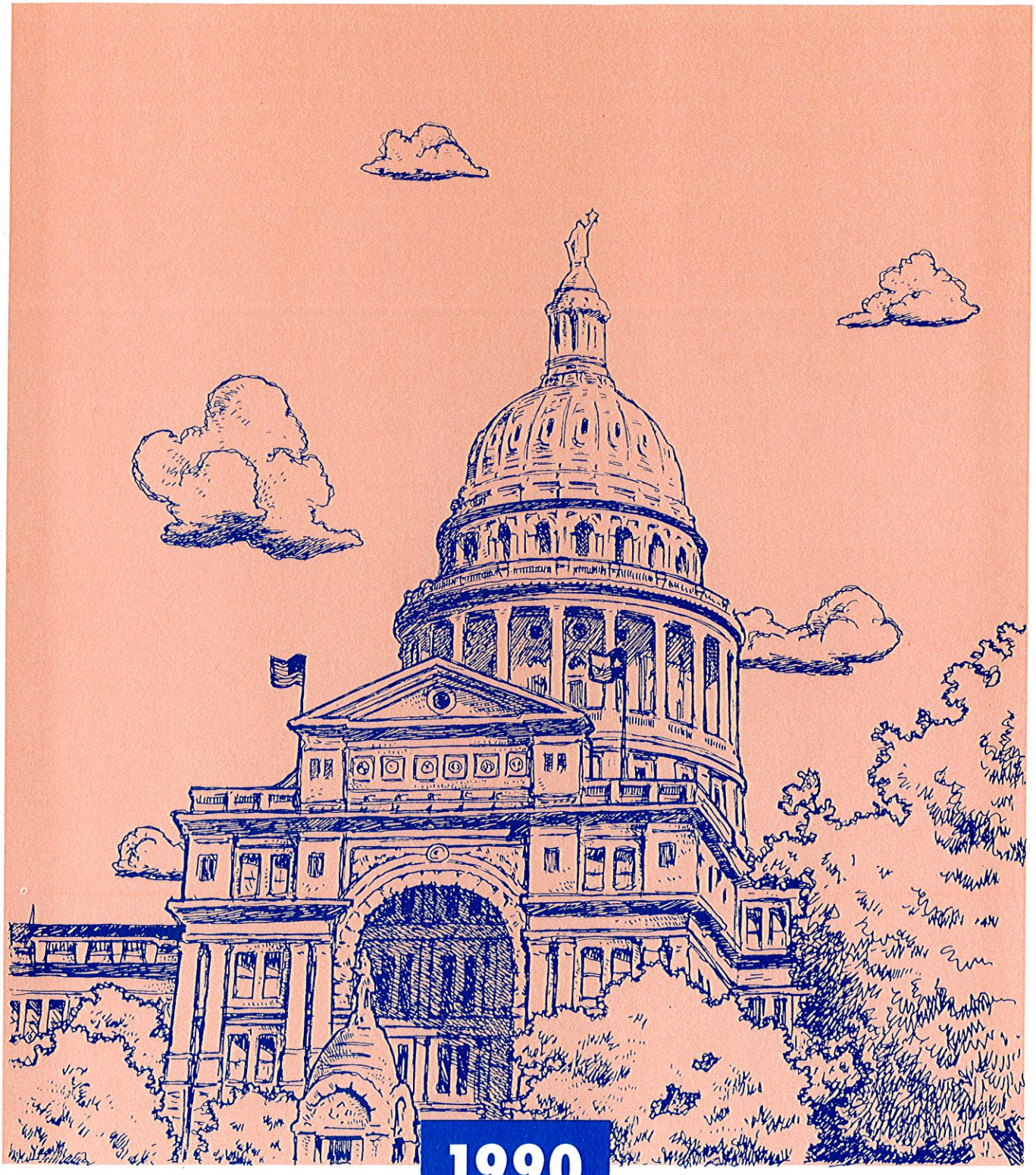
TEXAS BOND REVIEW BOARD

ANNUAL REPORT



1990

TEXAS BOND REVIEW BOARD

ANNUAL REPORT
FISCAL YEAR 1990

Year Ended August 31, 1990

William P. Clements, Jr., Governor, Chairman

William P. Hobby, Lieutenant Governor

Gibson D. (Gib) Lewis, Speaker of the House of Representatives

Bob Bullock, Comptroller of Public Accounts

Ann W. Richards, State Treasurer

Tom K. Pollard, Ph.D.

Executive Director

November 1990

INTRODUCTION

During fiscal year 1990, the Bond Review Board approved and Texas state agencies and universities issued $1.1 billion in bonds and executed $12.6 million in lease or installment purchases.

The 1990 Annual Report of the Bond Review Board presents an overview and analysis of Texas state bond debt.

