
1999 Debt Affordability Report
Sensitivity Case I: Decreased Projected Annual Growth Rates of Revenues, Total Personal Income and Population

Assumptions to the Sensitivity Case I:
(1) Provided by the State.
(2) Includes General Revenues (less Documentary Stamp Distribution) and Specific Tax Revenues dedicated to bond issues. Assumes annual growth rate of 2.19%.
(3) Total Personal Income - source: State of Florida Economic and Demographic Research for 1999 figure of $394,060 million. Assumes annual growth rate of 2.85% thereafter.
(4) Population - source: State of Florida Economic and Demographic Research for 1999 figure of 15,200,000. Assumes annual growth rate of 0.75% thereafter.

	Moody's Median 1998	Actual 1999	Projected 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL 2000-2009
Net Tax-Supported Debt (000's)													
Beginning Outstanding		$13,489,125	$13,087,166	$14,881,965	$15,653,139	$15,998,242	$16,081,779	$16,079,248	$15,997,242	$15,889,691	$15,744,985	$15,565,530	
Issuances			2,285,480	1,322,380	947,405	722,400	656,300	591,900	607,900	615,300	624,200	638,200	9,011,465
Retirements: Existing Debt		401,959	436,225	458,746	480,502	495,583	495,127	495,206	520,730	548,176	568,240	590,612	5,089,148
New Debt (1)			54,455	92,460	121,800	143,280	163,705	178,700	194,720	211,830	235,415	260,590	1,656,955
Total Retirements		401,959	490,680	551,206	602,302	638,863	658,832	673,906	715,450	760,006	803,655	851,202	6,746,103
Net New Debt		(401,959)	1,794,800	771,174	345,103	83,537	(2,532)	(82,006)	(107,550)	(144,706)	(179,455)	(213,002)	2,265,362
Ending Outstanding		13,087,166	14,881,965	15,653,139	15,998,242	16,081,779	16,079,248	15,997,242	15,889,691	15,744,985	15,565,530	15,352,528	
Existing Debt Service (000's)		1,071,739	1,123,679	1,124,834	1,123,421	1,113,954	1,088,221	1,063,432	1,062,469	1,061,790	1,053,225	1,046,322	
New Debt Service (000's) (1)		0	120,256	249,860	335,269	395,239	447,572	489,829	531,853	574,810	623,804	673,806	
Total Debt Service (000's)		1,071,739	1,243,935	1,374,694	1,458,690	1,509,193	1,535,793	1,553,261	1,594,322	1,636,600	1,677,029	1,720,128	
Revenues (000's) (2)		21,049,800	21,510,791	21,981,877	22,463,280	22,955,226	23,457,945	23,971,674	24,496,654	25,033,131	25,581,356	26,141,588	
Annual Growth Rate			2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%
Debt Service as a Percent of Revenues	10.00% *	5.09%	5.78%	6.25%	6.49%	6.57%	6.55%	6.48%	6.51%	6.54%	6.56%	6.58%	
Total Personal Income (000,000's) (3)		$394,060	$405,291	$416,841	$428,721	$440,940	$453,507	$466,432	$479,725	$493,397	$507,459	$521,922	
Annual Growth Rate			2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%
Debt to Personal Income	1.90%	3.32%	3.67%	3.76%	3.73%	3.65%	3.55%	3.43%	3.31%	3.19%	3.07%	2.94%	
Population (000's) (4)		15,200	15,314	15,429	15,545	15,661	15,779	15,897	16,016	16,136	16,257	16,379	
Annual Growth Rate			0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%
Debt Per Capita	$446	$861	$972	$1,015	$1,029	$1,027	$1,019	$1,006	$992	$976	$957	$937	

* Rule of thumb used by financial analysts as a warning level that should not be exceeded, as greater relative amount would place too heavy a fixed cost burden on the budget, thereby limiting fiscal flexibility. The last time Moody's provided median debt service as a percent of revenues ratio was in 1996 when the ratio was 3.50%.

Revenue Growth Reduced by 50%

THE STATE OF FLORIDA
1999 Debt Affordability Report
Sensitivity Case II: Projected Annual Growth Rates of Revenues, Total Personal Income and Population Correspond To Respective Historical Growth Rates

Assumptions to the Sensitivity Case II:
(1) Provided by the State.
(2) Includes General Revenues (less Documentary Stamp Distribution) and Specific Tax Revenues dedicated to bond issues. Assumes annual growth rate of 6.66%.
(3) Total Personal Income - source: State of Florida Economic and Demographic Research for 1999 figure of $394,060 million. Assumes annual growth rate of 5.40% thereafter.
(4) Population - source: State of Florida Economic and Demographic Research for 1999 figure of 15,200,000. Assumes annual growth rate of 1.85% thereafter.

	Moody's Median 1998	Actual 1999	Projected 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL 2000-2009
Net Tax-Supported Debt (000's)													
Beginning Outstanding		$13,489,125	$13,087,166	$14,881,965	$15,653,139	$15,998,242	$16,081,779	$16,079,248	$15,997,242	$15,889,691	$15,744,985	$15,565,530	
Issuances			2,285,480	1,322,380	947,405	722,400	656,300	591,900	607,900	615,300	624,200	638,200	9,011,465
Retirements: Existing Debt		401,959	436,225	458,746	480,502	495,583	495,127	495,206	520,730	548,176	568,240	590,612	5,089,148
New Debt (1)			54,455	92,460	121,800	143,280	163,705	178,700	194,720	211,830	235,415	260,590	1,656,955
Total Retirements		401,959	490,680	551,206	602,302	638,863	658,832	673,906	715,450	760,006	803,655	851,202	6,746,103
Net New Debt		(401,959)	1,794,800	771,174	345,103	83,537	(2,532)	(82,006)	(107,550)	(144,706)	(179,455)	(213,002)	2,265,362
Ending Outstanding		13,087,166	14,881,965	15,653,139	15,998,242	16,081,779	16,079,248	15,997,242	15,889,691	15,744,985	15,565,530	15,352,528	
Existing Debt Service (000's)		1,071,739	1,123,679	1,124,834	1,123,421	1,113,954	1,088,221	1,063,432	1,062,469	1,061,790	1,053,225	1,046,322	
New Debt Service (000's) (1)		0	120,256	249,860	335,269	395,239	447,572	489,829	531,853	574,810	623,804	673,806	
Total Debt Service (000's)		1,071,739	1,243,935	1,374,694	1,458,690	1,509,193	1,535,793	1,553,261	1,594,322	1,636,600	1,677,029	1,720,128	
Revenues (000's) (2)		21,049,800	22,451,717	23,947,001	25,541,871	27,242,960	29,057,341	30,992,560	33,056,664	35,258,238	37,606,437	40,111,026	
Annual Growth Rate			6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%
Debt Service as a Percent of Revenues	10.00% *	5.09%	5.54%	5.74%	5.71%	5.54%	5.29%	5.01%	4.82%	4.64%	4.46%	4.29%	
Total Personal Income (000,000's) (3)		$394,060	$415,339	$437,768	$461,407	$486,323	$512,584	$540,264	$569,438	$600,188	$632,598	$666,758	
Annual Growth Rate			5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%
Debt to Personal Income	1.90%	3.32%	3.58%	3.58%	3.47%	3.31%	3.14%	2.96%	2.79%	2.62%	2.46%	2.30%	
Population (000's) (4)		15,200	15,481	15,768	16,059	16,356	16,659	16,967	17,281	17,601	17,926	18,258	
Annual Growth Rate			1.85%	1.85%	1.85%	1.85%	1.85%	1.85%	1.85%	1.85%	1.85%	1.85%	1.85%
Debt Per Capita	$446	$861	$961	$993	$996	$983	$965	$943	$919	$895	$868	$841	

* Rule of thumb used by financial analysts as a warning level that should not be exceeded, as greater relative amount would place too heavy a fixed cost burden on the budget, thereby limiting fiscal flexibility. The last time Moody's provided median debt service as a percent of revenues ratio was in 1996 when the ratio was 3.50%.

