



BONDED INDEBTEDNESS IN KENTUCKY

Committee for Program Review & Investigation

Research Report No. 180

Legislative Research Commission

Frankfort, Kentucky

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The Commission functions as Kentucky's Commission on Interstate Cooperation in carrying out the program of the Council of State Governments as it relates to Kentucky.

BONDED INDEBTEDNESS IN KENTUCKY

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Research Report No. 180

*Legislative Research Commission
Frankfort, Kentucky
April, 1981*

FOREWORD

Debt and the Commonwealth's current and future capacity to service debt are issues of growing concern. As the use of debt to finance the state's future needs increases, it becomes more important for legislators to be aware of the sources of payment and the size of continuing obligations, in order to maintain Kentucky's fiscal soundness.

The Committee for Program Review and Investigation, which authorized the present study in October, 1979, addresses three major aspects here of bonded indebtedness in Kentucky:

- The magnitude of the state's debt and its claim against direct state revenues;
- How Kentucky's debt burden compares to those of other states;
- Alternatives in issuing and managing debt.

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The Capitol
Frankfort, Kentucky
April, 1981

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Managing State Debt

The Office for Investment and Debt Management, established by the 1980 General Assembly within the Department of Finance, has numerous responsibilities with respect to debt issuance and management. It has the potential to serve as a clearinghouse for debt information and to provide valuable assistance to state and local bond authorities in evaluating new bond issues. Over the long run, it may develop the ability to prepare and issue state government bonds. The Committee makes the following recommendations:

- The Office for Investment and Debt Management should maintain accurate, detailed data on the bonds of all state bond issuing authorities. The Office should request that the Department for Community and Regional Development and the State Department of Education forward detailed information on local debt to the Office for Investment and Debt Management on a regular periodic basis.

- In addition to assessing revenue projections related to proposed revenue bond issues, the Office for Investment and Debt Management should evaluate all feasibility studies for debt-financed projects and report the results of each such evaluation to the Governor and to the Legislative Research Commission or General Assembly prior to the original authorization of the bond issue.

- The Office for Investment and Debt Management should develop adequate expertise to advise state and local bond authority officials on the appropriate use of refunding bonds and bond anticipation notes. The Office should perform a thorough financial evaluation of each proposed issue of refunding bonds, bond anticipation notes or other interim financing instruments, and report the results of each such evaluation to the Governor and to the Legislative Research Commission or the General Assembly. Existing statutes should be changed to the extent necessary to implement this recommendation.

Long-term highway and building construction plans are a major determinant of a state's need to borrow. Likewise, major maintenance, reconstruction and repair of roads and buildings can require bond financing. Information concerning such long-term needs in Kentucky has not been readily available to the General Assembly in its consideration of biennial appropriations acts. The Committee recommends that the Office for Investment and Debt Management be responsible for coordinating data contained in its long-term debt plan and in highway and building inventories.

Controlling the Level of State Debt

Kentucky's unrealistic and impractical constitutional ceiling on general obligation debt has been circumvented, resulting in greater than necessary borrowing costs, while more than \$2 billion of tax-supported debt has been issued without voter approval. Several states use indexed or floating debt ceilings to limit their indebtedness. The most appropriate type of ceiling is a limit on debt service—that is, principal and interest payments—that may be made from direct state revenues in any fiscal period. The benefits of debt ceilings are (1) that they limit the obligations of future revenues, and (2) that they provide additional evidence of a state's fiscal responsibility, which in turn enhances its reputation in the bond market.

The Committee for Program Review and Investigation has discussed debt ceilings thoroughly this Interim. After considering all aspects of the issue, the Committee has elected to make no recommendations.

General Obligation vs. Project Revenue Bonds

The enabling statutes of state bond issuing authorities clearly state that their revenue bonds do not constitute an indebtedness of the Commonwealth. Likewise, the prospectuses for revenue bonds issued by these authorities specifically disclaim any liability of the state. Despite these disclaimers, however, most debt service on state revenue bonds is paid from general state revenues. The Commonwealth could not feasibly allow revenue bonds of the state authorities to default. Failure of these bonds would severely impair Kentucky's ability to borrow and would result in greatly increased interest costs for future bond issues.

General obligation bonds generally bear significantly lower interest rates than revenue bonds (all relevant factors being equal), resulting in great interest savings to the state. The only substantive difference between Kentucky's general obligation bonds and revenue bonds is that the Commonwealth pledges its full faith and credit to the payment of principal and interest on general obligation bonds. If Kentucky issued general obligation bonds instead of revenue bonds, debt service payments would come from exactly the same sources as at present. The Commonwealth would simply guarantee to continue paying debt service as it does presently. The savings on new debt issued in the 1986-92 biennium alone would be between \$70,000,000 and \$130,000,000 over the life of the bonds.

Recommendation

• The General Assembly should propose an amendment to the Kentucky Constitution which would enable the Commonwealth to issue general obligation debt upon the affirmative vote of at least three-fifths of each house of the General Assembly. This amendment should be integrated with the debt ceiling amendment described above.

INTRODUCTION

Long-term bond financing has emerged as a major feature of Kentucky state government finance. State government debt increased from \$1.6 billion in 1971 to \$2.9 billion in 1980. The General Assembly has expressed concern over the rapid growth of the Commonwealth's bonded indebtedness and has sought comprehensive information on the status of this debt. Reflecting these concerns, the Committee for Program Review and Investigation authorized this study, *Bonded Indebtedness in Kentucky*, in October, 1979.

The study contains three major components.

- Analysis of debt and sources for debt service payments.
- Evaluation of the Commonwealth's debt burden.
- Discussion and policy analysis of several issues concerning control and management of state debt.

The first chapter presents comprehensive data on each state government agency or authority which has bonds outstanding. The purposes of each authority's bonding programs are described, and sources of debt service are identified. Debt of cities, counties, school districts and special districts is examined briefly. The concluding sections of the chapter analyze debt service as a claim against direct state revenues.

Kentucky state debt is evaluated in Chapter II by comparing the debt burdens of the fifty states. Kentucky is also compared with states which have high, stable bond ratings and with states which have experienced debt problems. The cases of four states which have experienced deterioration of their bond ratings for various non-statistical reasons are presented, and Kentucky's situation is compared to theirs.

The final chapter addresses several key policy issues. Several recommendations for legislative and executive action are made. The role of the newly created Office for Investment and Debt Management is discussed. The need for long-term highway and building construction planning is addressed. Different types of debt ceilings are analyzed, and the desirability of a constitutional debt ceiling is discussed. The role of the General Assembly in approving new debt is examined. The final section addresses the question whether the Commonwealth should borrow by issuing general obligation bonds instead of revenue bonds.

State debt data was obtained primarily from the *Kentucky Financial Report, June 30, 1979*, and *The Kentucky Executive Budget, 1980-1982*. Additional information was obtained from officials of the bond issuing authorities. Comparative data for the fifty states was derived from *State Government Finances in 1978*, published by the U.S. Bureau of the Census. Substantial detailed information was provided by bond management personnel in other states and by staff of Moody's Investors Service, Incorporated, Standard and Poor's Corporation, and Prescott, Ball and Turben, Incorporated.

CHAPTER I

PUBLIC BONDED INDEBTEDNESS IN KENTUCKY

Public indebtedness in Kentucky exceeded \$6.8 billion in 1980. Bonds of state authorities totaled nearly \$2.9 billion at the end of fiscal year 1980. Local government debt exceeded \$3.1 billion and local industrial revenue bonds of over \$880 million were outstanding on June 30, 1980.

This chapter begins with an overview of state and local debt in Kentucky and proceeds with brief discussions of the various bonding programs and the Commonwealth's actual and potential liability for debt service payments on each authority's bonds. Projections of new debt and debt service for the 1980-82 fiscal biennium are presented. A discussion of debt service paid from direct state revenues concludes the chapter.

Overview of Kentucky's Public Debt

Most state revenue bonds have been issued by the State Property and Buildings Commission, the Turnpike Authority of Kentucky, the Kentucky Housing Corporation and the eight state universities. The Kentucky Higher Education Student Loan Corporation, Pollution Abatement Authority and School Building Authority also have revenue bonds outstanding. The Department of Transportation (formerly the Department of Highways) has issued bonds in the past, but retired its last outstanding debt in 1978. The Capital Plaza Authority and State Fair Board have issued bonds through the State Property and Buildings Commission. Four agencies, the Churchill Downs Authority, the Health and Geriatric Authority, the Water Resources Authority and the Department of Fish and Wildlife, have statutory authority to issue bonds but have never done so. All state general obligation bonds are issued by the State Property and Buildings Commission.

The enabling legislation of all state authorities disclaims any liability of the Commonwealth for their revenue bonds. Additionally, revenue bond prospectuses include the following general declaration:

The authority does not have any taxing power and these bonds do not constitute a debt of the Commonwealth of Kentucky and neither the faith and credit nor the taxing authority of the Commonwealth of Kentucky is pledged to the payment of the principal or interest on the bonds.

Despite this disclaimer, the state has a direct and overriding interest in protecting the integrity of its authorities' revenue bonds. Should a Kentucky issue fail or become delinquent, the Commonwealth's bond rating would be lowered and future issues could only be sold at higher interest rates, resulting in greater costs to the state. The Governor and General Assembly would almost certainly assume any unanticipated debt service payments on these bonds rather than allow them to

TABLE 1
 OUTSTANDING DEBT AND ANNUAL DEBT SERVICE
 COMMONWEALTH OF KENTUCKY
 FISCAL YEAR 1980

	PRINCIPAL OUTSTANDING JUNE 30, 1980	DEBT SERVICE PAYMENTS, FY 1980
State Property and Buildings Comm.		
Project Revenue Bonds	\$ 155,315,000 ^a	\$ 13,605,160
General Obligation Bonds	281,715,000	28,668,664
TOTAL SPBC	<u>\$ 437,030,000</u>	<u>\$ 42,273,824</u>
Turnpike Authority	\$1,297,437,000 ^b	\$ 97,230,123 ^c
University Revenue Bonds	384,361,500	28,152,814
Kentucky Housing Corporation	641,900,000	45,986,000
Pollution Abatement Authority	37,620,000	2,856,597
Kentucky Higher Education		
Student Loan Corporation	30,000,000	1,620,000 ^d
School Building Authority	46,000,000 ^d	337,000 ^d
STATE GOVERNMENT TOTAL	<u>\$2,874,348,500</u>	<u>\$218,456,358</u>
Local Government Debt:		
Counties	\$ 855,030,500 ^e	\$ 61,958,473 ^f
Cities	1,253,804,373 ^e	95,826,808 ^f
School Districts	724,802,000 ^e	55,698,820 ^f
Special Districts	301,195,928 ^e	22,513,434 ^f
LOCAL GOVERNMENT TOTAL	<u>\$3,134,832,801^e</u>	<u>\$235,997,535^f</u>
Industrial Revenue Bonds	\$ 987,017,668 ^e	\$ 73,274,883 ^e
GRAND TOTAL	<u>\$4,856,198,369</u>	<u>\$402,126,170</u>

SOURCE: Kentucky Legislative Budget, 1980-81;
 Kentucky Financial Report, 1979,
 Department for Local Government
 Bond Prospectuses.

^a Includes \$10,500,000 of Bond Anticipation Notes for Kentucky State Horse Park.

^b Includes \$880,490,000 of Refunding Bonds, Series of 1976.

^c Debt Service requirements calculated from data for individual project categories. See also Table 6.

^d The School Building Authority had actually issued roughly one-third this amount at the end of Fiscal Year 1980, although it had planned to issue the full amount by that time. This, and the fact that most of the debt which was issued was issued late in the biennium, caused the actual fiscal 1980 debt service payments to be relatively low.

^e Preliminary.

^f Estimated.

TABLE 2

OUTSTANDING PUBLIC DEBT
COMMONWEALTH OF KENTUCKY
FISCAL YEARS 1971, 1975 AND 1980

	<u>June 30, 1971</u>	<u>June 30, 1975</u>	<u>June 30, 1980</u>
State Property and Buildings Commission			
Project Revenue Bonds	\$ 92,936,000	\$ 144,550,000 ^a	\$ 155,315,000 ^b
General Obligation Bonds	413,895,000	361,130,000	281,715,000
Turnpike Authority and Department of Highways	711,330,000	735,785,590	1,297,437,000 ^c
University Revenue Bonds	347,435,000	377,212,000	384,361,500
Kentucky Housing Corporation	-0-	101,745,000 ^d	641,900,000 ^e
Pollution Abatement Authority	-0-	23,535,000	37,620,000
Kentucky Higher Education Student Loan Corporation	-0-	-0-	30,000,000
School Building Authority	-0-	-0-	46,000,000
State Government Total	<u>\$1,565,596,000</u>	<u>\$1,743,957,590</u>	<u>\$2,874,348,500</u>
Local Government Debt:			
Counties	\$ 57,150,400	\$ 188,403,400	\$ 855,030,500 ^f
Cities	450,380,711	690,185,329	1,253,804,373 ^f
School Districts	418,861,000	589,641,000	724,802,000 ^f
Special Districts	116,416,500	187,198,035	301,195,928 ^f
Local Government Total	<u>\$1,042,808,611</u>	<u>\$1,655,427,764</u>	<u>\$3,134,832,801^f</u>
Industrial Revenue Bonds	\$ 642,094,279	\$ 670,908,750	\$ 887,017,858 ^f
GRAND TOTAL	<u><u>\$3,250,498,890</u></u>	<u><u>\$4,070,294,104</u></u>	<u><u>\$6,896,197,159</u></u>

SOURCE: Kentucky Financial Reports, 1971, 1975 and 1979.
Kentucky Executive Budget, 1980-1982.
Local Debt Reports, 1971, 1975 and 1979, Kentucky Department for Local Government.
Kentucky Department for Local Government.