Texas state bonds, unless specifically exempted, may be issued only with the Board's approval. State agencies also must obtain the Board's approval prior to executing lease- or installment-purchase agreements for acquisitions in excess of $250,000 or which are financed for more than five years.

This report examines a number of areas related to the issuance of state bonds.

The affirmation of Texas' AA bond rating, growing investor confidence in the state's creditworthiness and other bond market trends affecting Texas are reported in Chapter 1.

Texas bond issuance during fiscal year 1990 to finance projects including the Superconducting Super Collider, University of Texas research facilities, affordable housing, extension of the Dallas North Tollway and expansion of Texas' prison system is analyzed in Chapter 2.

Chapter 3 examines the various costs involved in issuing Texas bonds. The chapter presents average costs for fiscal year 1990 for both negotiated and competitively sold bonds and traces recent issuance cost trends.

Total Texas bonds outstanding at the end of fiscal year 1990 and the annual debt service requirements associated with these bonds are reported and analyzed in Chapter 4.

Chapter 5 assesses Texas' debt from a state policy perspective.

Appendix A includes a capsule summary of each series of bonds approved by the Board and issued during 1990. Appendix B provides a list of each state bond issue expected during fiscal year 1991. Appendix C contains a description of each program under which state bonds may be issued. Appendix D contains the current administrative rules of the Board.

Tom K. Pollard, Ph.D.
Executive Director
Texas Bond Review Board

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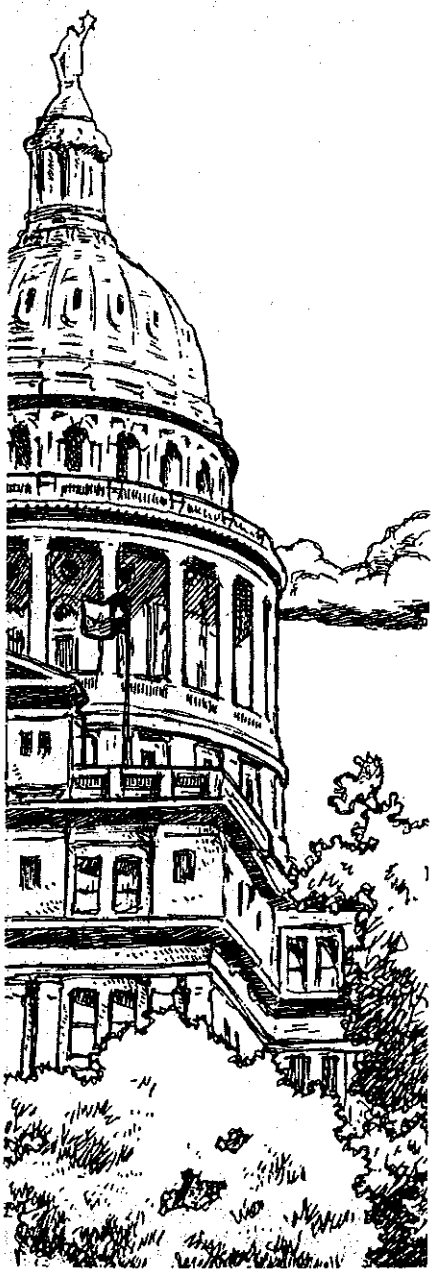
CHAPTER ONE

TEXAS IN THE BOND MARKET–1990



Texas enjoyed a favorable market for its bonds during fiscal year 1990 (September 1, 1989 to August 31, 1990). Interest rates on tax-exempt bonds remained stable during the year, though year-end was marked by an upturn in rates due to increasing tensions in the Middle East and related fears of oil-based inflation.

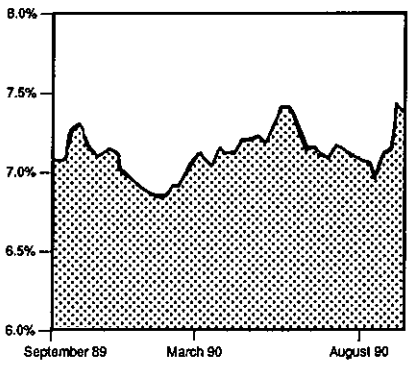
Texas' AA bond rating was affirmed during the fiscal year and the demand for Texas bonds remained strong in spite of the state's issuance of $1.1 billion in bonds during the period. Continued recovery in the state's economy and state finances has made it possible for Texas to issue this additional debt without weakening the state's creditworthiness.

INTEREST RATES STABLE

Long-term tax-exempt rates, as measured by the *Bond Buyer's* 11-Bond Index, began fiscal year 1990 at 7.1 percent and ended the fiscal year at 7.4 percent. Expected long-term weakness in the U.S. economy pushed rates to a low of 6.8 percent at the end of December 1989 *(Figure 1)*.