Revenue Growth at Ten-Year Average Rate

APPENDIX E

1999 STATE DEBT MEDIANS
Moody's Investors Service

BENCHMARK GENERAL OBLIGATION RATIOS
Standard & Poor's

Moody's Investors Service
Municipal Credit Research

March 1999

Special Comment

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1999 State Debt Medians

This special comment presents Moody's annual analysis of the State Debt Medians. The debt medians are based on two measures of state debt burden – debt per capita and debt as a percentage of personal income. They are based on analysis of tax-exempt and taxable municipal obligations issued by each state and supported by the tax base and are the debt burden measures most commonly used by municipal analysts. While debt burden is only one among numerous factors that determine a credit rating, it plays a significant role in Moody's determination of credit quality.

The 1999 State Debt Medians reflect net state-tax supported debt as of the end of calendar 1998.

STATE DEBT GREW MORE SLOWLY THAN OVERALL DEBT MARKET

State tax-supported debt grew at a slower rate than total debt outstanding in the credit markets. Among the major sectors of the debt markets, only debt issued by the federal government grew more slowly. Growth of state tax supported debt, which had been slowing in the mid-1990s, accelerated in 1998, outpacing state personal income growth of 5.0%. Recent growth in net tax supported debt, however, is significantly slower than in the early 1990s when it reached double digit levels for five consecutive years.

continued on page 3

Moody's State General Obligation Bond Ratings

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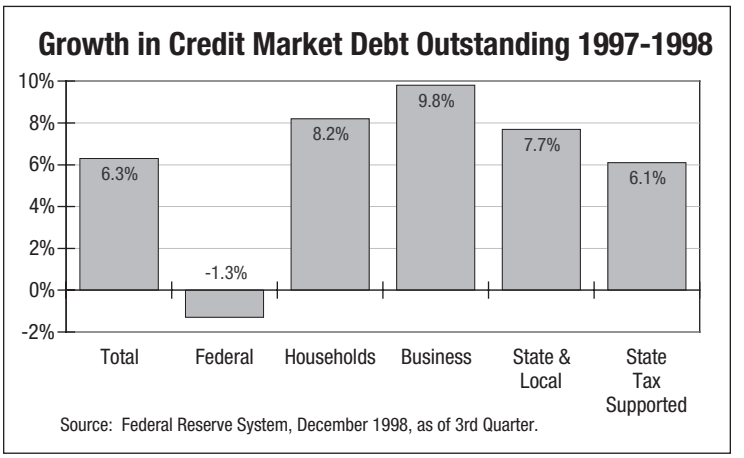
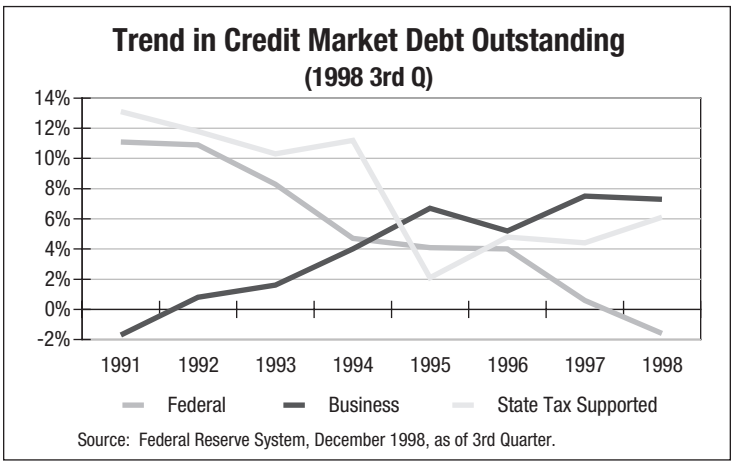
Outstanding federal debt declined in 1998 for the first time since 1969, a result of large federal cash surpluses and lower interest rates. The rate of increase in business debt was the fastest of any sector, continuing its steady rise spurred by the steady economic expansion of the national economy, now a record in length.

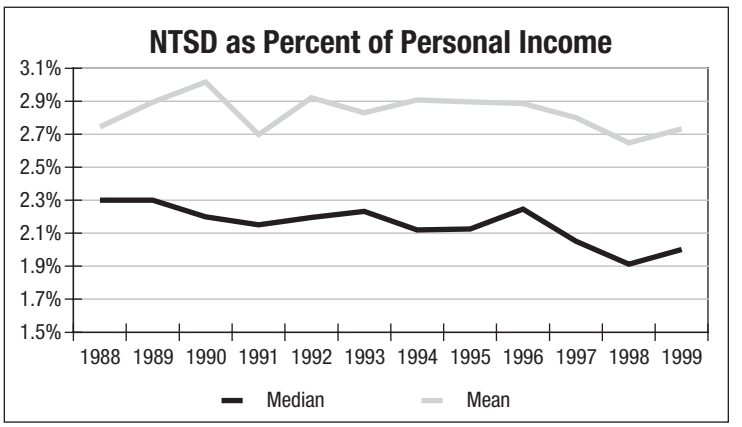
Combined state and local debt grew faster than other parts of the debt market, indicating an increased willingness on the part of voters and ability on the part of states and localities to take on additional debt and meet the demands of infrastructure renewal and replacement.





STATE DEBT RATIO GROWS SLIGHTLY, REVERSING THREE YEAR TREND

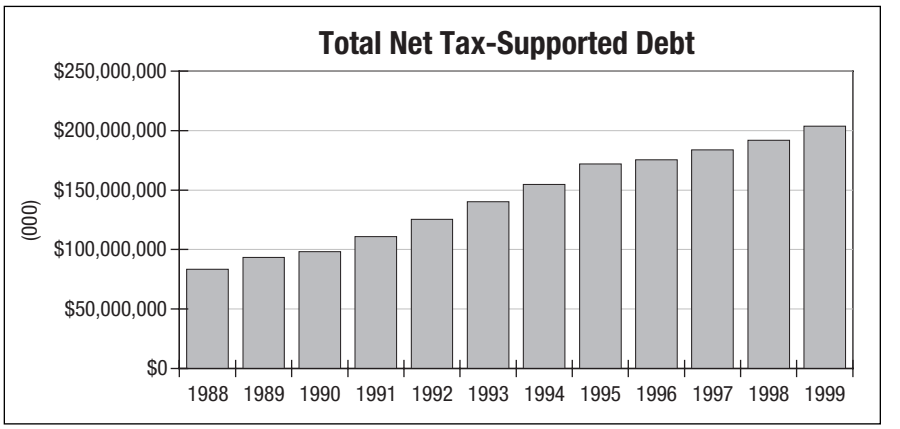
States' debt to personal income ratio, a key measure of debt affordability, grew in 1998, reversing a three year trend. State net tax-supported debt grew at a rate substantially greater than inflation and in excess of personal income growth, resulting in a rise in this key measure of debt affordability; from 1.9% to 2.0%. After declining from 2.25% in 1996 to 1.91% in 1998, a $11.7 billion rise in tax supported debt was supported by prosperous state economies, strong state finances, and high levels of consumer confidence. States increased their debt issuance in response to the demands for new infrastructure development and to repair and replace aging infrastructure which had been neglected during the economic recession of the early 1990s. Earlier in the decade, infrastructure maintenance had been a casualty of weak state revenue growth and double-digit growth in Medicaid spending that forced cutbacks in capital spending and caused voters to defeat new bond authorizations.