^aIncludes \$12,200,000 of Bond Anticipation Notes for Kentucky State Horse Park.

^bIncludes \$10,500,000 of Bond Anticipation Notes for Kentucky State Horse Park.

^cIncludes \$180,490,000 of Refunding Bonds, Series of 1978.

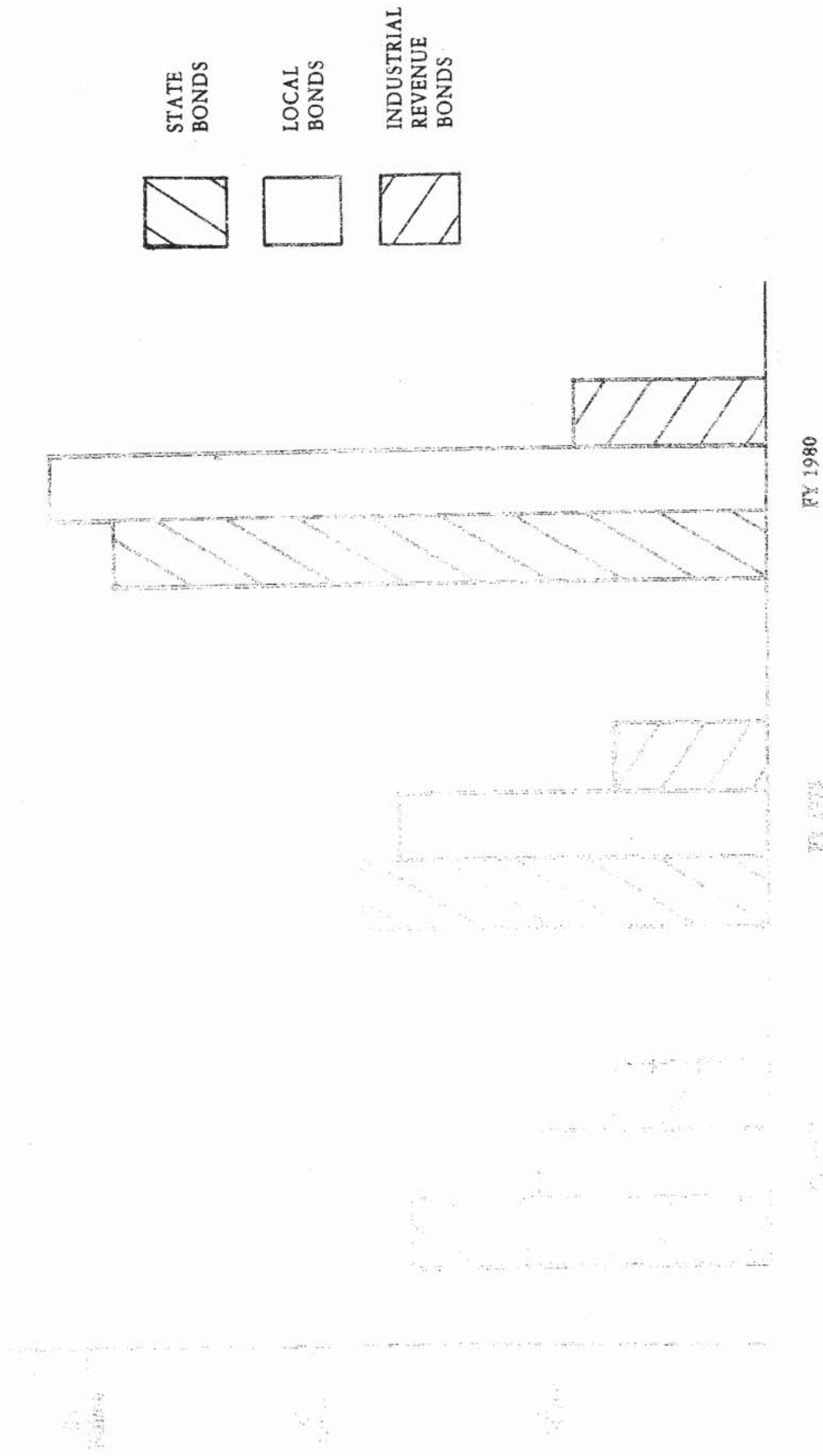
^dIncludes \$50,000,000 of second and third series Bond Anticipation Notes of the State of Ohio.

^eIncludes \$40,000,000 of Construction Loan Notes insured by the Federal Housing Administration and subject to Government National Mortgage Association commitments to the borrower's mortgages.

^fFig. rounded.

FIGURE 1

AN OVERVIEW OF STATE, LOCAL AND INDUSTRIAL REVENUE BONDS
ISSUED BY THE COMMONWEALTH OF KENTUCKY



Outstanding Debt and Debt Services

Table 1 presents the principal amount outstanding and annual debt service for all public bonded indebtedness in Kentucky as of June 30, 1980. Total state and local government debt was \$6,896,199,159. Debt of state agencies and authorities was \$2,874,348,500. Fiscal year 1980 principal and interest payments on state debt were \$218,456,358. Local government debt, excluding industrial revenue bonds, was \$3,134,832,801, with annual debt service of \$235,997,535. Industrial revenue bonds issued under the auspices of local authorities totaled \$887,017,858, with fiscal 1980 debt service of \$79,274,881. If no new bonds were issued, annual debt service would remain at approximately these levels until outstanding bonds were retired.

Most state debt has been issued by the Turnpike Authority, whose bonds account for forty-five percent of the state total, the Kentucky Housing Corporation (twenty-two percent), the State Property and Buildings Commission (fifteen percent), and the state universities (thirteen percent). Debt of city governments accounts for forty percent of local debt, followed by counties (twenty-seven percent), local school districts (twenty-three percent), and special districts (ten percent).

Debt Growth in the 1970's

Public sector indebtedness more than doubled during the past decade, increasing from \$3,250,498,890 at the end of fiscal year 1971 to \$6,896,199,159 on June 30, 1980. State government debt grew by eighty-four percent over this period, from \$1.57 billion to \$2.87 billion. Outstanding debt by government and authority is summarized in Table 2 for fiscal years 1971, 1975, and 1980. Figure 1 depicts this growth graphically. Local governments, led by counties, had the largest increases. Indeed, total local debt surpassed state debt for the first time in 1978. Among state authorities, the Kentucky Housing Corporation and Turnpike Authority issued the most new bonds.

The Commonwealth's Liability for Debt and Debt Services

Most debt service on state bonds is paid from the Commonwealth's General Fund and Transportation Fund revenues. The following sections briefly describe the purposes of borrowing and indicate sources of funds used to pay debt service for the bonds of each state authority. Local government and industrial revenue bonds are also analyzed from this perspective.

State Property and Buildings Commission

The State Property and Buildings Commission issues all state general obligation bonds. It also issues project revenue bonds for general government purposes. The Commission consists of the Governor, Lieutenant Governor, Attorney General, Secretary of Finance and Commissioner of Revenue. Staff services are provided by the Department of Finance.

General Obligation Bonds. General obligation bonds are backed by the full faith and credit and taxing authority of the Commonwealth. These bonds represent absolute commitments of the state, and have a primary claim against the Commonwealth's assets and General Fund revenues. In Kentucky, general obligation bonds may be issued only with voter approval in a statewide referendum. Principal and interest payments on general obligation bonds are made from General Fund and Transportation Fund appropriations. On June 30, 1980, Kentucky's outstanding general obligation

debt was \$281,715,000. Fiscal year 1980 debt service totaled \$28,668,664. No new state general obligation bonds have been issued since 1966.

Project Revenue Bonds. The State Property and Buildings Commission has issued revenue bonds for many general government projects, including the Capital Plaza Complex, Kentucky Educational Television, the Kentucky Convention and Fair Facility, and the Department for Human Resources building. Debt service for some bonds comes in part from facility revenues, but nearly two-thirds is provided by General Fund appropriations. For example, debt service payments on the Commonwealth Stadium revenue bonds are supported entirely by lease payments made by the University of Kentucky Athletic Association, whereas debt service on Kentucky Educational Television bonds is paid solely from the General Fund. The State Property and Buildings Commission will likely serve as the issuing authority for Economic Development Revenue Bonds for projects designated by the Secretary of the Development Cabinet.

Turnpike Authority of Kentucky

The Turnpike Authority consists of the Governor, Lieutenant Governor, Secretary of Transportation, Commissioner of Highways, State Highway Engineer and Attorney General, and constitutes a public corporation and government agency of the Commonwealth. The Turnpike Authority may issue three types of project revenue bonds for highway construction and maintenance: Toll Road Revenue Bonds, Resource Recovery Road Revenue Bonds, and Economic Development Road Revenue Bonds. It has issued bonds for the toll roads and for Kentucky's Resource Recovery Road System. The 1980 General Assembly empowered the Authority to issue Economic Development Road Revenue Bonds, but none have yet been sold. With \$1,297,437,000 of bond principal outstanding on June 30, 1980, the Turnpike Authority (TPA) is the largest issuing agency in Kentucky state government. Debt service on TPA revenue bonds is paid via lease rental payments from the Department of Transportation to the Authority. These debts represent actual and potential liabilities of the Commonwealth. Should current revenue sources fail, the Governor and the General Assembly would almost certainly provide funds for debt service payments from other general state revenues.

Toll Road Revenue Bonds. At the end of fiscal year 1980, outstanding principal on Toll Road Revenue Bonds was \$399,933,050, not including the refunding bond series of 1978. Debt service on these bonds is provided by lease rental payments from the Department of Transportation Road Fund to the TPA. The Road Fund, a major fund within the Transportation Fund, consists of all roadway-related revenues, including toll road receipts, motor fuel taxes, vehicle usage taxes, motor vehicle operator taxes, car and truck license receipts, vehicle sales taxes, truck trip permit fees, and junkyard license fees. In fiscal year 1979, toll road revenues accounted for \$19,312,367 (thirty-five percent) of total operations, maintenance and debt service costs for the parkways (\$54,536,165). The balance, \$35,223,798, was made up from general Road Fund revenues.

Resource Recovery Road Revenue Bonds. Through fiscal year 1980, the Turnpike Authority had issued three series of Resource Recovery Road Revenue Bonds, having total initial principal of \$610,520,000. On June 30, 1980, outstanding principal on these bonds was \$600,255,000. Debt service is provided by transfers of coal severance tax revenues from the state General Fund to the Transportation Fund. Amounts necessary for debt service are subsequently transferred to the Authority as lease rental payments for the roads. Three additional projects have been identified for inclusion in the Resource Recovery Road System, but these have not yet been funded. Current projections indicate they will cost approximately \$176,900,000. These projects may be funded in the 1980-82 biennium.

nium or deferred until a later date. The Authority has no plans to issue bonds for additional Resource Recovery Road projects during the 1980-82 biennium.

Economic Development Road Revenue Bonds. The 1980 General Assembly enacted legislation enabling the Turnpike Authority to issue revenue bonds to construct and maintain designated Economic Development Roads. Debt service is to be provided via lease rental payments from gasoline tax revenues. The Authority plans to issue \$150,000,000 of Economic Development Road Revenue Bonds in fiscal year 1981 and \$150,000,000 in 1982.

State University Revenue Bonds

Kentucky's state universities issue two types of bonds, Consolidated Educational Building Revenue Bonds and Housing and Dining Facility Revenue Bonds. Total outstanding principal on university revenue bonds was \$384,361,500 as of June 30, 1980. Consolidated Educational Building Bonds are issued to fund construction of buildings which do not directly generate revenue, such as classroom and administration buildings. Debt service for these bonds is paid from tuition and fee receipts, which are replaced, dollar for dollar, from the universities' General Fund appropriations. While these bonds thus do not represent a direct legal claim on General Fund revenues, General Fund monies are budgeted for debt service and are in fact used to replenish the tuition and fee receipts which are pledged to that purpose. Housing and dining facility bonds are issued to construct dormitories and cafeterias. Room and board payments generated by these facilities generally provide sufficient funds to retire the bonds.

University Consolidated Educational Building Revenue Bonds represent a substantial liability and claim against the state's General Fund revenues. Should student fees and other receipts fail or diminish as revenue sources, it is most likely that shortfalls affecting debt service payments would be made up by additional appropriations from the General Fund.

Kentucky Housing Corporation

The Kentucky Housing Corporation issues revenue bonds to support home purchases by lower and middle income families and construction of multi-family dwellings. It also sells construction loan notes to support multi-family housing construction. Its Loans to Lenders program supports single-family home mortgages. The Corporation has a statutory debt ceiling of \$700,000,000. Its outstanding bonded debt on June 30, 1980, was \$641,900,000.

Revenue bonds issued for the single-family and multi-family mortgage loan programs are used to provide mortgages which are fully insured by the Federal National Mortgage Association or the Government National Mortgage Association. The construction loan notes are insured by the Federal Housing Administration and are subject to permanent mortgage purchase commitments of the Government National Mortgage Association when construction is complete. The Commonwealth bears no actual liability for these securities, and its maximum contingent liability is limited to interest on amounts which the Corporation might have to borrow before the federal agencies remit insurance claims. In view of the fact that the Corporation maintains a reserve of more than one year's debt service requirements, even this liability appears extremely remote. The Loans to Lenders revenue bonds, while not federally insured, are backed by collateral pledges of the lending institutions' own conventional mortgages. Market value of the collateral securities thus pledged must be at least 110 percent of

the amount borrowed by the lending institution. The Commonwealth bears a contingent liability for the Loans to Lenders revenue bonds, but considered in light of the collateral pledges and the Corporation's large reserve, this potential liability also appears remote.