Heavy federal government borrowing and stronger economic news boosted interest rates to a mid-year high of 7.4 percent in May 1990. Rates fell back to 7.1 percent at the beginning of August before returning to the previous high as trouble brewed in the Middle East.

FIGURE 1
Interest Rate on 20-Year Municipal Bonds



SOURCE: Bond Buyer. The 20-year municipal bond rate is the average yield on the Bond Buyer's 11-Bond index of 20-year general obligation bonds.

Borrowing rates for specific states varied widely around the *Bond Buyer* index, depending on the risk investors placed on the state's bonds. A widely accepted indicator of investor risk is the "bond rating" assigned by Moody's, Standard & Poor's and Fitch bond rating services *(Table 1 on page 2)*.

Although each rating agency has a unique classification system, bonds of the highest quality are rated AAA (or Aaa). Ratings of AA and A denote very sound investments, but of lower quality.

TABLE 1
State General Obligation Bond Ratings
August 31, 1990

	Moody's Investors Service	Standard & Poor's Corporation	Fitch Investors Service
Alabama	Aa	AA	AA
Alaska	Aa	AA-	AA
Arkansas	A1	AA	*
California	Aaa	AAA	AAA
Connecticut	Aa	AA	AA+
Delaware	Aa	AA+	*
Florida	Aa	AA	AA
Georgia	Aaa	AA+	AAA
Hawaii	Aa	AA	*
Illinois	Aaa	AA+	AAA
Kentucky	Aa	AA	*
Louisiana	Baa1	BBB+	*
Maine	Aa1	AAA	*
Maryland	Aaa	AAA	AAA
Massachusetts	Baa	BBB	A
Michigan	A1	AA	AA
Minnesota	Aa	AA+	AA+
Mississippi	Aa	AA-	*
Missouri	Aaa	AAA	*
Montana	Aa	AA-	*
Nevada	Aa	AA	*
New Hampshire	Aa1	AA+	AA+
New Jersey	Aaa	AAA	AAA
New Mexico	Aa	AA	*
New York	A	A	A+
North Carolina	Aaa	AAA	AAA
North Dakota	Aa	AA-	*
Ohio	Aa	AA	*
Oklahoma	Aa	AA	*
Oregon	Aa	AA-	AA
Pennsylvania	A1	AA-	AA-
Rhode Island	Aa	AA	AA
South Carolina	Aaa	AAA	AAA
Tennessee	Aaa	AA+	AAA
Texas	Aa	AA	*
Utah	Aaa	AAA	*
Vermont	Aa	AA	AA
Virginia	Aaa	AAA	*
Washington	Aa	AA	AA
West Virginia	A1	A+	*
Wisconsin	Aa	AA	AA-

* Not rated by this service

SOURCE: Moody's Investors Service, Standard & Poor's and Fitch Investors Service.

Ratings below A, from BBB downward through C, indicate higher levels of risk.

TEXAS' BOND RATING AFFIRMED

Both Moody's and Standard and Poor's affirmed Texas' AA general obligation bond rating during 1990. Texas has been rated AA since 1987. The state's 1986-87 economic recession and the accompanying weakness in state finances caused the rating agencies to lower our long-held AAA rating.

Although reinstatement of the AAA rating which Texas enjoyed throughout its economic boom would be welcomed, the maintenance of an AA rating through trying economic times is testimony to the state's underlying economic strength and fiscal conservatism.

Standard & Poor's reports that Texas' AA rating "....reflects low and manageable debt ratios, an improving and diversifying economic base, and continued improved finance performance. Outlook: Stable."[1]

Moody's states: "Texas continues to have a strong debt position, although debt has both grown and changed in character....Despite the changes in magnitude and in debt policy direction, debt ratios remain low, both relatively and in an absolute sense....The outlook for the economy is slow growth, in line with national forecasts....Signs of economic stabilization have emerged."[2]

Other states have not been so fortunate. An economic downturn hitting the Northeast and a lack of sufficient fiscal discipline on the part of state governments in this region have led to rating downgrades recently *(Table 2)*.

The hardest hit has been Massachusetts. During the last year,

Standard & Poor's lowered the rating on that state's bonds from A to BBB, the lowest bond rating of any state. The downgrade was attributed by S&P to Massachusetts' "poor financial operations and a paralyzed budgetary process."[3]

A similar criticism accompanied Moody's downgrading of Massachusetts to Baa (equivalent to S&P's BBB): "Political paralysis has caused continued inaction by the state to deal with the growing magnitude of its deficit problem resulting in the downgrade."[4]

New York State's bond rating was cut to A by Standard & Poor's and Moody's in the spring of 1990, for much the same reason. Standard & Poor's noted that the state was facing an accumulated operating deficit of $5 billion at fiscal year-end 1990 and was failing to deal effectively with the problem: "Amplifying the ramifications of the imbalance [deficit] is the lack of government consensus on the magnitude of the problem and the absence of a credible plan to address it in a fiscally responsible manner."[5]

All the bond-rating news for other states has not been bad. Moody's upgraded three state ratings while Standard & Poor's and Fitch each upgraded one.