STRONG PUBLIC SUPPORT FOR INFRASTRUCTURE INVESTMENT

As state balance sheets improved with the record national economic expansion, fund balances have risen to record levels in many states, and credit quality has also improved with upgrades of tax-backed bonds outnumbering downgrades sharply by a seven to one margin in 1998. In 1998 debt issuance also grew, reflecting the view that low interest rates and strong economies make capital investments affordable. Over 90% of state and local ballot measures authorizing new debt were approved by the voters in November 1998, despite growing international economic instability and stock market volatility. The rate of bond measure

approval was far better in the November elections than in previous years; only 59% were approved in 1997 and 66% in 1996.



Support by elected officials is strong for reinvestments in neglected capital infrastructure and new infrastructure development, particularly in the areas of transportation, schools, higher educational institutions and parks and environmental protection.

BACKLOG OF CAPITAL INFRASTRUCTURE NEEDS REMAINS LARGE

Pent-up public capital infrastructure needs across the nation are the driving force behind the current growth of state debt. A recent study by the American Society of Civil Engineers, for example, pegged the number to repair and renew public infrastructure at $1.3 trillion over the next five years. Roads, bridges, schools, transit, drinking water and wastewater were the areas in which the largest capital investments are needed at all levels of government: federal, state and local.

Higher education institutions will need to accommodate the baby boom "echo", which will likely add, on average, an additional 240,000 students nationwide, per year, to graduating high school classes in each of the next 10 years. At the elementary and secondary school level, the U.S. General Accounting Office estimates that over 25,000 of America's 80,000 schools are in need of serious repairs. In November, California voters approved $9.2 billion in state general obligation bonds for school construction. Prison construction represents another significant area of pent-up state capital spending demand. The U.S. Department of Justice reports that state prisons are operating at 15% to 24% above capacity even after the 542,000 in increased prison capacity added nationally since 1990. Since 1990, the nation's incarcerated population has grown by an average annual rate of 6.5%, over six times the rate of general population growth.

OUTLOOK AND CONCLUSION

We expect state new money investment in capital infrastructure to continue to grow as long as the national economy remains strong, given the health of state finances and the public support for capital investment, even that financed with debt. The low cost of borrowing and the pent-up demand for capital improvements to meet the needs of a growing population and deferred infrastructure repair will likely cause debt levels to continue to move upwards.

States across the nation, recognizing the large gap between capital needs and affordability, have turned to state debt management commissions and long term state capital management plans to prioritize capital needs and allocate limited debt capacity. Over the next few years, the capital priority setting and allocation efforts will take on increased importance as states wrestle to make choices among the competing demands for capital funds.

Selected State Summaries

PUERTO RICO DEBT BURDEN GREATLY EXCEEDS ALL STATES

The Commonwealth of Puerto Rico (general obligations rated Baa1) issues a large amount of debt annually, and investor interest is strong due to the nationwide state and local income tax exemption accorded to Puerto Rico bonds. For the sake of consistency, however, the debt information and ratios for Puerto Rico have not been included in the state rankings and calculations of the 50-state medians, as the Commonwealth's debt ratios would heavily skew the overall results.

The Commonwealth has a heavy, and growing, debt load, reflecting in part its strongly centralized government – with many functions assumed by the Commonwealth which are carried out by localities in most other states – and also the broad scope of the infrastructure development tasks it has undertaken. The current ratio of tax supported debt to personal income is over 48%, more than twenty times the 50-state median and more than four times as high as the most heavily indebted of the states. The ratio is affected by the low levels of income in Puerto Rico (per capita income is about one-third the US average), and by the large absolute amount of debt. At $15.6 billion, the Commonwealth government has more outstanding tax-supported debt than all but two of the states.

From the mid 1970s to mid 1990's, the Commonwealth's debt policy sought to maintain a stable relationship between increases in debt and economic growth, and it largely succeeded in that effort. Since coming into office in 1994, the current administration has implemented a major effort to improve the island's infrastructure, focusing on highways, mass transit, water aqueduct and sewage treatment facilities, and electric power plants. As a result, in the last five years outstanding tax-supported debt has increased by more than $6 billion. The pace of growth in debt has been more than twice the pace of personal income growth, negatively affecting the debt ratio. Debt service, while growing as a percentage of the budget, remains manageable due to the Commonwealth's ability to impose high local tax rates on individual and corporate incomes given the absence of federal income tax on the island. None of the 50 states tax individuals or corporations to as great an extent as does the Commonwealth.

CONNECTICUT'S HIGH DEBT RATIOS PERSIST

Connecticut, whose general obligations are rated Aa3, is a frequent borrower and its debt ratios are among the very highest of the states: ranking 1st in per capita debt at $3,131 and ranking 2nd in the ratio of tax-supported debt to personal income at 8.7%. These debt ratios and rankings have been high for many years. Although among the most highly indebted of the states, Connecticut is the wealthiest of the states in terms of per capita personal income.

The state's debt to personal income ratio has increased from 6.5% (triple the national median at the time) at the beginning of the decade to its current level of 8.6%, more than four times the national median. This increase in debt has been augmented by the state's commitment to the UConn 2000 bonds and steady increases in transportation infrastructure bonds. In addition to financing capital projects, the state borrowed to accelerate funding for the settlement of claims against its workers compensation Second Injury Fund.

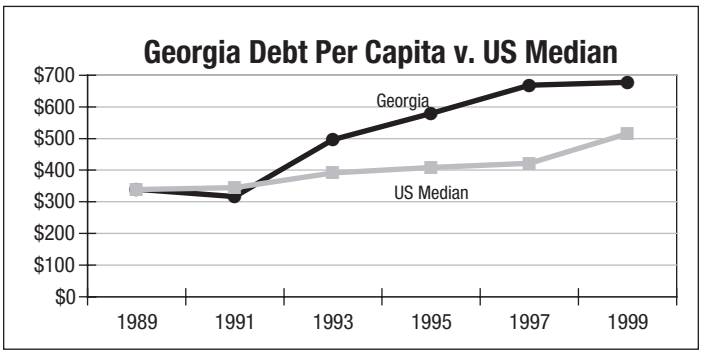
The state's planned borrowings from existing authorizations for the next several years are likely to keep debt ratios high. In addition, the state intends to issue up to $375 million of general obligation bonds to finance a new stadium and related facilities as part of an agreement for the New England Patriots football team to move to Hartford.