Kentucky Pollution Abatement Authority

The Pollution Abatement Authority's (PAA) bond assistance program provides funds to local governments to support the construction of wastewater treatment plants. Under a grants program administered by the U.S. Environmental Protection Agency pursuant to the Federal Water Pollution Control Act of 1972, local governments provide twenty-five percent and the federal government seventy-five percent of funding for treatment plants. By issuing bonds for several projects at one time, the Authority reduces administrative and issuance costs to each city or county and also obtains lower interest rates than the localities could obtain individually.

The Authority's administrative costs are paid from bond proceeds. There is no General Fund support for the program. The Pollution Abatement Authority's outstanding indebtedness was \$37,620,000 on June 30, 1980. Debt service on the PAA's revenue bonds is paid by the local governments, according to formal, legal agreements with the Authority. The Commonwealth bears no actual liability for these bonds. This debt could become a liability of the state only upon default, bankruptcy or breach of a repayment agreement by a city or county.

Kentucky Higher Education Student Loan Corporation

The General Assembly created this body in 1978 as a *de jure* municipal corporation and political subdivision of the Commonwealth. The Student Loan Corporation issued \$30,000,000 of revenue bonds rated AA in March, 1979, due in June, 1982, at 5.83 percent interest, including issuance costs. Funds for debt service on these bonds are provided by student loan repayments and by interest payments from the U.S. Department of Education while students are still enrolled. The Commonwealth bears no actual liability for this debt.

Revenue bonds issued by the Student Loan Corporation are insured by the Corporation and are fully reinsured by the U.S. Department of Education. In the event of massive defaults by borrowers, the Corporation might experience temporary cash flow problems, if there were delays in recovering insured amounts from the federal government. In this case, the Commonwealth might have to provide funds to the Corporation to pay interest on the unrecovered amounts until federal insurance payments were received. It is unlikely, though, that defaults would be this extensive.

While a student is enrolled in a qualified program, interest is paid by the U.S. Department of Education. The interest rate is calculated quarterly by formula. Specifically, the rate is the current rate on U.S. Treasury bills, plus three and one-half percent, subject to a minimum rate of seven percent. This formula yielded a sixteen percent rate of interest for the first quarter of 1980. Nine months after leaving school, either by graduation or withdrawal, a student must begin to repay the loan at seven percent interest. The maximum repayment period is ten years.

It appears that the \$30,000,000 issue of 1979 will be refunded by a new issue when it matures in June, 1982. Should the market be unfavorable for a new bond issue at that time, however, the Corporation could sell its securities to the Student Loan Marketing Association at ninety-eight percent of par value, using the proceeds of this sale, plus reserves, to retire the bonds.

Kentucky School Building Authority

The School Building Authority was established by 1978 legislation and began operations in fiscal year 1980. The Authority consists of five citizens appointed by the Governor, plus the following state officials or their designees: Superintendent of Public Instruction, Secretary of Finance, Attorney General, Chairman of the State Board of Education, and Chairman of the Interim Joint Committee on Education. Its purpose is to assist local school districts in financing buildings and other facilities, and to support the construction of state vocational education facilities. All bonds are issued in the name of the Authority; debt service is paid by General Fund appropriations for that purpose and by payments from local districts to the Authority, pursuant to formal agreements. Most local school debt has been incurred by the local districts and is entirely separate from obligations of the School Building Authority. The Authority pays an average of fifty percent of debt service on its bonds. Depending on a district's financial capability, the Authority may pay as much as seventy percent or as little as thirty percent of debt service.

Through fiscal year 1980, the Authority had issued \$46,000,000 worth of bonds, on which the annual debt service paid from the General Fund is roughly \$1,800,000. The Authority plans to issue an additional \$66,000,000 worth of bonds in the 1980-82 biennium.

Local Government and Industrial Revenue Bonds

Public debt in Kentucky also includes bonds issued by local governments to finance educational facilities and capital construction projects, and industrial revenue bonds. Local school debt is supported by General Fund appropriations to the districts and by local taxes. Other local debt is retired from local sources. Industrial revenue bonds, issued to construct or acquire business facilities, are not local government obligations and are backed solely by lease rental payments to the local governments from the enterprises using the facilities.

Local School Debt. Local school district bonded debt totaled \$724,802,000 at the end of fiscal year 1980. Debt service in 1980 was \$55,698,820, of which approximately \$42,500,000 (75 percent) was paid from the General Fund via capital outlay allocations through the Foundation Program. The balance was paid from locally-generated revenues.

Other Local Debt. City and County governments and special districts also issue general obligation and project revenue bonds for various public works projects; e.g., roads, water systems, municipal buildings, libraries and parks. Outstanding debt of these governments was \$2,410,030,801 on June 30, 1980.

Local government debts are unlikely to become liabilities of the Commonwealth. However, to protect the ability of other local governments in Kentucky to issue bonds, the Governor and General Assembly could choose to support a local government bond issue rather than allow it to default.

Industrial Revenue Bonds. Industrial Revenue Bonds are issued pursuant to a resolution or ordinance adopted by a local governing body. Bond proceeds are used to construct or purchase industrial or commercial facilities which are leased to private business firms. These facilities are exempt from property taxation. By law, local Industrial Revenue Bonds are retired solely from revenues derived from renting the facility, and do not constitute an indebtedness of the issuing government. After the bonds are retired, the local government owns the facility. Outstanding Industrial Revenue Bonds totaled \$887,017,858 at the end of fiscal year 1980.

In Kentucky, no local Industrial Revenue Bonds can be issued until the State Local Finance Officer, an official of the Department of Finance, has been notified of the proposed issue in writing. There is no ceiling on the amount in Industrial Revenue Bonds that a local government can issue, although fiscal prudence dictates that only sound, worthy projects be undertaken. Default on an Industrial Revenue Bond issue might impair the local government's ability to issue bonds in the future.

Debt Service Paid from the Commonwealth's Direct Revenues

This section identifies bonds which are retired from the state's own direct revenues and presents the debt service requirements of these bonds for fiscal years 1979 through 1982. Introducing the section is a brief summary of new debt budgeted for the 1980-1982 fiscal biennium. Next, direct revenues of the state are identified and debt service paid from them for each issuing authority's bonds is presented. Presentation of total state and specific major fund revenues dedicated to debt service in fiscal years 1979 through 1982 conclude the chapter.

New Debt, Fiscal Years 1981 and 1982

The following discussion is based on data extracted from the *Kentucky Executive Budget, 1980-1982*. Bonds which do not represent a claim against the state's own revenues are excluded. Table 5 indicates that most new state bonds will be issued by the Turnpike Authority (\$300,000,000) and the State Property and Buildings Commission (\$271,475,000). Economic Development Project Revenue Bonds issued by the Commission are expected to total \$100,000,000. New bonds of the state universities are projected at \$66,230,000 for the biennium, and those of the School Building Authority at \$66,000,000. Total new state debt budgeted for the biennium is \$703,705,000. This does not include bonds for three additional Resource Recovery Road projects, having total costs of \$176,000,000, because issuance of these may be deferred beyond June 30, 1982.

TABLE 3
NEW BOND ISSUES
COMMONWEALTH OF KENTUCKY, FISCAL YEARS 1981 and 1982

<u>ISSUING AUTHORITY</u>	<u>TOTAL NEW DEBT FY 1981 AND FY 1982</u>
State Property and Buildings Commission:	
Regular Construction Projects ^a	\$ 138,963,200
Economic Development Projects	100,000,000
Energy ^b	<u>32,509,800</u>
TOTAL SPBC	\$ 271,473,000
Turnpike Authority ^c :	
Economic Development Roads	\$ 300,000,000
Universities:	
University of Kentucky	\$ 23,410,000
Community Colleges	3,500,000
University of Louisville	24,948,000
Northern Kentucky University	<u>14,372,000</u>
TOTAL UNIVERSITIES	\$ 66,230,000
School Building Authority:	
Elementary and Secondary Schools	\$ 48,000,000
Vocational Education Projects	<u>18,000,000</u>
TOTAL SBA	\$ 66,000,000
GRAND TOTAL	<u>\$ 703,703,000</u>

SOURCE: Kentucky Executive Budget, 1980-82.

NOTE: Because of the estimated revenue shortfalls in Fiscal Years 1980 and 1981, this analysis assumes that most of the new bonds budgeted for the biennium will be issued in FY 1981. Those bonds which appear likely to be issued in FY 1980 include \$50,000,000 of economic development project bonds, \$150,000,000 of economic development road bonds, and \$33,000,000 of School Building Authority bonds.

^aThese projects include the Central Power Plant and Library and Archives Building at Frankfort; state support for the Galleria, Center for the Arts, General Hospital, and several State Fair Board projects in Louisville; and the expansion of Outwood and Central State Hospital, the construction of a new prison and the completion of the Kentucky Horse Park.

^bEstimated debt principal that could be supported by the \$3,000,000 budgeted for FY 1982 debt service for state support of a major coal development project.

^cThree additional projects, scheduled for inclusion in the Resource Recovery Road System, are not included in this analysis because it appears likely that the bond issues to finance them will be deferred beyond June 30, 1982. Design work on the projects has been completed. Estimated total construction costs are \$176,900,000.

Direct Revenues and Debt Service

Debt service is a recurring fixed expenditure. Principal and interest on new debt are in direct competition with additions to new programs or expansion of existing programs. Service on old debt generally cannot be reduced or deferred in the event of revenue shortfalls. Because of the significance of debt service as a fixed cost of government operations, this section describes briefly the magnitude of debt service compared to the Commonwealth's own revenues.

To understand Kentucky's actual liability for its debt, it is important to identify those bonds which are retired from the state's direct revenues and those which are effectively self-supporting. For example, general obligation bonds are retired from direct revenues of the General Fund and the Transportation Fund, while Kentucky Housing Corporation debt service is paid solely from revenues generated by the Corporation's bond programs. Bonds of the Kentucky Housing Corporation, the Pollution Abatement Authority, and the Kentucky Higher Education Student Loan Corporation, and Housing and Dining Facility Revenue Bonds, issued by the state universities, are self-supporting and are therefore excluded from the following analysis. The bonds and debt service incurred for Commonwealth Stadium at the University of Kentucky are excluded for the same reason. All other debt issued by state authorities is included. By the same logic, that portion of debt service on local school district bonds which is paid from capital outlay allocations through the Foundation Program is included because its direct source is the state General Fund.

Direct state revenues are defined for this analysis as direct revenue receipts from state sources. Federal revenues and interfund transfers are excluded. Specifically, revenue receipts of the General Fund, Agency Fund, Trust and Revolving Fund and Transportation Fund are included. It was not possible to obtain clear estimates of revenue receipts for the Agency Fund and Trust and Revolving Fund for fiscal years 1980 through 1982 from budget documents. Therefore, revenue receipts for these funds were estimated by the following procedure. First, it was assumed that the relationship between revenue receipts and non-revenue receipts (e. g., interfund transfers) for these funds remains constant over time. Second, revenue receipts as a percentage of total fund receipts were calculated for fiscal year 1979. Finally, estimated total receipts for 1980 through 1982 were multiplied by this percentage ratio to obtain estimated revenue receipts for the funds for those years. Table 4 shows the state's direct revenues for fiscal years 1979 through 1982.

Debt service paid from the state's own revenues for fiscal years 1979 through 1982 is presented in Table 5. The Turnpike Authority portion of total debt service will decline from 1980 to 1982, as will the share of local school district debt service paid from the General Fund. The share of the State Property and Buildings Commission and School Building Authority will increase. Debt service on university and community college bonds will remain stable as a percentage of debt service paid from direct state revenues. For analytical purposes, new debt is assumed to be issued for thirty years at 8.5 percent interest.

To indicate the magnitude of the debt service claim on state revenues, Table 6 shows the percentage of the Commonwealth's own revenues dedicated to debt service for fiscal years 1979 through 1982. This percentage rises from 7.26 percent in fiscal year 1979 to approximately eight percent in fiscal years 1980 and 1982. The decline from 1980 to 1981 and subsequent rise from 1981 to 1982 are due to the assumed deferral of many major bond issues until the second year of the biennium.

The debt service payments made from each major state fund are presented in Table 7. Debt service as a proportion of all state revenue receipts in fiscal 1980 is depicted in Figure 2. Figures 3 and 4 illustrate debt service as a portion of General Fund and Transportation Fund revenue receipts in that year. Principal and interest payments made from the General Fund equaled 4.6 percent of General Fund revenue receipts in fiscal year 1980. Debt service on Turnpike Authority revenue bonds and general obligation highway bonds represented 25.6 percent of Transportation Fund revenue receipts in 1980. Debt service on Resource Recovery Road Revenue Bonds is paid primarily from coal severance tax revenues transferred from the General Fund to the Transportation Fund for that purpose. If this debt service is treated analytically as being paid from the General Fund, then the Transportation Fund share of total debt service is reduced to 17.8 percent in 1980 and 16.9 percent in 1982. Counting Resource Recovery Road Revenue Bond debt service as being paid from the General Fund raises the General Fund share to 6.4 percent in 1980 and to 7.1 percent in 1982.