Most notable was Moody's restoration of California's AAA general obligation bond rating. (Fitch and Standard & Poor's had previously upgraded California's rating to AAA.) California's rating by Moody's had been at AA for almost a decade, since April of 1980. Moody's states: "California's economic strength and diversity, improved financial position at fiscal year-end 1989, enabling restoration of reserve balances, and low debt ratios support the rating revision at this time."[6]

Moody's also cited California's demonstrated ability to effectively respond to economic and fiscal challenges over an extended period of time as a primary reason for the upgrade.

These rating moves are important because of the close relationship between bond ratings and borrowing costs. Increased risk, signified by lower ratings, pushes up the interest rates that investors demand on state bonds.

At the close of fiscal year 1990, Texas general obligation bonds rated AA were carrying interest rates that averaged 0.2 of a percentage point higher than the highest quality, AAA-rated bonds. The interest rate on A-rated bonds averaged 0.4 of a percentage point above the rate on AAA-rated bonds. And the average interest rate on state general obligation

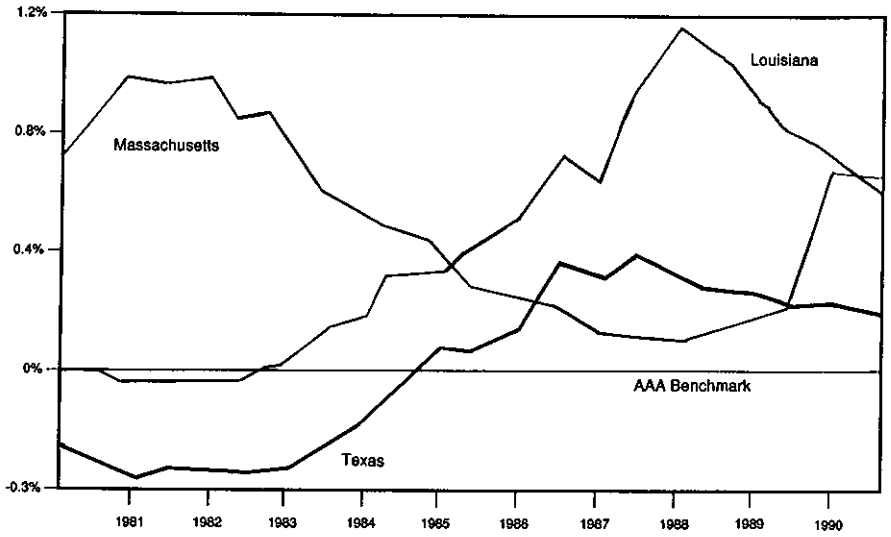
TABLE 2
Upgrades and Downgrades in State General Obligation Bond Ratings, September 1989–August 1990

UPGRADES	
State	Rating Change
California	Aa to Aaa by Moody's
Michigan	AA- to AA by Standard & Poor's
New Hampshire	AA to AA+ by Fitch
Oregon	A1 to Aa by Moody's
Washington	A1 to Aa by Moody's
DOWNGRADES	
State	Rating Change
Connecticut	Aa1 to Aa by Moody's
	AA+ to AA by Standard & Poor's
Massachusetts	A to Baa by Moody's
	A to BBB by Standard & Poor's
	AA to A by Fitch
New York	A1 to A by Moody's
	AA- to A by Sandard & Poor's

SOURCE: Moody's Investors Service, Standard & Poor's and Fitch Investors Service

[1] Standard & Poor's, *Credit Week*, March 19, 1990.
[2] Moody's Investors Service, *Moody's Municipal Credit Report*, January 17, 1990.
[3] Standard and Poor's, *Credit Week*, December 18,1989.
[4] George Leung, Managing Director of State Ratings at Moody's, *Muniweek*, March 26, 1990.
[5] Standard & Poor's, *Credit Week*, April 2, 1990.
[6] Moody's Investor's Service, *Moody's Municipal Credit Report: State of California*, October 6, 1989.