GEORGIA'S DEBT HIGH, BUT MANAGEABLE

The State of Georgia's debt levels have risen rapidly over the last decade and are among the highest for Aaa-rated states. Over the last ten years, the state's net tax-supported debt has risen by an average annual rate of 9.1% versus 8.1% for the total of 50 states.

Recognizing the need to control the growth of debt, in 1993 the state created a Debt Management Advisory Committee which prepared a Debt Management Plan. This plan sets out targets for affordable debt levels based upon a ratio of debt to personal income of 2.7% or debt service not to exceed 5% of general fund revenues. Committee projections indicate that the state can issue about $700 million in fiscal 2000 and $500 million in fiscal 2001 and remain within these targets.

Georgia's debt structure is comprised almost entirely of general obligation debt. Utilizing the benefit of the state's Aaa rating, the state issues debt on behalf of state agencies that often issue, in whole or in part, on their own credit in other states, such as the University system and Georgia Ports. While the state has internal budgeting systems requiring these entities to bear the budget burden of the debt, the debt is issued as a general obligation backed by the full faith and credit of the state. The use of this budgeting approach causes the state's debt to be relatively high compared to other Aaa-rated states.

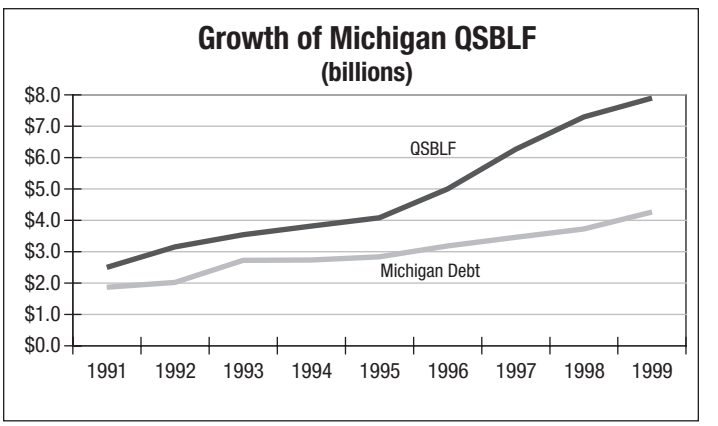


INDIANA DEBT POSITION IS SOUND – RATIOS BELOW COMPARABLE MEDIANS

Due to a constitution prohibiting the issuance of general obligations, all of Indiana's debt is lease rental debt, with payment subject to legislative appropriation. Despite recent and future planned activity in the debt market, with a steady increase in debt per capita over the last ten years, the state's debt burden remains low. Indiana's debt ratios are expected to remain low even after planned issuance of some $280 million during the remainder of fiscal 1999 and fiscal 2000 for highway improvements and prison spending. Currently, the state's outstanding tax-supported debt is $1.26 billion or $213 per capita, significantly below the median of $505 (ranking Indiana 43rd among the states), and debt to personal income is 0.9% compared to the median of 2.0% (ranking 43rd).

MICHIGAN'S DEBT LOW BUT GUARANTEED DEBT RISING RAPIDLY

The State of Michigan (rated Aa1) has low debt levels for a large, highly industrialized state. Debt ratios have consistently ranked the state in the bottom 1/3 in terms of debt per capita and debt to personal income. Most of the state's debt is issued through the Michigan State Building Authority with leases paid from state appropriations for state facilities and state university buildings (facilities are rated Aa2). More recently, the state has also begun to issue state Certificates of Participation (COPs).

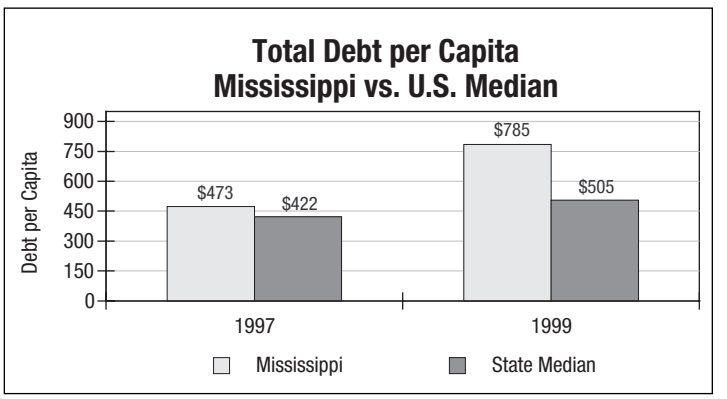


The state has maintained this low debt profile despite a severe prolonged economic downturn in the 1980s as well as through the current economic expansion which saw unemployment levels drop to a record low of 3.8% in 1998. Recently, the state has considered increased debt issuance for road and bridge repair, although these proposals have not yet been adopted.

The state does maintain a very significant contingent liability in the form of the Michigan Qualified School Bond Loan (QSBLF) program under which debt of school districts is guaranteed by the state through a state aid intercept mechanism. School districts that "qualify" are rated at either Aa2 or Aa1 depending on whether their transactions include the strongest pre-default notification requirements. This debt has doubled from 1994 to 1998 and continues to grow rapidly. There has been no material claim on state resources for the 30-year life of the program, although with increasing participation in the program of financially weak credits such as the Detroit City Schools the level of contingent risk is rising. Detroit City Schools are in the process of issuing $1.5 billion in voter approved, state-guaranteed debt on a phased basis expected to take 10 years.

MISSISSIPPI AMONG THE MOST INDEBTED SOUTHERN STATES

Over the last two years, the State of Mississippi's total net tax-supported debt outstanding has significantly increased, rising from $1.5 billion in January 1997 to nearly $2.2 billion by the end of 1998. As reflected in the exhibit below, the increase has resulted in a dramatic change in the state's total debt per capita, with the state going from being the 24th most indebted state (on a per capita basis) to being the 8th most indebted state.



The sizable increase in net tax-supported debt outstanding over the last two years is due, in part, to the amount of debt issued specifically to further economic growth in the state. These economic development-related transactions have totaled nearly $400 million, and have funded improvements to the state's port facilities and upgrades to various roadways providing access to gaming establishments – whose operations have represented a significant portion of the state's employment growth over the last several years. The borrowings also funded a variety of economic development loan programs, instituted specifically to assist small business investments in the state. But despite these investments over the last two years, state growth in both personal income and employment trailed that of the U.S.

INCREASE IN NEW MEXICO DEBT DRIVEN BY HIGHWAY BONDS

Over the last four years, New Mexico's tax-supported debt has grown at twice the state's rate of personal income growth. The debt increase has been concentrated in highway revenue bonds, with good coverage levels provided by motor-vehicle related taxes and fees. Some $200 million of such bonds were issued in just the past year, causing New Mexico's ratio of debt to personal income to increase to 2.6% and putting the state above the 50-state median for the first time since 1990.

With issuance capacity for the state's other main borrowing vehicles (general obligations and severance tax bonds) severely constrained, a similar pace of highway bond issuance is expected over the next several years. This will cause the state's debt ratios to further increase by a moderate amount.

NORTH CAROLINA'S DEBT IS LOW AND BORROWING INFREQUENT

The State of North Carolina (general obligation rating of Aaa) is an infrequent borrower, and has conservatively managed debt throughout the 1990's. As a result, its debt ratios have consistently been among the lowest in the nation. But over the last two years, the state's net tax supported debt outstanding has doubled, rising from $1.0 billion in 1996 to nearly $2.1 billion by the end of 1998. This dramatic increase is due primarily to the capital investments the state has made to improve its public school system infrastructure – investments deemed necessary to accommodate the state's rapidly growing school-age population.