These values will vary with the actual level of revenues and the timing of the bond issues. If revenues are higher than anticipated, the corresponding percentages will be lower. If bonds are delayed beyond expected issuance dates, or if they are issued at lower interest rates than anticipated, then actual debt service payments and the proportion of revenues devoted to them will be lower. If bonds are issued earlier than anticipated, debt service payments will be higher than shown in this analysis.

TABLE 4

STATE'S OWN REVENUES
COMMONWEALTH OF KENTUCKY
FISCAL YEARS 1979 -- 1982

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
General Fund Revenue Receipts	\$1,698,527,239	\$1,810,000,000	\$2,035,000,000	\$2,305,000,000
Agency Fund and Trust & Revolving Fund Revenue Receipts ^A	249,415,290 ^B	319,775,192 ^C	350,063,529 ^C	354,873,062 ^C
Transportation Fund Revenue Receipts	<u>415,207,481^D</u>	<u>418,205,384</u>	<u>455,453,400^E</u>	<u>511,298,000^E</u>
TOTAL.	\$2,363,150,010	\$2,547,980,576	\$2,840,516,929	\$3,171,171,062
Total Available Funds Per 1980-1982 Executive Budget ^F	\$3,889,221,083	\$4,303,781,154	\$4,788,267,162	\$5,141,562,852

SOURCE: Kentucky Financial Report, 1979.
Kentucky Executive Budget, 1980-1982.

NOTE: The General Fund, Agency Fund, Trust and Revolving Fund, and Transportation Fund revenues receipts for Fiscal Years 1980, 1981, and 1982 are the unrevised figures from the Kentucky Executive Budget, 1980-82.

NOTES TO TABLE 4

- A. Excludes university housing and dining facility and other university auxiliary enterprise revenues. Since housing and dining facility project revenue bond debt service is excluded from debt service paid from state's own revenues, revenues from these aggregately self-supporting enterprises are excluded here.
- B. Actual revenue receipts according to fund summary data in the Kentucky Financial Report, 1979.
- C. Estimated revenue receipts. The Kentucky Executive Budget, 1980-1982 shows a tremendous increase in agency fund (including Trust and Revolving Fund) revenues from FY 1979 to FY 1980. No satisfactory explanation of this increase could be obtained, nor could it be verified that the projected revenue data obtained from the budget overview document did not include double counting. Therefore, revenue receipts for the Agency Fund and Trust and Revolving Fund were estimated by multiplying the total projected revenues, per the budget overview document, times the ratio of actual non-federal revenue receipts to total fund receipts for the two funds for FY 1979. This ratio is 69.2%.
- D. Road fund revenue receipts excluding federal and local aid.
- E. Includes projected increased gasoline tax revenues.
- F. For FY 1979, the value is gross receipts for all funds. This includes double counting where funds are recorded as revenue receipts in one fund and transfer or non-revenue receipts in another.

TABLE 5

DEBT SERVICE PAID FROM STATE'S OWN REVENUES
COMMONWEALTH OF KENTUCKY
FISCAL YEARS 1979 - 1982

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
State Property & Buildings Commission				
General Obligation Bonds	\$ 28,656,491 ^A	\$ 28,668,664	\$ 28,671,226	\$ 28,705,635 ^C
Project Revenue Bonds	13,231,870 ^B	13,011,666	12,682,401	32,644,938
Turnpike Authority	71,419,936	97,230,123	98,859,350	114,367,915 ^D
University Consolidated Education Buildings Revenue Bonds	17,127,906	19,308,244	19,542,408	25,341,708
Community College Revenue Bonds	1,433,337	1,425,387	1,416,737	1,745,317
School Building Authority	-0-	337,000	3,448,500 ^F	5,500,000 ^F
General School District Debt Service Paid Through Forgation Program by General Fund	39,644,538	42,574,216	46,114,216	49,654,216
TOTAL	\$171,514,070	\$202,555,300	\$210,734,838	\$257,959,459

SOURCE: Kentucky Financial Reports, 1978 and 1979.
Bond prospectuses.
Kentucky Department of Education.
Kentucky Executive Budget 1980-1982.

NOTES TO TABLE 5

- A. Excludes debt service on Commonwealth Stadium project revenue bonds (SFBC Project Number 15, because these are serviced entirely by revenues generated by it, which are not included in state revenue receipts.
- B. From State Property and Buildings Commission Sinking Fund financial statements in Kentucky Financial Report, 1979. This number differs from that presented in the computer summary earlier in the financial report.
- C. Includes debt service on construction project bonds scheduled for issuance during the biennium, assuming that they are issued on July 1, 1981. Also includes debt service on the economic development project and energy project revenue bonds, as reported in the Kentucky Executive Budget, 1980-1982.
- D. Includes debt service on Economic Development Road Revenue Bonds, as reported in the final Kentucky Executive Budget, 1980-1982.
- E. Does not include university housing and dining project revenue bonds.
- F. Governor's budget recommendations, final Kentucky Executive Budget, 1980-1982.
- G. The FY 1979 figure is the actual amount used to pay local school district debt service from capital outlay allotments provided from the General Fund through the Foundation Program. The values for FY 1980, 1981 and 1982 are estimated by applying the state's percentage share -- 70.8 percent, estimated by Kentucky Department of Education, Division of Local School District Finance -- to total projected local school district debt service for those years (estimates also obtained from KDE, Division of Local School District Finance).

TABLE 6

DEBT SERVICE PAID FROM STATE'S
OWN REVENUES AS A PERCENTAGE OF STATE REVENUES
COMMONWEALTH OF KENTUCKY, FISCAL YEARS 1979-1982

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Debt Service Paid From State's Own Revenues as a Percentage of:				
State's Own Revenues ^a	7.26%	7.95%	7.63%	8.13%
Total State Revenues ^b	4.41%	4.71%	4.53%	5.02%

SOURCES: Tables 4 and 5.
Kentucky Financial Report, 1979.
Kentucky Executive Budget, 1980-1982.

^aDebt service paid from state's own revenues, from Table 5, divided by total state's own revenues, line 4 from Table 4.

^bDebt service paid from state's own revenues, from Table 5, divided by total available funds, bottom line of Table 4.

TABLE 7

DEBT SERVICE PAID FROM STATE'S DIRECT REVENUES, BY ISSUING AUTHORITY AND FUND SOURCE
COMMONWEALTH OF KENTUCKY
FISCAL YEARS 1979-1982

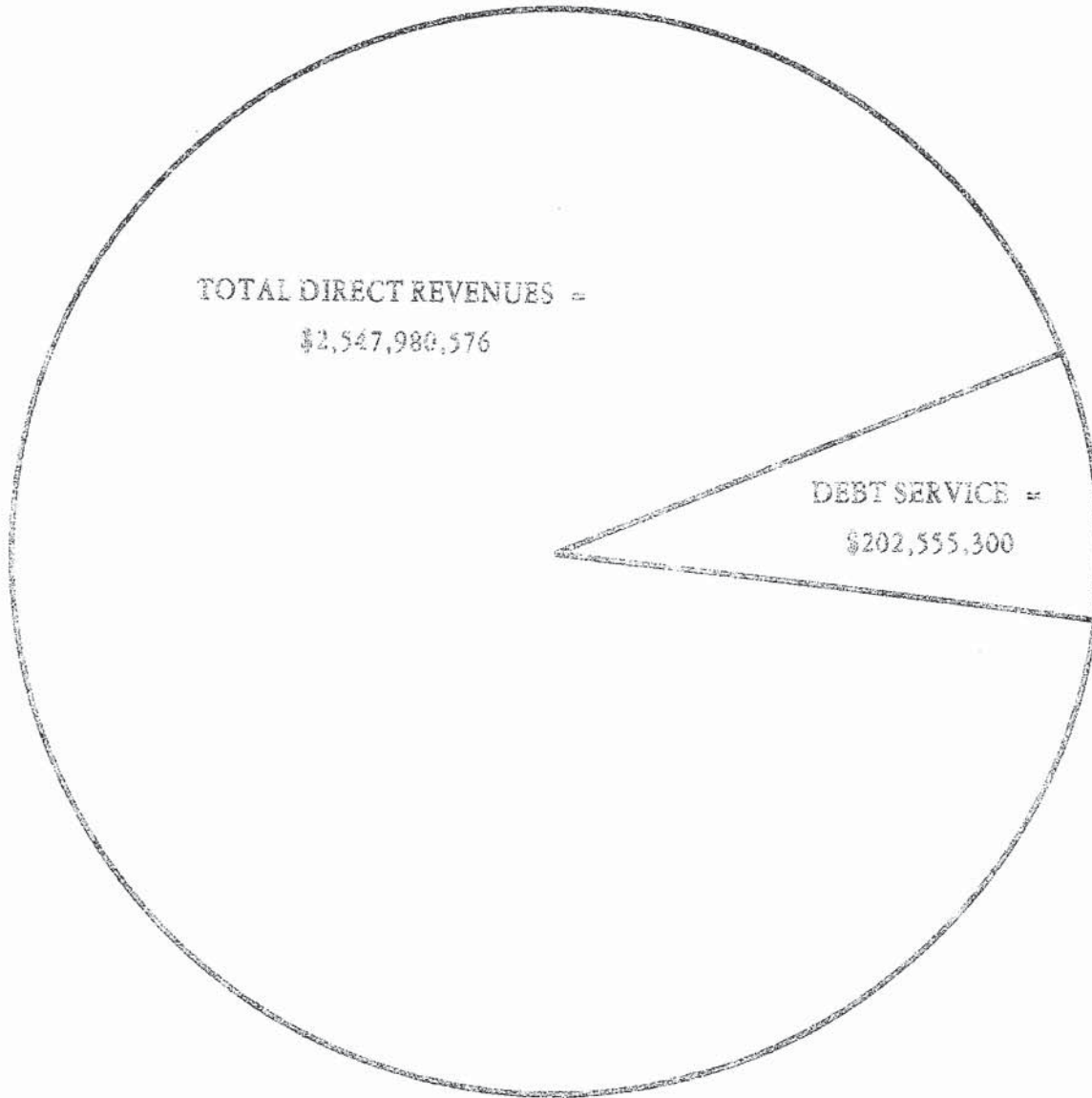
	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
State Property & Buildings Commission:				
General Obligation Bonds				
General Fund	\$10,388,408	\$10,405,673	\$10,414,596	\$10,415,184
Transportation Fund	18,268,083	18,262,991	18,256,630	18,290,181
State Property & Buildings Commission:				
Project Revenue Bonds				
General Fund	8,994,495	8,966,635	8,692,354	28,664,955 ^A
Agency & Trust & Revolving	4,021,463	3,826,253	3,785,972	3,777,492
Transportation Fund ^B	215,912	218,778	204,075	202,491
Turnpike Authority: Toll Roads				
Toll Road Revenues	11,157,668	7,285,200	7,447,300	7,468,600
Transportation Fund	32,204,180	48,629,670	44,796,400	46,043,100
Turnpike Authority: Resource Recovery Roads				
Coal Severance Tax Transfers to				
Transportation Fund	14,627,612	32,642,816	43,750,000	43,750,000
Investment Income	798,032	1,885,004	2,865,650	2,856,215
Capitalized Interest	11,632,444	6,787,433	-0-	-0-
Turnpike Authority: Economic Development Roads				
Transportation Fund	-0-	-0-	-0-	14,250,000 ^C
Universities: and Community Colleges:				
Tuition & Fees (General Fund)	18,561,243	20,733,631	20,959,145	27,087,025
School Building Authority: (General Fund)	-0-	337,000	3,448,500	5,500,000
Local School District Debt Service Paid				
Through Foundation Programs (General Fund)	39,644,538	42,574,216	46,114,216	49,654,216
Total General Fund	77,588,684	83,017,155	89,628,811	121,321,380
Total Transportation Fund	77,473,455	107,039,455	114,454,405	130,004,372
Total Agency & Trust & Revolving Fund	4,021,463	3,826,253	3,785,972	3,777,492
Total Other ^D	12,430,476	8,672,437	2,865,650	2,856,215
GRAND TOTAL	\$171,514,078	\$202,555,300	\$210,734,838	\$257,959,459

NOTES TO TABLE 7

- A. Includes estimated debt service on projected SPBC projects of \$12,823,524 per year. This estimate is based on the assumption that the debt is retired over thirty years at 8.5 percent interest on a regular mortgage-type amortization schedule. Also includes debt service on economic development project and energy project revenue bonds, as reported in the executive budget.
- B. Debt service is paid through the Transportation Fund for two SPBC projects: the Capital City Airport project revenue bonds and 4.53% of the debt service on the DHR building project revenue bonds.
- C. Debt service for Economic Development Road Revenues Bonds is reported in the budget at \$14,250,000 for FY 1982. Debt service on these bonds for FY 1983 and succeeding years will be approximately twice this amount.
- D. Includes investment income and capitalized interest used to pay debt service on Resource Recovery Roads.