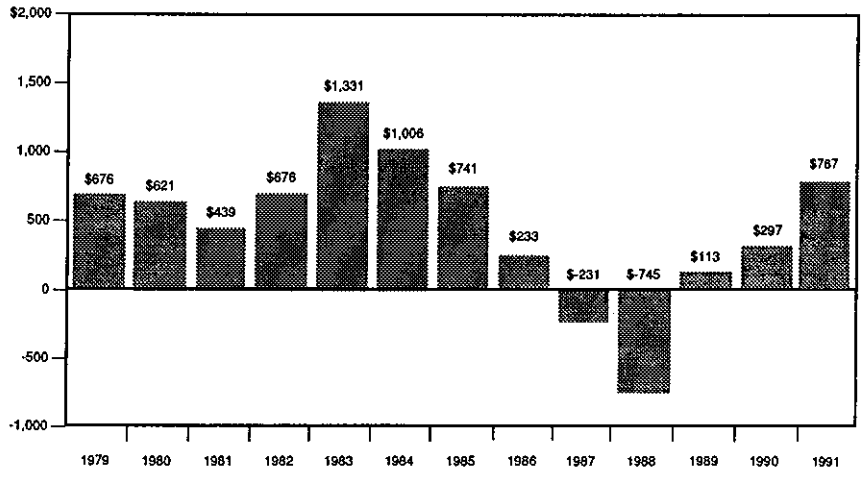
FIGURE 2
Yield Differences on Texas, Louisiana, and Massachusetts General Obligation Bonds Relative to AAA-Benchmark State



SOURCE: The Chubb Corporation.

NOTE: Yield differences are compiled from a semiannual poll by the Chubb Corporation of major municipal bond dealers. Traders are asked to express the average yield they demand on the general obligation debt of a number of states relative to a benchmark state, New Jersey, which is top-rated by Moody's, Standard and Poor's and Fitch bond rating agencies.

FIGURE 3
Beginning Balance in Texas' General Revenue Fund by Fiscal Year (millions of dollars)



SOURCE: Texas Comptroller of Public Accounts.

bonds with less than an A rating was 0.7 of a percentage point above that on AAA-rated bonds.[7]

The cost of such a differential can be tremendous. An interest rate increase of 0.7 of a percentage point, from 7 percent to 7.7 percent, on a $500 million, twenty-year bond issue would mean $50 million more in total interest paid by the borrower.

Texas' ability to maintain its bond rating in the face of difficult economic times and increasing demands on state government has helped to keep borrowing costs low.

STRENGTHENING STATE ECONOMY AND FINANCES BUILD CONFIDENCE IN TEXAS' BONDS

The final decision regarding the risk and interest rate on bonds is not made, however, at the rating agencies but on the trading floor. Bond ratings are just a broad measure of credit quality. All but twelve of the forty-one states assigned bond ratings have an AA rating or better. Each bond purchaser assesses the risk involved in a bond purchase and demands a commensurate interest rate.

Texas bonds are trading at lower interest rates as the state's economy and finances gain strength. In the summer of 1987, investors were charging Texas an average 0.4 of a percentage point above the interest rate on benchmark AAA-rated bonds *(Figure 2)*. This interest rate margin is a measure of the higher risk investors placed on Texas' bonds due to our economic and financial difficulties. Today, that margin has been cut in half, due in large part to improvements in the state's economy and the ability of Texas' policymakers to keep state finances sound.

For comparison, Figure 2 includes the relative rates required by investors on the bonds of Louisiana, with an oil-based economy less diversified than Texas', and Massachusetts, with an economy relying more on high technology research and manufacturing.

Massachusetts' recent financial difficulties show up vividly in the

[7] Merrill Lynch, *Municipal New Issue Calendar*, September 6, 1990.

increases in the rates which investors are demanding on that state's bonds. In December 1988, the rate on Massachusetts' bonds was just 0.17 of a percentage point above the AAA benchmark and one-tenth of a point below the rate on Texas bonds. By the summer of 1990, Massachusetts' bonds carried rates averaging 0.6 of a percentage point above the AAA benchmark and more than 0.4 of a percentage point above Texas' rate. Massachusetts' bond interest rates have not been this much higher than Texas' since the early 1980s, when oil price increases brought a boom to Texas and recession to the Northeast.