A 1995 study of the North Carolina public school system capital needs concluded that the state's public school system required more than $6 billion in infrastructure investments. In November 1996, the voters of the state approved the issuance of $1.8 billion in debt to fund grants to counties for such purposes. Since 1997, the state has issued $900 million of this amount, and current plans call for the remaining $900 million to be issued in $450 million increments over the next two years.

Despite an increase in total debt outstanding of more than 100%, the state's debt ratios continue to rank among the lowest of all states. And while the issuance of the remaining amount of public school building debt will weaken its debt position, the state will continue to rank among the lower half of all states in terms of total debt burden.

PENNSYLVANIA DEBT BURDEN IMPROVES OVER PAST FIVE YEARS

Despite an increased new issuance pace in the past year, Pennsylvania's growth in tax-supported debt in the last five-years has been significantly less than its growth in personal income. As a result, the ratio of debt to personal income has improved to 2.3% from 2.7% five years ago. This continues a long term trend of improvement in this ratio since the late 1970s, when the ratio was 6.5%. In addition, the state's ratio has continued to move closer to the median over this period, and is now only about 15% above the median. The debt per capita ratio, while increasing due to the state's very slow population growth, has also moved closer to the median. Current debt per capita of $580 is about 15% above the median, compared to 35% above the median five years ago.

The increased tax-supported debt issuance over the past year includes a mild spike in general obligation bonds issued for various purposes, and a relatively large issue of oil franchise tax bonds by the Pennsylvania Turnpike Commission for new highway construction. The state's recently revised five-year capital spending and borrowing plan remains moderate, even after the inclusion of new general obligation bond authorizations for the state's one-third share of the cost of four new professional sports stadiums. As a result, the ratio of debt to personal income is expected to increase only slightly in the next several years.

The 1999 Medians

The debt ratios for the fifty states are based on data from various sources. The debt numbers are based on actual debt figures as reported by the individual states in audited financial statements and official statements for bond offerings. The concept of net tax-supported debt takes into account all debt serviced by tax revenues of the state, whether or not the state itself was the issuer. Debt issued through special purpose conduits is included if the debt is serviced by a state-wide tax source. Deducted to reach the net figure is any debt that is self-supporting from enterprise revenues (not special tax revenues), debt that is serviced by another unit of government, as well as appropriate sinking funds and short-term operating debt.

Per capita debt is calculated by dividing the net tax-supported debt as of the end of 1998 by estimated population in 1998. To derive the ratio of debt to personal income, net tax-supported debt is divided by 1997 personal income as reported by the U.S. Department of Commerce, Bureau of Economic Analysis.

In the following tables, the states are ranked in descending order from one to fifty, with the first ranked state having the highest ratio. The median derived for each table represents the midpoint rather than the average of the fifty states. These medians are used as a guide in assessing the burden represented by debt obligations. In addition to the median for each measure presented, we show the mean, which averages the total outstanding net tax-supported debt with the total relevant denominators of population and personal income. The mean is heavily influenced by the effect of a few state debt issuers, and may be more indicative of total national borrowing trends.

TABLE 1

Net Tax-Supported Debt per Capita*

1	Connecticut	$3,131
2	Hawaii	$2,865
3	Massachusetts	$2,436
4	New York	$1,986
5	Rhode Island	$1,670
6	New Jersey	$1,660
7	Delaware	$1,581
8	Washington	$1,185
9	Maryland	$953
10	Vermont	$953
11	Florida	$863
12	Mississippi	$785
13	Kentucky	$757
14	Illinois	$723
15	Utah	$705
16	Georgia	$679
17	California	$679
18	Wisconsin	$670
19	Ohio	$649
20	West Virginia	$633
21	New Hampshire	$620
22	Pennsylvania	$581
23	Louisiana	$528
24	Minnesota	$525
25	Virginia	$516
26	New Mexico	$495
27	Kansas	$471
28	Nevada	$456
29	Michigan	$434
30	Maine	$418
31	Arizona	$388
32	Montana	$329
33	South Dakota	$322
34	South Carolina	$321
35	Alabama	$317
36	Texas	$296
37	Oregon	$281
38	North Carolina	$273
39	Oklahoma	$243
40	Missouri	$233
41	Wyoming	$232
42	Tennessee	$214
43	Indiana	$213
44	North Dakota	$130
45	Arkansas	$125
46	Iowa	$106
47	Alaska	$88
48	Idaho	$83
49	Nebraska	$24
50	Colorado	$11
MEAN:		**$697**
MEDIAN:		**$505**
Puerto Rico		$4,079 **

**Based on 1998 population figures. Population figures from the U.S. Census Bureau.*

*** This figure is not included in any totals, averages, or median calculations but is provided for comparison purposes only. Puerto Rico population is 1997 estimate.*

TABLE 2

Net Tax-Supported Debt as a % of 1997 Personal Income*

1	Hawaii	11.2%
2	Connecticut	8.7%
3	Massachusetts	7.8%
4	New York	6.6%
5	Rhode Island	6.5%
6	Delaware	5.7%
7	New Jersey	5.2%
9	Washington	4.6%
8	Mississippi	4.4%
10	Vermont	4.2%
11	Kentucky	3.7%
12	Utah	3.6%
13	Florida	3.5%
14	West Virginia	3.4%
15	Maryland	3.3%
16	Georgia	2.9%
17	Wisconsin	2.8%
18	Ohio	2.7%
19	California	2.6%
20	Illinois	2.6%
21	Louisiana	2.6%
22	New Mexico	2.6%
23	Pennsylvania	2.3%
24	New Hampshire	2.3%
25	Minnesota	2.0%
26	Kansas	2.0%
27	Virginia	2.0%
28	Maine	1.9%
29	Arizona	1.9%
30	Nevada	1.8%
31	Michigan	1.7%
32	Montana	1.7%
33	South Carolina	1.6%
34	Alabama	1.5%
35	South Dakota	1.5%
36	Texas	1.3%
37	Oklahoma	1.2%
38	North Carolina	1.2%
39	Oregon	1.2%
40	Wyoming	1.0%
41	Missouri	1.0%
42	Tennessee	1.0%
43	Indiana	0.9%
44	Arkansas	0.6%
45	North Dakota	0.6%
46	Iowa	0.5%
47	Idaho	0.4%
48	Alaska	0.4%
49	Nebraska	0.1%
50	Colorado	0.0%
MEAN:		**2.7%**
MEDIAN:		**2.0%**
Puerto Rico		48.6%**

**Personal Income figures are from U.S. Bureau of Economic Analysis.*

*** This figure is not included in any totals, averages, or median calculations but is provided for comparison purposes only.*