FIGURE 2

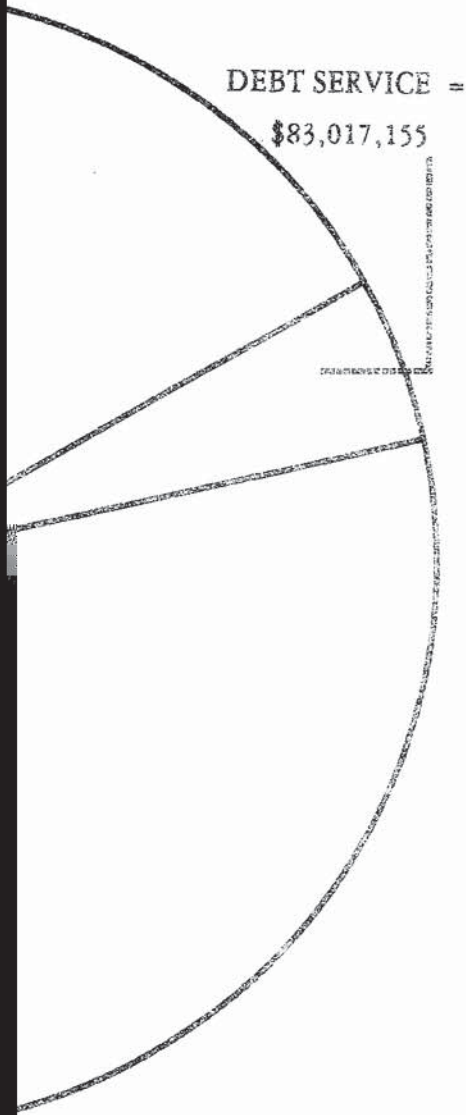
DEBT SERVICE PAID FROM STATE'S DIRECT REVENUES
COMMONWEALTH OF KENTUCKY
FISCAL YEAR 1980



SOURCE: Tables 5 and 6.

NOTE: Revenues are budget estimates, not final actual revenues.

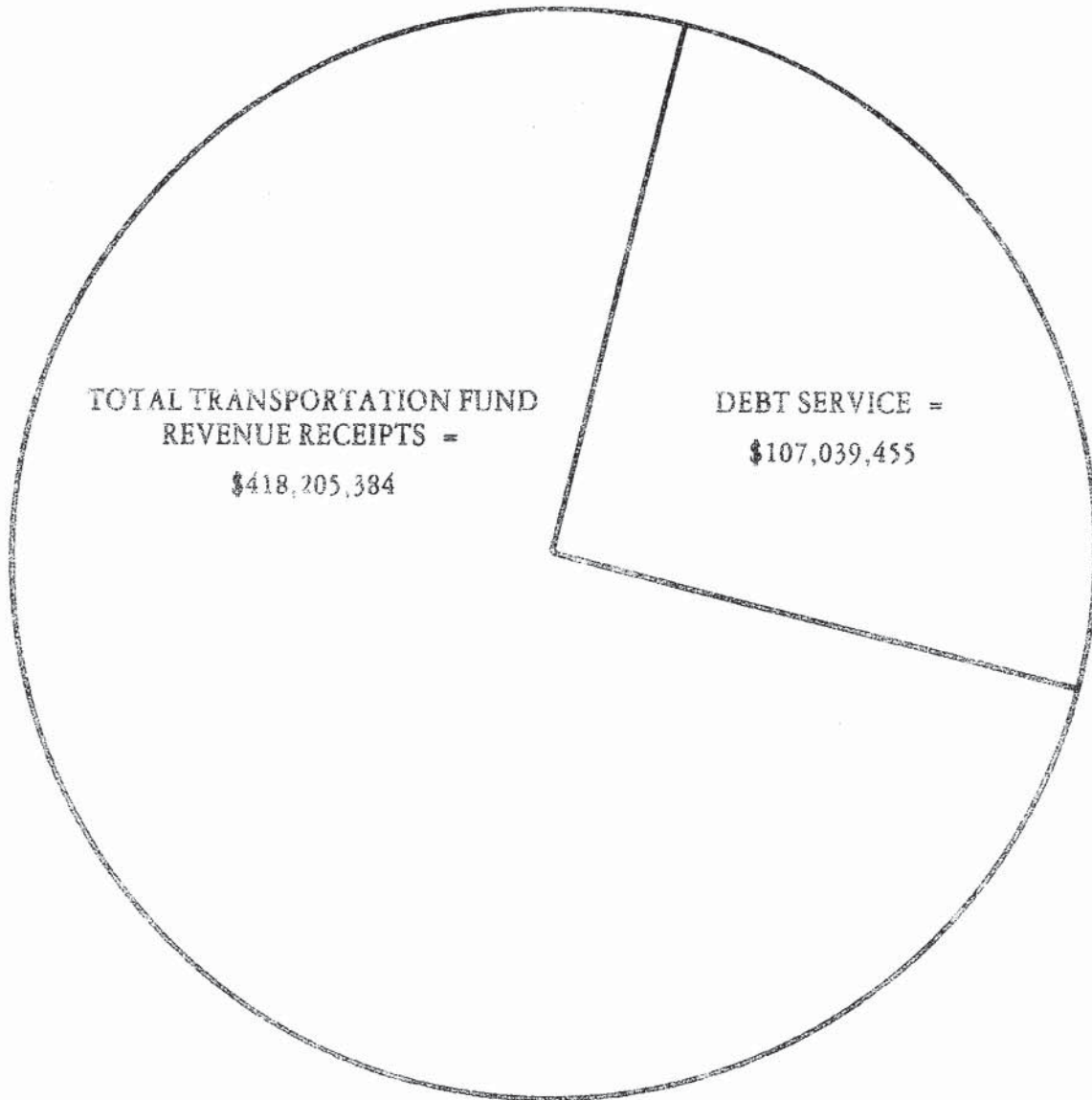
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FIGURE 4

DEBT SERVICE PAID FROM TRANSPORTATION FUND REVENUE RECEIPTS
COMMONWEALTH OF KENTUCKY
FISCAL YEAR 1980



SOURCE: Tables 5 and 6.

NOTE: Revenues are budget estimates, not final actual revenues.

CHAPTER II

EVALUATION OF KENTUCKY'S DEBT

Two central questions must be addressed in evaluating Kentucky's state debt.

- How much debt can Kentucky incur and manage responsibly?
- Has the Commonwealth issued too much debt?

This chapter addresses these questions in three ways. It begins with a theoretical discussion of the factors which determine a state's maximum feasible indebtedness. The second section presents comparative statistical data on the debt burdens of the fifty states. Kentucky is also compared with states identified as having stable debt conditions and with those having debt problems. In the final section, non-statistical factors affecting state debt conditions and bond ratings are discussed. Four states which have suffered reductions in their bond ratings are identified and their problems briefly described. Kentucky is analyzed in terms of whether the factors which caused bond downgrading are likely to apply to it.

Determining Feasible State Debt

Unfortunately, it is not possible to determine a specific limit on indebtedness which may be applied uniformly to all states. Neither is it possible to calculate a precise measure of the debt which an individual state can issue and manage. Annual debt service payments can be regarded as any other expenditure, provided that legislators and executive officials recognize that debt service requirements are fixed for the life of the bonds. Government decision-makers can choose to allocate funds to debt retirement in preference to current program expenditures. This is entirely sound and legitimate, provided that two requirements are met. First, the debt and associated cash needs must be properly managed. Secondly, no new commitments or decisions can be made which impair the state's ability to retire its bonds.

The maximum debt service to which a state could possibly obligate itself may be estimated as the smallest amount of discretionary funds available, under the worst conceivable revenue conditions, after minimum necessary government activities are provided. Depending on the minimum level of services defined by the legislature and executive officials, the amount available for debt service may represent a high percentage of actual revenues. This maximum possible level may well be higher than most decision-makers would choose, but there is no definite analytical reason to establish a lower limit.

Practically considered, the securities markets will determine the maximum amount of bonds that a state can issue. However, it is wise and prudent for states to establish debt ceilings because of the enhanced credibility this provides for their bonds. New bond issues of states whose debt service exceeds ten or twelve percent of current direct revenues would likely receive additional scrutiny from underwriters and potential investors because of the level of state debt.

Several factors influence the capacity of a state to borrow and to repay its debts. Chief among these are the state's tax base, its tax structure, and the stability of these factors. The security of the revenue source supporting a bond issue is by far the most important determinant of that issue's rating. A state's long-term economic prospects are also important as determinants of the state's wealth and tax base.

Legislative and executive decision-makers must also consider that a high level of debt increases the vulnerability of state programs and employees to unexpected declines in state revenues. Debt service claims are fixed and cannot be avoided. If there is ever a conflict, scarce government revenues must first be used to pay debt service, even at the cost of reductions in program expenditures.

Comparative Analysis

This section presents selected debt burden statistics for the fifty states. Kentucky's statistics are compared with those of states identified as having sound, stable debt conditions and also with those of states whose debt conditions have deteriorated. Comparative analysis is descriptive and generally does not offer firm conclusions regarding why given conditions exist. The point of this analysis is to observe whether states with high debt burdens have experienced problems with bonded indebtedness and whether Kentucky has factors in common with these states. If this is the case, it might prove desirable to monitor Kentucky's debt more closely than in the past and perhaps study specific variables more thoroughly.

Data for these comparisons was obtained from *State Government Finances in 1978*, published by the U.S. Bureau of the Census, and from information obtained from two bond rating companies, Moody's Investors Service, Incorporated and Standard and Poor's Corporation, and an underwriting firm, Prescott, Ball and Turben, Incorporated, which also rates bonds. The data obtained from *State Government Finances in 1978* is not comparable to the refined statistics developed in Chapter I. The Census Bureau data is comparable among states and is used for that reason.

Fifty States Comparison

Statistics selected for these comparisons are (1) state government debt per capita, (2) state governments debt as a percentage of direct state revenues, (3) interest on debt as a percentage of direct state expenditures, and (4) debt per \$1,000 of personal income. The most recent available data is for fiscal year 1978. Tables 8 through 11 present these statistics for all fifty states.

Kentucky ranks eleventh highest among the fifty states in gross long-term debt per capita, at \$748 (Table 8). Gross debt includes general obligation and project revenue bonds. Alaska is highest, at \$2,737, and Nebraska lowest, at \$36. The median is \$368 per capita. Table 9 shows that Kentucky ranks twelfth in government debt as a percentage of general revenues from own sources (direct state revenues), at 118 percent. Oregon ranks highest, at 195 percent, and Nebraska and Arizona are lowest, at 6 percent. The median is 55 percent.

When ranked by interest payments on debt as a percentage of direct state expenditures, Kentucky is eleventh, at 4.5 percent (Table 10). New York is highest in this category, allocating 13.9 percent of its direct expenditures to interest payments. Nebraska and Arizona are again lowest, spending only 0.3 percent of direct expenditures on interest. The median is 2.9 percent.

Kentucky ranks tenth in long-term debt per \$1,000 of personal income, with \$113 in state debt outstanding for every \$1,000 of personal income (Table 11). Alaska is highest, at \$251, and Nebraska lowest, at \$5. The median is \$46.

By four different measures, Kentucky's debt burden ranks among the top twelve. However, no evaluative conclusion can be drawn from this information. The next section compares Kentucky with states with sound debt conditions and with states which have experienced problems with debt

TABLE 8

STATE GOVERNMENT DEBT PER CAPITA
UNITED STATES
FISCAL YEAR 1978

<u>State</u>	<u>Gross Long Term Debt Per Capita</u>	<u>Rank</u>	<u>State</u>	<u>Gross Long Term Debt Per Capita</u>	<u>Rank</u>
Alabama	\$ 267.22	32	Montana	\$ 173.52	39
Alaska	2,737.10	1	Nebraska	35.79	50
Arizona	41.62	49	Nevada	363.73	26
Arkansas	80.29	47	New Hampshire	474.20	20
California	315.06	28	New Jersey	641.42	13
Colorado	114.86	44	New Mexico	284.38	30
Connecticut	1,068.66	6	New York	1,165.56	5
Delaware	1,305.66	3	North Carolina	139.42	42
Florida	272.75	31	North Dakota	124.89	43
Georgia	264.70	33	Ohio	319.93	27
Hawaii	1,866.61	2	Oklahoma	373.01	25
Idaho	143.06	41	Oregon	1,271.97	4
Illinois	450.72	21	Pennsylvania	542.28	17
Indiana	103.41	46	Rhode Island	908.38	9
Iowa	78.46	48	South Carolina	603.72	15
Kansas	179.67	38	South Dakota	544.27	16
Kentucky	748.27	11	Tennessee	302.41	29
Louisiana	514.80	19	Texas	163.11	40
Maine	639.75	14	Utah	222.32	36
Maryland	915.67	8	Vermont	945.82	7
Massachusetts	810.63	10	Virginia	213.09	37
Michigan	227.40	35	Washington	382.90	24
Minnesota	441.69	22	West Virginia	739.42	12
Mississippi	538.47	18	Wisconsin	421.99	23
Missouri	112.03	45	Wyoming	237.11	34

SOURCE: U.S. Department of Commerce, Bureau of the Census, State Government Finances in 1978, Washington, D.C.: U.S. Government Printing Office 1979.

TABLE 9

STATE GOVERNMENT DEBT AS A PERCENTAGE OF
GENERAL REVENUES FROM STATE'S OWN SOURCES
UNITED STATES
FISCAL YEAR 1978

State	Gross Long Term Debt As a Percentage of General Revenue From Own Sources		Rank	State	Gross Long Term Debt As a Percentage of General Revenue From Own Sources		Rank
Alabama	50		30	Montana	31		36
Alaska	129		8	Nebraska	6		49
Arizona	6		49	Nevada	54		27
Arkansas	16		46	New Hampshire	120		11
California	41		32	New Jersey	109		14
Colorado	19		44	New Mexico	31		36
Connecticut	174		2	New York	163		4
Delaware	132		7	North Carolina	25		42
Florida	55		25	North Dakota	16		46
Georgia	53		28	Ohio	67		22
Hawaii	174		2	Oklahoma	62		24
Idaho	24		43	Oregon	195		1
Illinois	76		21	Pennsylvania	89		19
Indiana	18		45	Rhode Island	136		6
Iowa	13		48	South Carolina	108		16
Kansas	32		35	South Dakota	109		14
Kentucky	118		12	Tennessee	65		23
Louisiana	78		20	Texas	31		36
Maine	105		17	Utah	36		33
Maryland	125		9	Vermont	145		5
Massachusetts	121		10	Virginia	36		33
Michigan	31		36	Washington	50		30
Minnesota	53		28	West Virginia	118		12
Mississippi	98		18	Wisconsin	55		25
Missouri	26		40	Wyoming	26		40

SOURCE: U.S. Department of Commerce, Bureau of the Census, State Government Finances in 1978, Washington, D.C.: U.S. Government Printing Office, 1979.