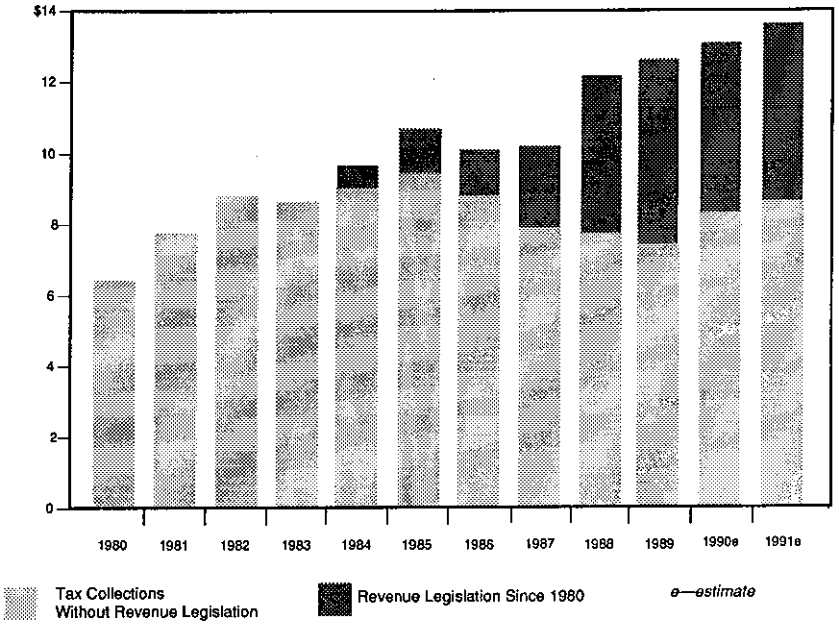
Louisiana has continued to show improvement since that state—along with Texas—hit economic rock-bottom in 1986-87. The effect of the oil bust was much more severe on Louisiana because that state's economy and state finances were much more oil dependent. The rate on Louisiana bonds peaked in late 1987 at 1.12 percentage points above the AAA benchmark. The improvement since then has been steady, but slow. In June 1990, interest rates on Louisiana bonds still averaged 0.58 of a percentage point above the benchmark and 0.39 of a percentage point above the rate on Texas bonds.

IMPROVEMENT IN TEXAS STATE FINANCES

Texas began fiscal year 1991 with a positive cash balance of $767 million, posting the third consecutive year of fiscal improvement *(Figure 3)*.

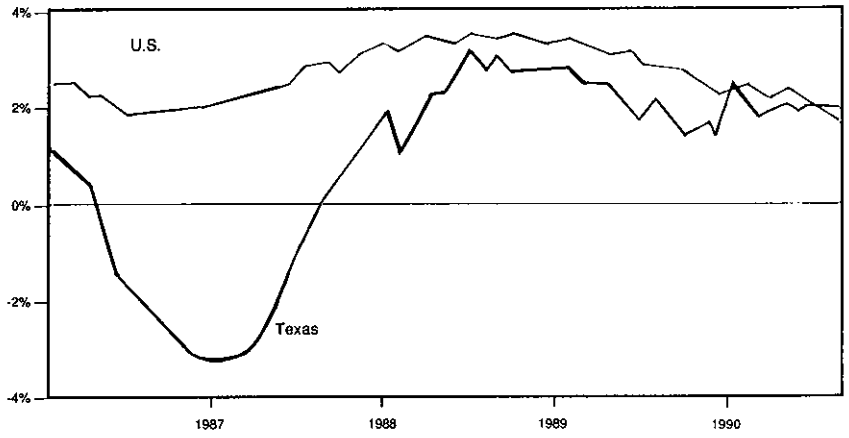
This improvement in the state's bottom line since 1988 has come both from increased revenues as a result of the state's economic rebound and from revenue measures passed by the legislature to bolster Texas' tax collections *(Figure 4)*.

FIGURE 4
Texas State Tax Revenue
Actual and Adjusted for Revenue Legislation Since 1980
(Billions of dollars)



SOURCE: Texas House Ways and Means Committee

FIGURE 5
Employment Growth, Texas vs. U.S.
January 1986 through August 1990
(percent change from same month, previous year)



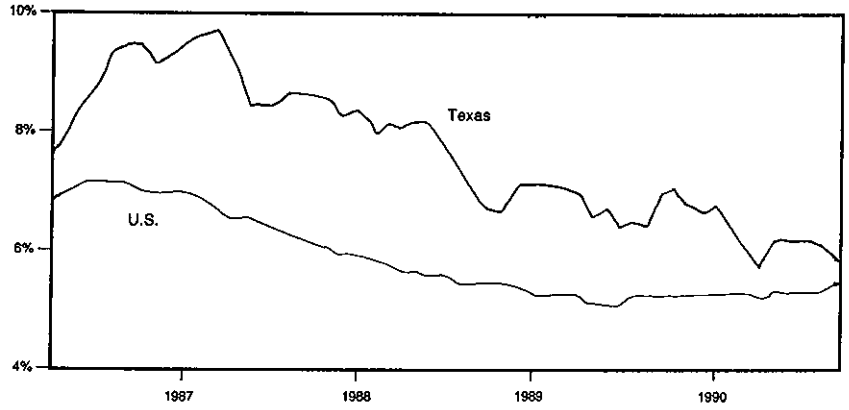
SOURCE: Texas Comptroller of Public Accounts and Texas Employment Commission

TEXAS ECONOMY CONTINUES TO EXPAND

The Texas economy has regained stability after wide swings related to boom and bust cycles in petroleum, real estate and finance.