TABLE 3

Total Net Tax Supported Debt

1	New York	$36,097,000
2	California	$22,180,930
3	Massachusetts	$14,974,076
4	New Jersey	$13,469,000
5	Florida	$12,872,044
6	Connecticut	$10,251,270
7	Illinois	$8,710,407
8	Ohio	$7,269,552
9	Pennsylvania	$6,977,173
10	Washington	$6,743,679
11	Texas	$5,847,460
12	Georgia	$5,187,785
13	Maryland	$4,892,012
14	Michigan	$4,260,786
15	Virginia	$3,504,651
16	Wisconsin	$3,499,056
17	Hawaii	$3,417,863
18	Kentucky	$2,979,503
19	Minnesota	$2,479,557
20	Louisiana	$2,308,794
21	Mississippi	$2,158,216
22	North Carolina	$2,059,240
23	Arizona	$1,768,832
24	Rhode Island	$1,650,628
25	Utah	$1,481,326
26	Alabama	$1,377,524
27	Missouri	$1,265,335
28	Indiana	$1,256,868
29	Kansas	$1,239,466
30	South Carolina	$1,230,185
31	Delaware	$1,175,692
32	Tennessee	$1,162,124
33	West Virginia	$1,146,295
34	Oregon	$921,051
35	New Mexico	$859,315
36	Oklahoma	$814,588
37	Nevada	$796,392
38	New Hampshire	$734,517
39	Vermont	$562,845
40	Maine	$519,979
41	Arkansas	$316,785
42	Iowa	$303,421
43	Montana	$289,765
44	South Dakota	$237,401
45	Wyoming	$111,548
46	Idaho	$102,130
47	North Dakota	$82,780
48	Alaska	$54,149
49	Colorado	$44,313
50	Nebraska	$40,232
		$203,685,540
Puerto Rico		$15,609,277**

*** This figure is not included in any totals, averages, or median calculations but is provided for comparison purposes only.*

TABLE 4

Net Tax-Supported Debt as a Percentage of Personal Income

Medians

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Alabama	3.0	2.7	2.4	2.2	2.0	2.0	1.8	1.9	1.7	1.5
Alaska	4.9	3.2	2.5	2.6	2.4	1.2	0.9	0.9	0.5	0.0
Arizona	1.2	1.4	1.6	1.8	1.6	2.7	2.4	2.1	1.9	1.9
Arkansas	0.4	0.3	0.7	0.7	0.7	0.6	0.7	0.6	0.8	0.6
California	1.1	1.5	2.0	2.5	3.0	3.5	2.8	2.6	2.6	2.6
Colorado	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.0
Connecticut	5.1	6.5	8.7	8.9	9.1	9.6	9.7	9.4	8.7	8.7
Delaware	6.8	7.0	8.1	7.5	8.0	8.0	7.6	6.4	5.9	5.7
Florida	2.8	2.7	2.2	2.3	2.9	3.0	2.9	3.0	3.4	3.5
Georgia	2.2	2.0	2.5	2.9	3.0	3.1	3.3	3.1	2.9	2.9
Hawaii	11.1	10.4	10.2	10.4	12.1	10.5	10.3	10.9	10.7	11.2
Idaho	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.4
Illinois	2.8	2.7	2.7	2.7	3.0	3.2	3.2	2.9	2.7	2.6
Indiana	0.4	0.6	0.7	1.0	1.0	1.0	0.9	0.9	0.8	0.9
Iowa	0.0	0.3	0.2	0.4	0.4	0.6	0.6	0.6	0.5	0.5
Kansas	0.6	0.6	0.5	1.3	2.0	2.1	2.0	1.9	1.7	2.0
Kentucky	4.7	5.8	4.7	5.1	5.0	4.7	5.1	4.1	3.9	3.7
Louisiana	7.1	7.4	6.5	6.3	5.9	5.4	4.9	4.4	2.6	2.6
Maine	2.0	2.3	2.2	2.7	2.6	2.7	2.7	2.6	1.9	1.9
Maryland	3.3	3.4	3.4	3.3	3.3	3.5	3.4	3.3	3.1	3.3
Massachusetts	6.9	8.1	8.0	8.5	8.2	8.4	8.3	8.1	7.8	7.8
Michigan	1.1	1.1	1.2	1.6	1.5	1.5	1.5	1.5	1.6	1.7
Minnesota	2.2	2.3	2.2	2.2	2.0	1.9	1.9	2.2	1.9	2.0
Mississippi	1.9	2.0	1.8	1.8	2.1	2.0	3.0	2.9	3.5	4.4
Missouri	1.3	1.2	1.3	1.3	1.2	1.2	1.3	1.3	1.0	1.0
Montana	2.9	2.5	2.2	2.1	1.9	3.2	2.4	1.4	1.4	1.7
Nebraska	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1
Nevada	2.3	2.0	2.9	2.7	2.2	2.1	2.0	1.8	1.6	1.8
New Hampshire	2.2	2.2	2.5	2.7	2.9	2.9	2.9	2.5	2.4	2.3
New Jersey	2.4	2.3	2.2	3.0	2.9	3.7	3.6	3.8	5.1	5.2
New Mexico	2.7	2.1	1.8	1.7	2.1	2.1	2.1	2.0	1.9	2.6
New York	4.4	4.7	5.6	6.1	6.4	6.6	6.9	6.7	6.5	6.6
North Carolina	0.8	0.5	0.6	0.6	0.6	0.8	0.7	0.7	1.0	1.2
North Dakota	1.0	1.3	1.2	1.2	1.1	1.1	1.1	1.0	0.8	0.6
Ohio	2.6	2.5	2.4	2.5	2.5	2.4	2.5	2.5	2.5	2.7
Oklahoma	0.4	0.6	0.4	0.4	1.0	1.0	0.8	0.9	0.8	1.2
Oregon	1.5	1.7	1.5	1.1	1.2	1.2	1.4	1.9	1.2	1.2
Pennsylvania	2.6	2.4	2.7	2.6	2.7	2.6	2.4	2.2	2.0	2.3
Rhode Island	4.6	4.0	6.1	8.8	8.9	8.7	8.5	8.7	6.6	6.5
South Carolina	1.9	1.9	1.8	1.9	1.6	1.7	1.6	1.6	1.6	1.6
South Dakota	2.8	2.4	2.2	2.3	2.3	2.1	1.8	1.8	1.5	1.5
Tennessee	1.0	0.7	1.0	0.8	0.8	0.9	0.9	0.9	0.9	1.0
Texas	1.1	1.2	1.2	1.1	1.2	1.6	1.7	1.5	1.4	1.3
Utah	1.7	1.5	1.6	1.7	1.6	1.7	1.8	1.7	3.1	3.6
Vermont	3.0	3.9	4.5	4.6	4.5	4.7	4.9	4.7	4.2	4.2
Virginia	1.3	1.2	1.2	1.3	1.6	1.7	1.6	1.7	2.1	2.0
Washington	4.7	4.4	4.4	5.0	5.0	5.0	4.8	5.0	4.8	4.6
West Virginia	4.0	5.2	4.7	3.4	3.1	2.5	2.6	2.7	2.8	3.4
Wisconsin	2.5	2.5	2.7	3.1	3.0	3.0	2.9	3.2	2.8	2.8
Wyoming	0.0	0.0	0.0	0.0	0.5	0.4	0.4	0.7	0.7	1.0
Median	**2.2**	**2.2**	**2.2**	**2.2**	**2.1**	**2.1**	**2.1**	**2.1**	**1.9**	**2.0**

Table 5

STATE RATING CHANGES AND REFINEMENTS SINCE 1980 (January 1999)