TABLE 10

INTEREST ON DEBT AS A PERCENTAGE OF
DIRECT STATE EXPENDITURES
UNITED STATES
FISCAL YEAR 1978

State	Interest on Debt As a Percentage of Direct State Expenditures	Rank	State	Interest on Debt As a Percentage of Direct State Expenditures	Rank
Alabama	2.0	31	Montana	0.9	43
Alaska	5.6	8	Nebraska	0.3	49
Arizona	0.3	49	Nevada	1.0	42
Arkansas	0.6	46	New Hampshire	3.7	14
California	1.9	32	New Jersey	5.8	6
Colorado	0.7	45	New Mexico	1.1	41
Connecticut	7.6	2	New York	13.9	1
Delaware	6.6	5	North Carolina	2.2	29
Florida	3.2	20	North Dakota	0.6	46
Georgia	2.3	28	Ohio	2.8	26
Hawaii	5.7	7	Oklahoma	2.9	25
Idaho	0.8	44	Oregon	7.3	3
Illinois	3.7	14	Pennsylvania	4.0	13
Indiana	1.2	38	Rhode Island	3.6	17
Iowa	0.4	48	South Carolina	3.2	20
Kansas	1.4	36	South Dakota	3.1	22
Kentucky	4.5	11	Tennessee	2.7	27
Louisiana	3.7	14	Texas	1.7	35
Maine	3.6	17	Utah	1.2	38
Maryland	5.3	9	Vermont	5.1	10
Massachusetts	6.9	4	Virginia	1.8	34
Michigan	1.9	32	Washington	2.2	29
Minnesota	3.0	23	West Virginia	4.5	11
Mississippi	3.0	23	Wisconsin	3.4	19
Missouri	1.2	38	Wyoming	1.3	37

SOURCE: U.S. Department of Commerce, Bureau of the Census, State Government Finances in 1978, Washington, D.C.: U.S. Government Printing Office, 1979.

TABLE 11

STATE GOVERNMENT DEBT PER \$1,000
OF PERSONAL INCOME
UNITED STATES
FISCAL YEAR 1978

<u>STATE</u>	<u>Gross Long Term Debt Per \$1000 of Personal Income</u>	<u>Rank</u>	<u>State</u>	<u>Gross Long Term Debt Per \$1000 of Personal Income</u>	<u>Rank</u>
Alabama	42	28	Montana	25	38
Alaska	251	1	Nebraska	5	50
Arizona	6	49	Nevada	40	30
Arkansas	13	46	New Hampshire	66	20
California	36	32	New Jersey	73	18
Colorado	14	45	New Mexico	43	27
Connecticut	120	8	New York	141	6
Delaware	152	4	North Carolina	21	40
Florida	36	32	North Dakota	16	43
Georgia	39	31	Ohio	41	29
Hawaii	226	2	Oklahoma	53	23
Idaho	21	40	Oregon	162	3
Illinois	52	24	Pennsylvania	70	19
Indiana	13	46	Rhode Island	121	7
Iowa	10	48	South Carolina	97	14
Kansas	22	39	South Dakota	80	16
Kentucky	113	10	Tennessee	47	25
Louisiana	78	17	Texas	21	40
Maine	101	12	Utah	33	34
Maryland	110	11	Vermont	144	5
Massachusetts	100	13	Virginia	28	35
Michigan	27	36	Washington	45	26
Minnesota	56	21	West Virginia	115	9
Mississippi	94	15	Wisconsin	56	21
Missouri	15	44	Wyoming	26	37
			U.S. Average	59	

SOURCE: U.S. Department of Commerce, Bureau of the Census, State Government Finances in 1978, Washington, D.C.: U.S. Government Printing Office, 1979.

Kentucky vs. Selected States

In this section, Kentucky's debt burden statistics are compared with those of states with solid, stable debt conditions and with those of states whose debt conditions have deteriorated. These groups were identified by comparing the consensus rankings of two major bond rating companies, Moody's and Standard and Poor's, and a large underwriting firm, Prescott, Ball and Turben (PBT), which also assigns bond ratings. The states categorized as having sound debt conditions had received AAA ratings on their general obligation bonds from all three services, as of the latest reports prior to April, 1980. Eight states satisfied this criterion: Minnesota, New Jersey, North Carolina, South Carolina, Texas, Utah, Virginia and Wisconsin. Additionally, PBT assigns a rating trend in its reports. All of these states were rated as having stable or improving debt conditions.

The states identified as having debt problems all had at least one rating as low as A and none higher than AA. Five states fit this category: Delaware, Hawaii, Michigan, New York and Pennsylvania. PBT reported a downward rating trend in four of these five states.

In long-term debt per capita, the states with high, solid ratings ranked from thirteenth to forty-second, with an average ranking of twenty-ninth. The states which experienced difficulties ranked from second to thirty-fifth, with an average ranking of twelfth. Kentucky ranked eleventh.

Kentucky ranked twelfth in debt as a percentage of direct state revenues (Table 9). The sound debt states ranked from fourteenth to forty-second, with an average ranking of twenty-eighth. The problem states ranked from second to thirty-sixth, with an average ranking of fourteenth.

In interest on debt as a percentage of direct expenditures (Table 10), Kentucky ranked eleventh. The states with high bond ratings ranked from sixth to thirty-eighth, with an average rank of twenty-sixth. The states with debt problems ranked from first to thirty-second, with an average rank of twelfth.

Kentucky ranked tenth in debt per \$1,000 of personal income. The sound debt states ranked from fourteenth to fortieth, with an average rank of twenty-eighth. The debt problem states ranked from second to thirty-sixth, with an average ranking of thirteenth.

These statistics seem to indicate that states with high debt burdens are more prone to experience problems with their bond ratings than states with low debt burdens. However, the experience of New Jersey and South Carolina shows that states with higher than average debt burdens can maintain high bond ratings. Likewise, Michigan's case demonstrates that factors other than a high debt burden can cause deterioration of a state's bond rating. Considering that Kentucky's ranking is far closer to the average of states which have experienced problems than it is to the average of states with high, stable ratings, it would probably be wise to monitor Kentucky's debt condition closely and to enhance efforts to manage the Commonwealth's debt.

Non-Statistical Factors Affecting State Bond Ratings

Numerous factors can affect a state's bond rating adversely. These include mismanagement, using general obligation debt to finance deficits, improper use of debt financing, unusually high short-term borrowing, vulnerability to national economic fluctuations, and changes in tax structure. This section briefly discusses the cases of four states which suffered adverse bond ratings for various special reasons. The likelihood of such factors arising in Kentucky is briefly considered.

California. California's general obligation bond rating was lowered from AAA to AA by both Standard and Poor's and Moody's as a direct result of Proposition 13. California ranked below average in the debt burden statistics presented in the previous section, and it has a rational debt policy. However, the investment firms lowered California's bond rating because the success of tax limitation initiatives created a climate of uncertainty.

Delaware. The prudent management of long-term finances is essential for a state to maintain a high credit rating. Delaware provides an example of a relatively wealthy state whose bond rating was lowered because of poor judgment and mismanagement. Delaware's bond rating was lowered in 1977 for several reasons.

- The state had a history of high borrowing and a high level of outstanding short-term debt in 1977.
- The state-owned bank had significant financial difficulties.
- Three consecutive budget deficits had been funded by general obligation bonds.
- The deficits were aggravated by the 1974-75 recession.

* In 1977, the newly elected governor declared that the state was bankrupt. Although this claim was intended as a political statement, it was taken almost literally by bond analysts. Both Moody's and Standard and Poor's lowered Delaware bond rating shortly after the Governor's declaration. The excessive use of short-term borrowing and the practice of financing deficits with general obligation bonds also contributed significantly to the downgrading. Future policy maker and judgment would likely have reversed this low rating.

Connecticut. Connecticut experienced several problems which led to one downgrading of its bonds. Like Delaware, it had a history of high debt and had used obligation bonds to finance spending increases in the early 1970's. Connecticut also found itself vulnerable to the 1974-75 recession. Two additional factors are listed. A Connecticut bond rating being lowered.

1. The legislature created substantial uncertainty among investors by altering its tax structure in several ways. It first lowered and then raised the state sales tax. In 1973, it eliminated a dividends tax and then restored it in 1975.

2. The state exercised poor judgment in its use of debt financing. In addition to funding deficits with general obligation bonds, it used these instruments for questionable purposes. In one case, long-term general obligation bonds were used to purchase computer software with a maximum useful life of five years.

Massachusetts. Several factors caused Massachusetts' bond rating to be lowered in June, 1975. Like Connecticut and Delaware, it suffered greatly in the 1974-75 recession. Additionally, the state's welfare program costs increased substantially because it assumed responsibilities formerly fulfilled by local governments. These factors and incorrect revenue estimates left Massachusetts facing a \$531 million deficit in 1975. A \$1 billion short-term note of a local government housing authority came due when existing economic and bond market conditions made refinancing almost impossible. The state was forced to intervene and assist in restructuring the authority's debt. The cumulative effect of these events was that Massachusetts was forced to borrow nearly \$1 billion for purposes other than capital construction, \$450 million to finance its 1975 deficit and \$530 million to assist the local housing authority.

Kentucky. None of the specific factors which caused problems for the states discussed above appear to be present in Kentucky. It seems unlikely that a conventional rollback of taxes will be initiated and major modifications to the tax structure are indicated. The Commonwealth has not

little outstanding short-term debt and has never used general obligation bonds for deficit financing. It has not yet used bond financing for unusual purposes, but rather for normal capital construction. The commitment of state revenue bonds to industrial and commercial development projects may be a cause for concern, however.

Kentucky is less vulnerable to national economic fluctuations than states in the industrial northeast. Its long-term tax base and economic prospects appear at least stable.

There is no evidence that the Commonwealth will experience difficulties because of local government debt problems. Local defaults have been small and temporary. The major local governments appear sound and unlikely to cause the state problems.

The absence of clear, comprehensive data on state debt may have been a source for concern among investors in the past. Likewise, Kentucky's inadequate accounting system may have been a cause for misgivings. The General Assembly addressed both these problems in 1980, however, establishing the Office for Investment and Debt Management in the Department of Finance and statutorily mandating that the state accounting system achieve compliance with generally accepted accounting principles.

CHAPTER III

ISSUING AND MANAGING STATE DEBT

Over the past decade, debt financing has emerged as a major element of Kentucky state government finance. Since 1971, state debt has nearly doubled. Based on current authorizations, the Commonwealth's outstanding indebtedness will approach \$3.5 billion in 1982. This chapter addresses several important issues relating to the state's borrowing policies and practices, including (1) the need for integrated long-term capital construction and debt planning, (2) improvement of debt issuance and management activities, and (3) the role of the General Assembly in approving new bond issues.

This report makes specific and general recommendations concerning these issues. In developing these recommendations, four criteria are applied.

1. The General Assembly, the Governor, and appropriate executive branch officials should be fully informed of proposed new debt and its impact on future state revenues.

2. The General Assembly should have clear authority to approve or disapprove proposed bonds if state revenues will be used to retire them.

3. The Commonwealth's costs of borrowing via bond financing should be as low as possible.

4. The Commonwealth's credit rating should be maintained and enhanced to the maximum extent feasible.

Complete and accurate information on present and future financial commitments is necessary to making sound decisions. Because the General Assembly must ultimately authorize the use of state funds for debt service, it is entirely appropriate that it approve new bonds when state revenues will be used to retire them. Financing at the lowest cost is desirable because it limits tax burdens and can conserve funds for other purposes.

This Chapter proceeds with a discussion of the rationale for debt financing by state government and a brief description of the bond issuing process in Kentucky. Debt information and executive control over the process are discussed in the following section. The next two sections address the issues of consolidating bond authorities and adding legislators to those bodies. Legal limitations on indebtedness are discussed next. The final section addresses the question whether the Commonwealth should use general obligations bonds instead of project revenue bonds.

Rationale for Debt Financing

State governments use debt financing for several purposes, but mainly for highway and building construction. Roads and buildings have long, useful lives, and bond financing satisfies the equity criterion that persons in different generations who benefit from a project should share in paying for it. In periods when the rate of inflation exceeds the interest rate at which governments may borrow, bonds may be used to obtain desired facilities at less expense than if the projects were deferred. A state government can also use bond financing to promote various programs. For example, bonds are used in Kentucky to support pollution abatement and to provide low-interest home mortgages to lower and middle income families.

Issuing Bonds in Kentucky

Several parties participate in issuing bonds in Kentucky. The first step in the process is the identification of projects for which debt financing may be appropriate and desirable. The decision must then be made whether to proceed with bond financing. This may be done either formally or informally by the members of an issuing authority. This body then authorizes development of the bonds, the prospectus for the issue, the trust indenture, and obtaining legal opinions and other documents necessary to sell the bonds. Prior to preparation of these materials, the managing underwriters and bond counsel for the issue must be selected and their fees determined.