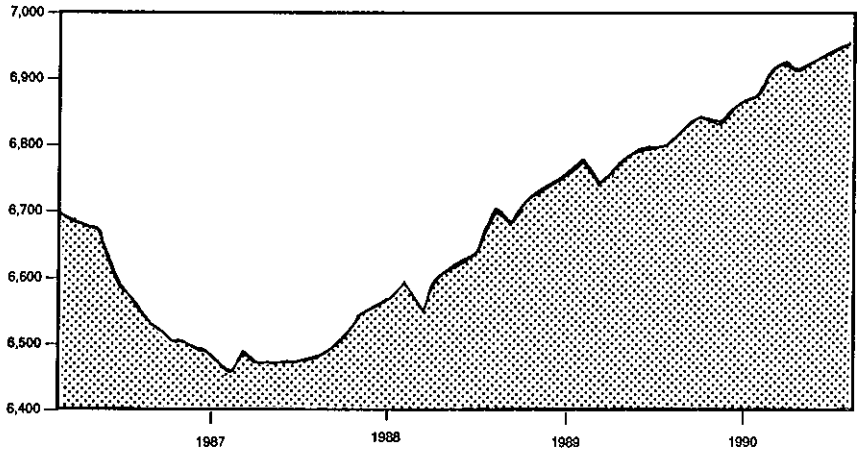
Texas employment is growing at a two percent annual rate—about the same as the U.S. growth rate *(Figure 5)*. And personal income in Texas and the U.S. as a whole is

FIGURE 6
Unemployment Rate for Texas and the U.S.
January 1986 through August 1990
(Three-month Moving Average)



SOURCE: Texas Comptroller of Public Accounts and Texas Employment Commission

FIGURE 7
Texas Nonfarm Employment,
January 1986 through August 1990,
Seasonally Adjusted
(000's)



SOURCE: Texas Comptroller of Public Accounts and Texas Employment Commission .

The Texas economy has regained stability after wide swings related to boom and bust cycles in petroleum, real estate and finance.

growing at around seven percent per year.

Texas' unemployment rate fell to below six percent during 1990, down from a peak of almost ten percent in 1986. The Texas unemployment rate is closer to the U.S. rate than it has been in six years *(Figure 6).*

Texas is now in its fourth straight year of economic growth. Texas added 133,000 non-farm jobs during fiscal year 1990 and has added a total of 506,000 since the low-point of the Texas recession in December 1986. *(Figure 7).*

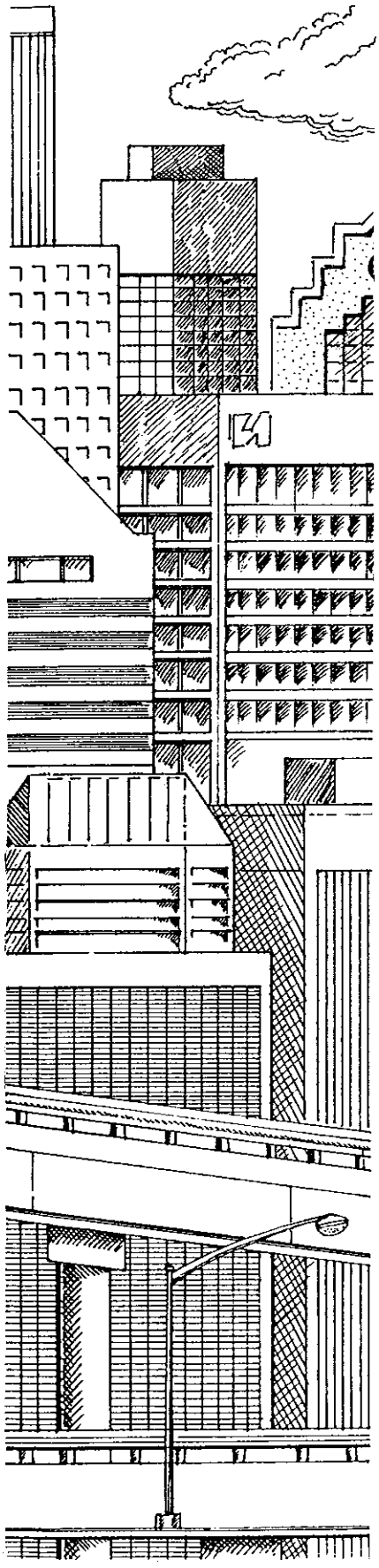
Employment gains are spread throughout the state. Twenty-three of Texas' twenty-eight metropolitan areas have added jobs over the last year.

But the picture is not entirely bright. Texas lost 5,840 manufacturing jobs during fiscal year 1990 following a nationwide decline brought on by a weak national economy, sluggish export growth and defense cutbacks.