	CHANGE/REFINEMENT		
	Date	**From**	**To**
Alabama	7/1/98	Aa	Aa3*
Alaska	10/26/98	Aa	Aa2*
	6/13/80	A1	Aa
Arizona	No General Obligation Debt		
Arkansas	4/14/97	Aa	Aa3
	9/19/90	A1	Aa
	7/11/85		A1
California	12/8/98	A1	Aa3
	7/15/94	Aa	A1
	7/6/92	Aa1	Aa
	2/10/92	Aaa	Aa1
	10/6/89	Aa	Aaa
	4/10/80	Aaa	Aa
Colorado	No General Obligation Debt		
Connecticut	3/7/97	Aa	Aa3*
	4/9/90	Aa1	Aa
	10/18/85	Aa	Aa1
Delaware	12/2/94	Aa	Aa1
	8/26/82	A1	Aa
	12/11/80	A	A1
Florida	2/24/97	Aa	Aa2*
Georgia	1980		Aaa
Hawaii	4/8/98	Aa3	A1
	3/21/97	Aa	Aa3*
Idaho	No General Obligation Debt		
Illinois	6/11/98	Aa3	Aa2
	2/10/97	A1	Aa3
	2/3/95	Aa	A1
	8/12/92	Aa1	Aa
	9/5/91	Aaa	Aa1
Indiana	No General Obligation Debt		
Iowa	No General Obligation Debt		
Kansas	No General Obligation Debt		
Kentucky	No General Obligation Debt		
Louisiana	4/6/98	A3	A2
	3/12/97	Baa1	A3
	2/10/87	A	Baa1
	4/24/86	A1	A
	4/4/85	Aa	A1
Maine	6/4/98	Aa3	Aa2
	5/12/97	Aa	Aa3*
	8/24/93	Aa1	Aa
	2/26/82	Aa	Aa1
Maryland	1980		Aaa
Massachusetts	4/28/98	A1	Aa3
	11/14/94	A	A1
	9/9/92	Baa	A
	3/19/90	Baa1	Baa
	11/15/89	A	Baa1
	6/21/89	Aa	A
	2/9/88	A1	Aa
Michigan	3/19/98	Aa2	Aa1
	3/7/97	Aa	Aa2*
	7/18/95	A1	Aa
	4/24/86	A	A1
	11/16/84	Baa1	A
	5/7/82	A	Baa1
	10/2/80	Aa	A

**** Rating refined due to introduction of modifiers.***

	CHANGE/REFINEMENT		
	Date	**From**	**To**
Minnesota	5/3/96	Aa1	Aaa
	3/25/94	Aa	Aa1
	4/16/82	Aaa	Aa
Mississippi	3/4/97	Aa	Aa3
Missouri	1980		Aaa
Montana	4/9/97	Aa	Aa3
	6/28/85	Aa1	Aa
	8/21/81	Aa	Aa1
Nebraska	No General Obligation Debt		
Nevada	5/16/97	Aa	Aa2
New Hampshire	5/16/97	Aa	Aa2
	11/11/91	Aa1	Aa
	11/9/88	Aa	Aa1
	1/21/85	A1	Aa
	7/29/82	Aa	A1
	3/3/82	Aaa	Aa
New Jersey	8/24/92	Aaa	Aa1
New Mexico	7/7/94	Aa	Aa1
	2/22/85	Aa1	Aa
	8/21/81	Aa	Aa1
New York	2/10/97	A	A2
	6/6/90	A1	A
	5/27/86	A	A1
North Carolina	1980		Aaa
North Dakota	No General Obligation Debt		
Ohio	8/15/96	Aa	Aa1
Oklahoma	2/7/97	Aa	Aa3
	6/3/87	Aaa	Aa
Oregon	4/3/97	Aa	Aa2
	1/8/90	A1	Aa
	7/29/82	Aa	A1
	7/22/80	Aaa	Aa
Pennsylvania	10/3/97	A1	Aa3
	3/6/86	A	A1
Rhode Island	5/4/92	Aa	A1
South Carolina	1980		Aaa
South Dakota	No General Obligation Debt		
Tennessee	1980		Aaa
Texas	6/27/97	Aa	Aa2
	3/10/87	Aaa	Aa
Utah	1980		Aaa
Vermont	10/20/97	Aa	Aa2
Virginia	1980		Aaa
Washington	6/20/97	Aa2	Aa1
	1/6/97	Aa	Aa2
	1/8/90	A1	Aa
	7/28/86	A	A1
	1/21/82	A1	A
	10/30/81	Aa	A1
West Virginia	1980		A1
Wisconsin	3/19/97	Aa	Aa2
	5/20/82	Aaa	Aa
Wyoming	No General Obligation Debt		

TABLE 6

STATE GENERAL OBLIGATION BONDS (by rating category)

Aaa (9 States)	Aa1 (6 States)	Aa2 (10 States)
Georgia	Delaware	Alaska
Maryland	Michigan	Florida
Minnesota	New Jersey	Illinois
Missouri	New Mexico	Maine
North Carolina	Ohio	Nevada
South Carolina	Washington	New Hampshire
Tennessee		Oregon
Utah		Texas
Virgina		Vermont
		Wisconsin

Aa3 (10 States)	A1 (3 States)	A2 (2 States)
Alabama	Hawaii	New York
Arkansas	Rhode Island	Louisiana
California	West Virginia	
Connecticut		
Massachusetts		
Mississippi		
Montana		
North Dakota		
Oklahoma		
Pennsylvania		

Note: Moody's ratings are subject to change. Because of the possible time lapse between Moody's assignment of or a change in a rating and your use of this publication, we suggest you verify the current rating of any security or issuer in which you are interested.

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43026

Benchmark General Obligation Ratios

Standard & Poor's representative ranges for key ratios of GO debt issuers provide an indication of what constitutes a high or low ratio for some key factors Standard & Poor's uses in the credit rating process.