Rating

The bond issue is rated according to its risk and quality by an investment analysis firm, such as Moody's Investors Service, Incorporated, or Standard and Poor's Corporation. Bonds with lower risk of default receive higher ratings, which result in lower interest costs for the issuer. It is virtually impossible to sell bonds in the open market without an acceptable rating from a recognized bond rating firm. The highest possible rating is AAA. According to state law, bonds issued by the State Property and Buildings Commission, and the School Building Authority, and Consolidated Educational Building Revenue Bonds, issued by state universities, must earn at least an A rating when they are issued. This requirement will also apply to Turnpike Authority bonds after July 1, 1982.

Interest Rate Determination

When all documents are in order and the rating is obtained, the companies handling the sale of the bonds for the state, called the underwriters, assess the market to determine what interest rate the state must pay. The interest rate depends on prevailing market conditions, the rates borne by similar securities and on special factors affecting the particular issue.

Final Approval, Sale and Disbursement of Proceeds

The authority formally approves the final prospectus, or official statement, for the issue and authorizes the sale of the bonds. The underwriters purchase the bonds from the authority for resale to investors. The proceeds from the sale are forwarded to the trustee, who pays the underwriters and bond counsel, makes necessary deposits to escrow and reserve accounts, and deposits the net proceeds to accessible accounts of the authority. The relationship between the authority and the trustee is governed by a legal document known as a trust indenture. The trustee continues to manage the bank accounts of the bond issue, carrying out the transfer and disbursement instructions of the authority, assuring that debt service, reserve and sinking fund deposits are made, and generally protecting the interests of the bondholders.

Role of the General Assembly

Until 1980, the Kentucky General Assembly's role in issuing debt was limited to enacting the enabling legislation for the various types of bond issues. Specific decisions to incur new debt were reserved to the various authorities. Legislation enacted in 1980 gave the General Assembly a role in approving new debt. Prior to the issuance of any bonds or anticipation notes, each issuing authority must obtain the approval of the General Assembly if state general funds will be used to retire the debt. Approval may be made by specific legislation or by the legislature's passage of the biennial appropriations act, which specifies bond financing for various projects.

The Turnpike Authority of Kentucky is exempt from these provisions until July 1, 1982. If the General Assembly has authorized a debt ceiling for a particular authority, new bonds up to the level of the ceiling are exempt. Refunding bonds need not be approved if they will result in net interest savings. General Assembly approval is not required for a project if it will generate sufficient revenues to pay its debt service. That revenue projection, however, must be certified by the Secretary of Finance to the head of the issuing authority, to the Governor, and to the Legislative Research Commission before the bonds may be sold.

Centralized Information and Executive Control: The Office for Investment and Debt Management

The 1980 General Assembly created the Office for Investment and Debt Management within the Department of Finance. Its enabling statutes specify the following general duties relating to debt management.

- Coordination and monitoring of cash needs relative to investment and debt activity;
- Development of a long-term debt plan, including criteria for the issuance of debt and an evaluation of how much total state debt is justified;
- Evaluation of revenue projections relative to proposed revenue bond issues;
- Maintaining liaison with the General Assembly on all investment and debt matters; and
- Fulfilling other functions of the Department of Finance relative to state investment and debt management, including the making of debt service payments, the sale of bonds, and staff assistance to the State Property and Buildings Commission and the State Investment Commission.

Additionally, all state agencies, authorities, commissions, and other entities having the authority to issue bonds must submit all proposals for bonds, bond anticipation notes, or other interim financing to the Office for review and approval prior to issuance.

As framed by statute, the Office for Investment and Debt Management has the potential to function as an effective clearinghouse for information on state debt and as a powerful managerial unit for evaluating proposed debt and assuring that decisions are based on sound data. Presently, responsibility for maintaining accurate records on state debt is fragmented and inconsistent. Further, no state agency has the duty or authority to review feasibility studies for proposed debt-financed projects. For these reasons, and to satisfy the information needs of the General Assembly and the executive branch, the Committee makes the following specific recommendations.

Recommendations

1. The Office for Investment and Debt Management should maintain accurate, detailed data on the bonds of all state bond issuing authorities. The Office should request that the Department for Community and Regional Development and the State Department of Education forward detailed information on local debt to them on a regular periodic basis.

2. In addition to evaluating revenue projections, the office should evaluate feasibility studies for debt-financed projects and report the results of each evaluation to the Governor and the General Assembly or Legislative Research Commission prior to original authorization of the bond issue.

Discussion

These recommendations are intended to provide better and more accessible information concerning Kentucky's debt. The State Department of Education presently maintains good records on the bonds of local school districts, and the Department for Community and Regional Development maintains good data on local government debt. These recommendations contemplate that these departments should retain this function and responsibility. The General Assembly may want to consider establishing statutory guidelines for feasibility studies and for financial qualifications of debt-financed projects.

Developing Internal Debt Management Expertise

Several states maintain in-house expertise for preparing most or all documents necessary to issue bonds. The benefits of employing personnel with this expertise include better information for all parties to debt decisions, enhancement of a state's financial reputation, and the possibility of direct cost savings in preparing and issuing bonds. For these reasons, the Committee makes the following recommendation.

Recommendation

The office for Debt and Investment Management should review fiscal agent fees paid by the state and negotiated versus competitive bid bond sales to determine if the cost of issuing bonds can be reduced. However, it does not appear feasible at this time for Kentucky to employ its own fiscal agent staff (See Appendix A).

Interim Financing and Refunding Bonds

The Committee for Program Review and Investigation has expressed specific concern over the wisdom of the state's use of bond anticipation notes and refunding bonds. In the case of the Kentucky Horse Park, bond anticipation notes were originally issued (1976), rather than permanent revenue bonds, because executive branch officials believed that interest rates would decline. Unfortunately this prediction was incorrect and new anticipation notes were issued at higher interest rates in 1978. At the time of this writing, it appeared that a third series of bond anticipation notes would be issued in December, 1980, at still higher interest rates.

In 1973, the Turnpike Authority issued \$280,490,000 of the Toll Road Refunding Bonds. These were used primarily to refinance outstanding revenue bonds at a net interest savings. The refunding issue was also used to obtain \$25,000,000 in new funds for highway construction. This was done by issuing \$280,490,000 of refunding bonds when only \$244,445,000 of the original revenue bonds remained to be retired.

Recommendation

The Office for Investment and Debt Management should develop adequate expertise to advise state and local bond authority officials on the appropriate use of refunding bonds and bond anticipation notes. The Office should perform a thorough financial evaluation of each proposed issue of refunding bonds, bond anticipation notes and other interim financing instruments, and report the results of each such evaluation to the Governor and to the Legislative Research Commission of the General Assembly. Existing statutes should be changed to the extent necessary to implement this recommendation.

State Property Inventory and Capital Construction Plan

An accurate and complete inventory of state buildings and roads, including assessments of the condition of these assets, is crucial to planning and understanding the Commonwealth's long-term debt needs. The magnitude and condition of the state's buildings and roads are major determinants of its need for long-term debt. Likewise, future capital construction plans are a significant indicator of the need for future bond issues. Present and future building and highway renovation costs loom large in Kentucky's fiscal future.

Many buildings on Kentucky's state university campuses are ten to fifteen years old and will require major renovation and repair within the next ten years. Given current inflation, costs for repair and renovation may exceed the original construction costs of the buildings. State roads face a similar future. Many state highways are even now in need of major maintenance and reconstruction work, as evidenced by the 1980 General Assembly's authorization of \$300,000,000 in new bonding authority for such projects.

An effective capital construction plan identifies all buildings and road projects scheduled within the planning period. The plan should also identify the costs and means for financing the projects. This information would facilitate debt planning. Current bond issues and capital construction commitments compete for scarce government financial resources, not only with existing programs but also with future projects. The inventories and plans outlined here will enable the General Assembly to make better informed decisions with these capital need projections clearly before it.

Recommendations

1. The Secretary of Finance should compile and publish, at least biennially, an inventory of all state-owned buildings, including information on their age and condition and future needs for repairs and renovation.

2. The Secretary of Transportation should compile and publish, at least biennially, an inventory of all roads for which the Commonwealth has maintenance responsibility, including information on their age and condition, projected reconstruction and major maintenance needs, and estimated costs for reconstruction and major maintenance work at current prices.

3. Consistent with its statutorily established tasks of developing a long-term debt plan for the Commonwealth and preparing long-term cash forecasts, the Office of Investment and Debt Management should be responsible for coordinating and integrating the information presented in the debt plan and the building and highway inventories. The Office should make a biennial report, at least three months prior to the regular legislative session opening date, to the Governor and either to the General Assembly or the Legislative Research Commission. This report should include the state's projected construction, reconstruction, renovation, and major maintenance and repair needs, both for buildings and roads, and their impact on the state's ability and need to issue new bonds.

Discussion

While information is always valuable, it is frequently difficult to assign dollar values to specific data and to compare these values to the costs of obtaining it. The data outlined in Recommendations 1 and 2 for inclusion in the property and highway inventories would doubtless be of value in making decisions concerning new bonds, but it would be expensive to compile and publish.

Controlling the Level of Long-Term Debt

States use different methods to control long-term debt. Some states impose absolute dollar limits on general obligation debt. Kentucky's Constitution, for example, provides that no more than \$500,000 of general obligation debt may be issued without voter approval. Other states have floating or indexed ceilings which vary as their revenues vary. The following discussion sets forth the advantages and disadvantages of the two types of ceilings. A brief exposition of different types of indexed ceilings is also presented.

Absolute Debt Ceilings

Absolute limits prohibit a state government from incurring more than a fixed dollar amount of debt. The inflexibility imposed by absolute limits can prevent a government from borrowing even when doing so is fiscally wise and prudent. It could conceivably hinder development of a state by limiting the growth of necessary government services.

Kentucky's absolute limit on general obligation debt has effectively forced the executive branch to circumvent it, in order to issue debt for transportation, education, and other reasonable and proper purposes. This circumvention has unfortunately had two significant adverse effects. First, the intent of the constitution to take decisions on indebtedness before the voters has been circumvented. Decisions to issue bonds which are supported directly by general tax revenues have been made by bodies consisting of the Governor, one or two other elected officials and gubernatorial appointees. Secondly, interest costs on the project revenue bonds thus issued are significantly higher than the costs on equivalent amounts of general obligation bonds.

Indexed or Floating Debt Ceilings

These limits are expressed as a proportionate relationship between debt or debt service and state revenues. The maximum amount of outstanding bond principal may be fixed as a percentage of a state's direct revenues, total revenues, or revenues of a specific fund. Alternatively, maximum debt service payments in a given fiscal year or biennium may be pegged at a percentage of state revenues during that period.

South Carolina law limits debt service payments to seven percent of its general fund revenues. Debt service in Tennessee may not exceed fifteen percent of its general fund receipts. Connecticut limits debt service in any year to 4.5 percent of the previous year's state tax receipts. Delaware employs a different technique, which not only limits but actually reduces its debt: new debt issued in any year cannot exceed 75 percent of the principal amount of debt retired the previous year.

The benefits of a realistic debt ceiling are (1) that it limits the obligations of future revenues that can be incurred, and (2) that such a ceiling provides additional evidence of a state's fiscal responsibility, which in turn enhances its reputation in the bond market. Kentucky's unrealistic and impractical absolute debt ceiling has merely been circumvented, resulting in greater than necessary borrowing costs and in more than \$2 billion of tax-supported debt issued without voter approval.

The Committee for Program Review and Investigation thoroughly discussed legal limitations on state borrowing, including the issue of whether statutory or constitutional limits would be preferable. After due consideration, the Committee elected to make no recommendation concerning this matter.

Consolidation of Bond Issuing Authorities

Twenty-one Kentucky state agencies and authorities presently have statutory power to issue revenue bonds. Six of these have never used this authority and appear unlikely to do so in the foreseeable future. These include the Churchill Downs Authority, the Health and Geriatric Authority, the Capital Plaza Authority, the State Fair Board, the Department of Fish and Wildlife, and the Water Resources Authority. These smaller single-purpose authorities are presently required to obtain the state Property and Buildings Commission's approval prior to issuing bonds. Necessary staff work would be performed by Department of Finance personnel if the authorities should decide to issue bonds. This situation is clearly duplicative.

The debt issuance authority of these agencies is unnecessary. Further, the large number of such authorities may create uncertainty among investors as to the true status of the Commonwealth's debt. Recordkeeping for the various authorities which have issued bonds has not been consistent and current in the past.

The Department of Transportation, formerly the Department of Highways, has issued bonds in the past but its last outstanding debt was retired in 1978. All highway construction bonds since 1954 have been issued by the Turnpike Authority, with appropriate staff services provided by the Department of Transportation.

Several benefits would derive from consolidating the bond issuing powers of these six authorities under the State Property and Buildings Commission and the Turnpike Authority of Kentucky. First, centralization of staff functions in the Office for Investment and Debt Management should result in lower administrative costs associated with revenue bonds issues. Second, records and information concerning existing and proposed bonds would be more complete and accessible than at present. Finally, the better information and enhanced debt management function resulting from consolidation would provide additional credibility for all Kentucky project revenue bonds in the securities market.