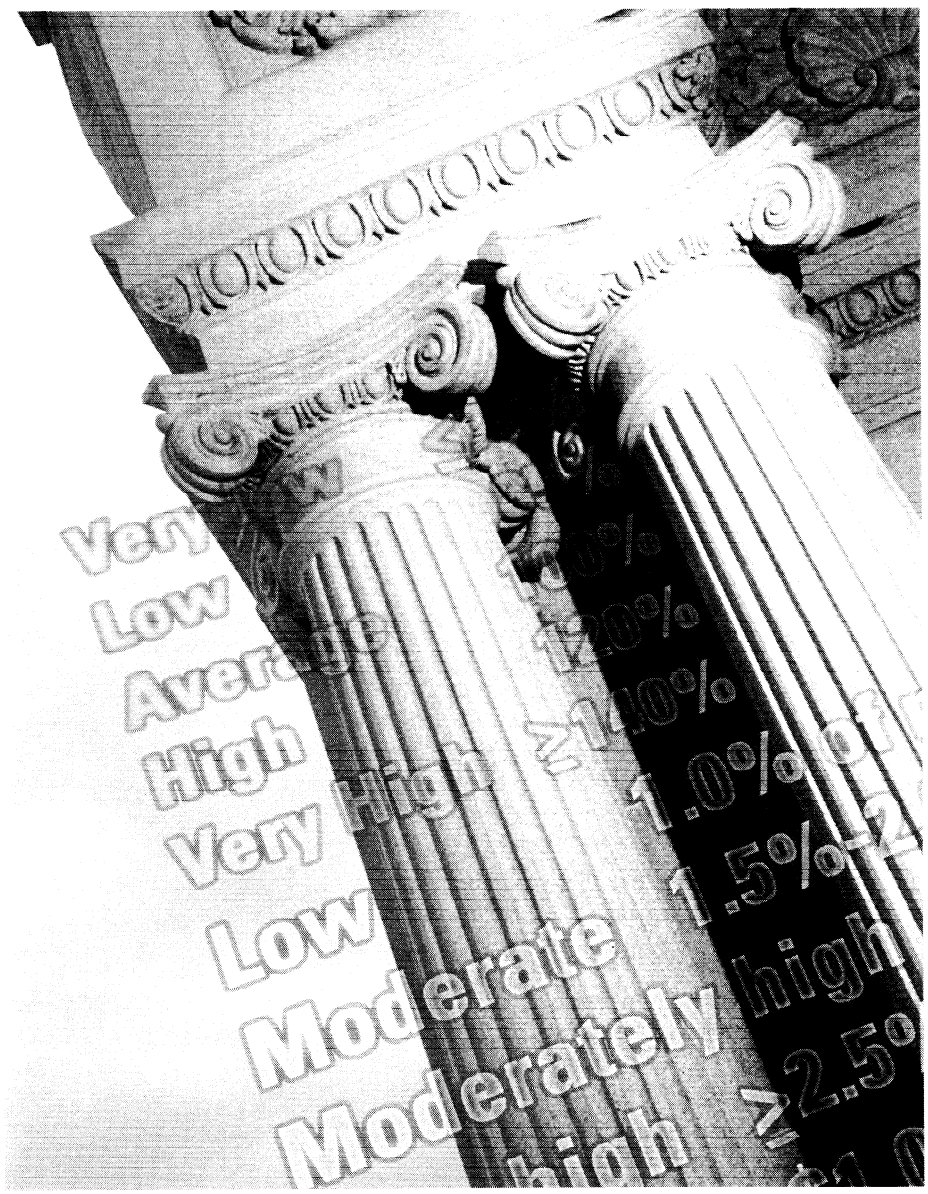
The ratios represent benchmarks that Standard & Poor's analysts usually consider high, low, or moderate, regardless of rating category or point in the national economic cycle. These ratios differ from typical median analysis. Median analysis usually examines a pool of bond issuers by rating category. However, medians will drift over the economic cycle and do not indicate the normal range of dispersion for individual ratios. For example, highly rated credits may have widely varying debt ratios, while overall medians by rating category may show only small variations.

In contrast, the key ratios help separate the significance of ratio variations for each independent ratio.

A related criteria element is the weighting of one ratio against another in the rating process. The relative weight of individual criteria elements is discussed in detail in Standard & Poor's *Public Finance Criteria*. Standard & Poor's examines four main factors when evaluating GO credits in the following order:

- Economic factors,
- Administrative factors,
- Financial factors, and
- Debt factors.

Variation in any of these factors can influence a bond rating. However, the heavier weighting on economic factors



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Typical Ranges for Tax-Backed GO Ratings

The ratios below represent benchmarks that Standard & Poor's analysts usually consider high, low, or moderate, regardless of rating category or point in the national economic cycle.

Economic

Income levels as a percent of the national average. These include both per capita and median household figures. Analysts may also compare income levels against local cost of living indexes.

Very low	≤ 75%
Low	85%
Average	100%
High	120%
Very High	≥ 140%

Market value per capita. These may vary greatly by state depending on assessment practices, homeowners' exemptions, cost of living, etc.

Low	$20,000
Moderate	$40,000
High	$60,000

Taxpayer concentration. Percent of assessed value in the top 10 taxpayers.

Diverse	≤ 15%
Moderately Concentrated	25%
Concentrated	≥ 40%

Financial

Ending general fund balances as a percent of operating revenues. These are only guidelines. What is considered high and low depends on peak cash-flow needs during the year, as well as whether the fiscal year ends in a historically cash poor or cash rich month.

Total general fund balances.

Strong	≥ 15%, plus no cash flow borrowing over the fiscal year
Adequate	5%-15%
Low	0%-5%

Unreserved general fund balances.

Strong	≥ 8%
Adequate	2%-8%
Low	≤ 2%

Property tax burdens. Expressed as a percent of overlapping tax as a percent of market value.

Low	1.0% of market value
Moderate	1.5%-2.0% of market value
Moderately high	2.0%-2.5% of market value
Very high	≥ 2.5% of market value

Debt

Debt to market value. Not including pension funding debt.

Low debt burden	≤ 3%
Moderate debt burden	3%-6%
High debt burden	≥ 6%

*Combined general fund/debt service fund debt service to operating expenditures "Carrying Charge."** Not including pension funding debt.

Low	≤ 5%
Moderate carrying charge	10%
High carrying charge	≥ 15%

*Carrying charges for special service districts may not be a relevant statistic; collecting a debt service levy may be their only operation.

Overall debt per capita.

Low	$1,000
Moderate	$1,000-$2,500
High	≥ $2,500

Debt to income. S&P index.

Low	0%-3%
Moderate	3%-6%
High	≥ 6%

Appropriate debt amortization over 10 years.

25% over 5 years
50% over 10 years

Pension Funding

In the analysis of a bond issuer's ability to pay debt service, Standard & Poor's examines the issuer's other obligations including pension liabilities. There are several key factors indicative of the retirement system's health and relationship to its sponsor. Because pension ratios depend to some extent on actuarial assumptions, discussion of a fixed "high" or "low" ratio becomes less meaningful than for other types of economic or debt ratios.

The principal factor is the status and historical track record of the funding of pension liabilities. This funding ratio is usually expressed as a percent of assets available for benefits divided by actuarial accrued liabilities. With the objective being full funding of liabilities, generally the higher the ratio the stronger the system.

The latest survey by the Public Pension Coordinating Council (PPCC), published in 1997, reported an increased average funding ratio for public funds to 87.4%, continuing an upward trend since the 1970s. Robust investment returns in recent years most likely will push funding levels even higher. This calculation takes into account a number of assumptions that affect end results. Two important assumptions are for investment return and salary increase. In the survey, the average assumption for investment return was 7.89% and salary increase was 5.92%.

Standard & Poor's also reviews the asset allocation strategy of pension funds in order to gauge the level of investment risk assumed. The long-term shift from fixed-income securities to equities has continued. The PPCC survey reported average domestic equities at 44.2%, up from 41.3% in the 1995 survey, and domestic bonds at 32.0%, down from 36.7%. International equities grew to 10.0% from 6.8%.

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reflects that a wealthy and diverse economic base can afford higher debt burdens, or recover from financial problems more easily through a modest tax hike, than a poor economic base that might have more limited and less forgiving governmental options.

A note of caution. Ratios do not tell the whole story; they are only a portion of what Standard & Poor's uses in its analysis. Economic, administrative, structural, or subjective factors may outweigh any of these ratios when a rating is assigned. Numbers alone can not determine an entity's willingness to meet its financial obligations; numbers alone can not reveal a history of late budgets or the operating restraints presented by the state/local framework. Not all of the key ratios are weighted equally, nor do they represent a complete set of the ratios Standard & Poor's uses in its analysis, which incorporates information from many internal and external databases. In addition, a municipal entity's trends in any of these ratios may be more important than the historical ratios. A rating, after all, is prospective in nature. GWM