Recommendation

The General Assembly should enact legislation consolidating the bond issuing powers of the Churchill Downs Authority, Health and Geriatric Authority, Capital Plaza Authority, State Fair Board, Department of Fish and Wildlife, Water Resources Authority into the State Property and Buildings Commission and the Department of Transportation into the Turnpike Authority of Kentucky. The statutes which empower the first six entities to issue bonds should be repealed.

Authorities whose bonds are retired from funds other than direct state revenue receipts would be exempt from this measure. At present, these would include the Kentucky Housing Corporation, the Kentucky Higher Education Student Loan Corporation and the Kentucky Pollution Abatement Authority. Similar authorities established in the future would also be exempt if no direct state revenues were involved and if any liability of the Commonwealth were effectively eliminated by federal agency insurance coverage or other sound guarantees.

If and when the Office for Investment and Debt Management develops the expertise to prepare and issue bonds, the Program Review Committee contemplates that state university revenue bonds would be included within the scope of this recommendation. Such a change would not limit the ability of universities to initiate proposals for capital construction projects, nor would it diminish the authority of the Council on Higher Education to evaluate and rank the universities' capital con-

The second major benefit may be even more important: as proposed, general obligation bonds will be issued through a more open and democratic process. Decisions will be made by a larger entirely elected body.

Finally, the Commonwealth should realize lower preparation and marketing costs for general obligation bonds: legal documents are simpler and the marketing activities need not be as extensive as for revenue bonds. The practice of using primarily general obligation bonds would lend itself to the state's assuming many of the functions associated with preparing and marketing its bonds.

Twelve state legislatures presently have the power to authorize general obligation debt. Six may do so by a simple majority vote. Three require a three-fifths majority and two require a two-thirds majority. In Delaware, a three-fourths majority vote is necessary.

CONCLUSIONS

Compared to other states, Kentucky has a relatively high state government debt burden. The Commonwealth ranks among the top twenty-five percent of the fifty states by four different measures of debt burden. Kentucky ranks noticeably closer to states which have experienced problems with indebtedness than to states which have high, stable bond ratings. This fact does not lead to the conclusion, however, that Kentucky has issued too much debt. At least three states with high, stable bond ratings have debt burdens close to or higher than Kentucky's. At least one state has a very low debt burden but has nonetheless experienced difficulties, including downgrading of its bonds.

Many factors other than a high debt burden can cause debt problems. Among these are mismanagement and improper or unwise use of debt financing, debt problems of major local governments within a state, vulnerability to national economic fluctuations, and frequent or major modifications to a state's tax structure. None of these appears likely to arise in Kentucky in the foreseeable future. However, considering the Commonwealth's relatively high debt burden, it would be wise to monitor state debt and related factors closely and to enhance debt management efforts.

Kentucky has demonstrated that it can manage debt service payments equal to eight percent of direct state revenues feasibly and responsibly. The present report, however, addressed only the level of debt. It has not evaluated specific debt-financed projects, nor has it examined the relative merit of bond-financed highway and capital construction projects, as opposed to current operating programs. Questions of allocating revenues among competing activities must be addressed by the General Assembly in its consideration of proposed appropriations and new bond issues.

The General Assembly must have better, more complete information on state bonded indebtedness made available to it on a regular basis. Data on current and future debt service requirements is essential to making sound, informed decisions. Debt service competes for scarce government resources, not only on a current basis but also over the entire life of the bonds. The General Assembly must be aware of these long-term commitments in considering whether to approve new bond issues.

Kentucky's absolute constitutional ceiling on general obligation debt has been circumvented by the use of project revenue bonds, resulting in greater than necessary borrowing costs, while over \$2 billion of tax-supported debt has thus been issued without voter approval. The Commonwealth treats such revenue bonds as general obligation bonds and must continue to do so. Therefore, the General Assembly should propose a constitutional amendment which would enable the Commonwealth to issue general obligation bonds upon the affirmative vote of three-fifths of each house of the General Assembly.

Substantial interest savings would be realized by issuing general obligation bonds instead of revenue bonds. Debt service on general obligation bonds would come from the same sources as for revenue bonds. In issuing general obligation bonds, the Commonwealth would simply guarantee to continue to pay debt service as it does at present.

APPENDIX A

The Cost of Issuing Bonds

There are two processes by which bonds are issued: negotiated and competitive bid. A negotiated bid is one in which the issuer agrees to sell the bonds to a specified purchaser at the outset. That purchaser acts as fiscal agent and underwriter. A competitive bid is a sale at which bonds are offered at a public auction on a particular day. A fiscal agent who may or may not purchase the bonds is hired to prepare the necessary materials.

Services

The fiscal agent function of bond preparation entails the provision of several services in both types of sale.

1. Preparation of financial studies: determining source of debt service; reviewing policies, laws that affect ability to pay debt service; assessing debt capacity.
2. Recommending financing program.
3. Preparing necessary documents.
 - a. Bond resolution
 - b. Official statement
 - c. Underwriting papers
4. Presenting issue to bond rating agencies.
5. Determining pre-sale strategy.
6. Selecting firms to be included in underwriting syndicate (negotiated sale). Presenting information to underwriting firms.
7. Proposing interest rate, underwriting discount and offering terms.
8. Offering bonds for sale.
9. Conducting all necessary meetings for bond issuance.
10. Conducting meetings for acceptance of bids and award of bids (competitive bid sale).
11. Advising on reinvestment plan for bond proceeds.
12. Preparing distribution of bonds; selecting and orienting bond trustee; paying agents; other closing services.

In addition to these services that are relatively tangible, an issuer also purchases: knowledge of bond market conditions on a daily fluctuating basis; knowledge of financial approaches that are current, creative, and will result in a cost saving to the issuer; and an ongoing interest in the issuer's circumstances, so as to develop refinancing plans of advantage to the issuer.

Cost

The actual cost to an issuer to issue or sell bonds is the interest rate or yield paid by the issuer necessary to attract investors, and a fiscal agent fee, where applicable.

Costs are paid by the issuer in the form of a yield or return on investment rate which takes into account the coupon interest rate and the amount of the discount.

In a negotiated sale, the total cost to the issuer is within the interest charged on net proceeds. In a competitive bid sale, part of the cost to the issuer is within the interest charged on net proceeds and part is within a fee charged by the fiscal agent.

The return to the fiscal agent/underwriter is determined by the difference between the purchase price or proceeds paid the issuer and resale price realized in the bond market. This amount is the underwriter's "gross spread." It is usually expressed as a dollar value per \$1,000 of bonds issued. From the gross spread certain costs are paid. Cost elements are as follows.

1. **Selling Commission:** This is paid to the underwriter for selling the bonds. The commission is paid by the issuer indirectly within the spread. This means the issuer sells bonds at a greater discount or lower price, realizing less proceeds than those which will be realized by the underwriter upon resale. (The commission is earned by the underwriter at resale, so he must set a purchase price at a level to insure a higher resale price and thus a profit.) That difference is a function of the market at sale day.

2. **Underwriting or Risk Fee:** This is compensation for the risk the underwriter takes by purchasing bonds he may or may not sell at a profit. This is also paid by the issuer and earned by the underwriter within the gross spread. Again, this amount is a function of the market at sale day and how it receives the bonds.

3. **Management Fee:** This is the fee for preparation of the materials necessary to market the issue and development of a financial plan.

This is paid as a flat fee (percent of face value of issue) in a competitive bid sale. In a negotiated sale, this fee is realized within the spread.

4. **Expenses:** These include expenses of legal fees, travel, printing, advertising, out-of-pocket expenses. This is also paid within the flat fee or fiscal agent's fee in a competitive bid sale and out of the spread in a negotiated sale.

An average gross spread is approximately \$18 per \$1,000 bond sold. The range can be anywhere from about \$5 per \$1,000 to \$30, depending on the complexity of the issue. Of that amount, about 50% is the selling commission fee and about 14% is the risk fee. These fees are influenced by the market on sale day and are not fully controllable by the issuer, the underwriter or the fiscal agent. The underwriter's assessment of his effort and risk influences the amount at which he purchases the bonds, or the "bottom side" of his spread.

The management fee accounts for about 17% of the cost and could be a "bargaining point" of the issuer. If an issue were of a very common nature, the issuer could request a lower fee of the fiscal agent for this service. In some cases, the issuer may even provide this service himself.

Expenses account for the remaining 19%. These of course are fairly set and do not vary a great deal among in-state fiscal agents. Out-of-state fiscal agents may incur higher travel and "leg-work" expenses than average. In small cases the expenses may be disproportionately high, meaning the ratios of one or all three other elements may have to be reduced.

Fees

Generally the gross spread for negotiated sales is higher than that for competitive bid sales. This is because the gross spread in a negotiated sale covers the total fees to the underwriter/fiscal agent.

In a competitive bid sale, the fiscal agent fee is a percentage of the face value of the issue. It is realized only if the bonds are sold. This is paid by the issuer, however, in addition to the spread.

Fiscal agent fees in Kentucky are as follows:

In general for Kentucky underwriters:

1% or \$3,000, whichever is greater, up to \$1 million

The next \$1 million at \$6.50 per \$1,000 (.65%)

The next \$1 million at \$6.00 per \$1,000 (.6%)

The next \$1 million at \$5.50 per \$1,000 (.55%)

All over \$4 million at \$5.00 per \$1,000 (.5%)

Paid by Kentucky state authorities:

\$1 million to \$2 million 1%

Next \$3 million .4%

Next \$15 million .3%

Over \$20 million .25%

The trend since 1970 has been for more negotiated sales than competitive bid sales. This may be related to the fact that most bonds issued are revenue bonds, which often require more expertise in preparation and sale. In a negotiated sale the issuer agrees to negotiate with a specific underwriter. The underwriter then takes the time to educate the market as to the risk of the issue. The market is tested before actual release of the bonds, to set the best price for the issuer and the underwriter. The underwriter is generally careful to get the best price he can for the issue, to insure further business. Even though the underwriter could enlarge the spread by buying the bonds at a large discount, competitors would soon inform the issuer of the unnecessary cost to issue.

In the case of very stable, secure and uncomplicated issues a competitive bid process may lead to lower costs to the issuer. But when the market is unsure of the value or risk of an issue, a competitive bidder—not being involved in the development—may bid a larger than needed discount to insure a profit.

On the following pages are examples to illustrate the two types of bond issues. The first example, a negotiated bid, is an illustration of how Kentucky Turnpike Authority, Kentucky Housing Corporation, Pollution Abatement Authority and Kentucky Higher Education Student Loan Corporation bonds are issued. The second example, a competitive bid, is an illustration of how the state universities and the State Property and Buildings Commission issues bonds. This type of issue is required by statute (Chapter 56) to be in the form of a competitive bid.

Conclusion

Of all the costs involved in issuing bonds only one element can realistically be controlled by the issuer: fiscal agent costs. Fiscal agent costs may be negotiated directly in a competitive bid issue or indirectly by issuing a familiar type issue on a competitive bid basis rather than negotiated bid basis (or the reverse on complex issues).

Fiscal agent costs are a relatively small part of the total cost, and that cost is only paid if the bonds are actually sold. Services of a fiscal agent who is engaged in underwriting may provide savings in interest and discount costs. It is not advisable at this time for the State of Kentucky to provide staff to act as its own fiscal agent.

EXAMPLE 1

Cost of Bonding Negotiated Issue
\$95,000 Project Cost, Maturity: 1 year

Sale at Discount		Sale at Par
\$100,000	face value	\$95,000
95,000	proceeds from sale to underwriter	95,000
5,000	discount	par (0)
96,500	proceeds to under- writer from resale	96,500
1,500	gross spread	1,500

Underwriter's Fee Breakdown

1,500	gross spread	1,500
750	sales commission	750
210	risk fee	210
285	expense*	285
255	management fee	255

Cost to Issuer

6%	interest on face value	11.28%
6,000	interest cost	10,716
5,000	amount to be repaid but not received in cash	0
11,000	total cost	10,716
11.28%	yield	11.28%
11%	cost/face value	11.28%

* in small issues, part of the risk fee and management fee may be allocated to expenses if necessary.

EXAMPLE II

Cost of Bonding
Competitive Bid Issue
\$95,000 Project Cost, Maturity: 1 Year

Sale at Discount		Sale at Par
\$100,000	face value	\$95,000
95,000	proceeds from sale to underwriter	95,000
5,000	discount*	par (0)
96,500	proceeds to under- writer from resale	96,500
1,500	gross spread	1,500
Underwriter's Fee Breakdown		
1,500	gross spread	1,500
	sales commission	
	risk fee, expenses	
Cost to Issuer		
1%	state scale fee rate	1%
1,000	management fee and expenses	950
6%	interest on face value	11.28%
6,000	interest cost	10,666
5,000	amount to be repaid but not received	0
12,000	total cost	11,716
11.28%	yield	11.28%
12%	cost/face value	12.3%

* Underwriter may bid less discount in negotiated bid, due to fewer costs involved or a greater discount, if the issue is unusual in some way, implying greater risk, or the same discount.

ESTIMATED FISCAL AGENT FEES PAID
FOR KENTUCKY COMPETITIVE BID ISSUES

Year	Issue	Estimated Fiscal Agent Fees*
1978	U.K. Housing and Dining System Revenue Bonds—\$1.9 million	\$ 19,000
1979	University of Louisville Consolidated Educational Building Bonds— \$35 million	
	University of Louisville Housing System Refunding Bonds— \$6.2 million	\$129,500
80-81 Biennium Projected:		
	\$337.7 million Issues of SPBC and Universities	\$898,258 (2 years)

* Based on state fiscal agent fee scale applied to principal amount at issue.