Still, growth in the service industries—primarily health services, transportation, restaurants and government—has more than taken up the slack. The transportation sector alone added 16,890 jobs during fiscal year 1990. Increased airline activity, particularly at the Dallas/Ft. Worth Airport, is the primary reason for this four percent growth.

In summarizing the outlook for Texas, Standard and Poor's states: "With diversification.... the state's economy is recovering. Employment in services, government and trade have offset losses suffered by mining and construction during the state's economic downturn.... Barring a deep national recession that would negatively impact the state, Texas' recovery should continue into the 1990s."[8]

[8]Standard and Poor's, *Credit Week,* March 19, 1990.



CHAPTER TWO

TEXAS BOND ISSUANCE –1990

Texas state agencies and public universities issued a total of $1.1 billion in bonds during fiscal year 1990. About $931 million (85 percent) were new-money bonds and $168 million (15 percent) were refunding bonds *(Table 3 on page 8)*. New-money bond issues raise additional funds for new projects and add to the state's outstanding debt while refunding bonds, for the most part, replace bonds issued previously. A synopsis of each 1990 bond issue is included in Appendix A.

Total bond issuance is down sharply from 1989, but the issuance of new-money bonds is up *(Figure 8 on page 8)*. The state issued $1.5 billion in bonds during 1989—$501 million in new-money bonds and $962 million in refunding bonds.

MORE NEW-MONEY BONDS ISSUED DURING 1990

Texas new-money bond issuance during 1990 was the greatest since 1986, when the state sold $2.4 billion in new-money bonds. These 1990 bonds were issued to finance a number of projects, including the initial phase of the Superconducting Super Collider, expansion of The University of Texas research facilities across the state, an increase in mortgage funds available for affordable housing, extension of the Dallas North Tollway and continued expansion in Texas' prison, mental health and youth corrections systems.

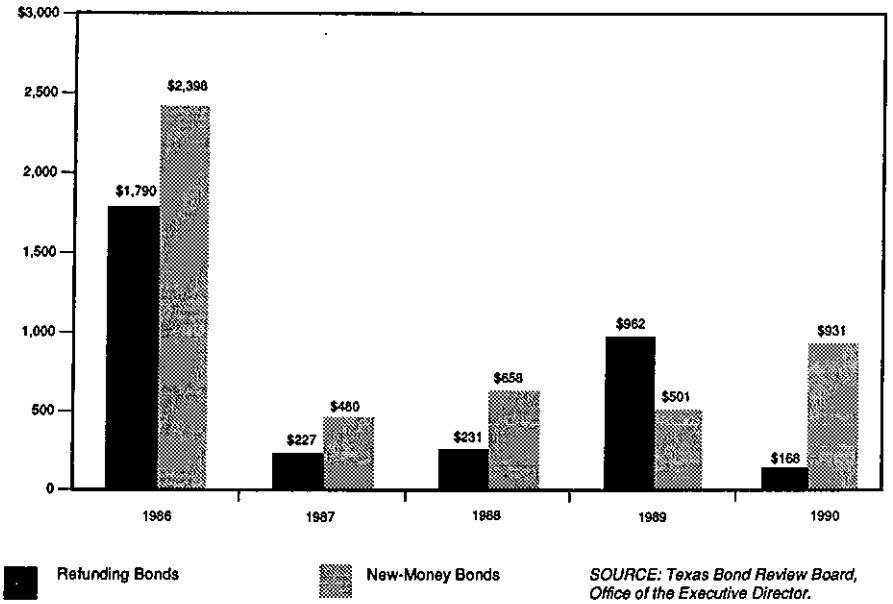
Superconducting Super Collider Largest User of Bonds in 1990

The largest issuer of new-money bonds in 1990 was the Texas National Research Laboratory Commission (TNRLC) which sold $250 million in general obligation bonds to finance the initial construction stages of the Superconducting Super Collider (SSC) in Ellis County.

The SSC replaced prison construction—which was first in 1988 and 1989—as the number one use of new-money state bonds.

Proceeds from the bonds for the SSC will be used to buy land, build on-site improvements and provide research and start-up funds for the project. Plans call for the construction of a 54-mile circular tunnel in which proton beams are sent in opposite directions at high speed and smashed together. When completed in the late 1990s, the super collider will be the world's largest particle accelerator and is expected to provide scientists with valuable insight into the smallest components of matter.

FIGURE 8
Texas New-Money and Refunding Bond Issues - 1986 through 1990
(millions of dollars)



SOURCE: Texas Bond Review Board, Office of the Executive Director.

This $250 million issue represents half of $500 million in general obligation bonds authorized by the legislature and the voters by constitutional amendment in 1987. The debt service on these bonds will be paid from the state's general revenue fund.

The legislature authorized an additional $500 million in revenue bonds which could also be issued to support the construction of the SSC.

According to TNRLC officials, it will probably be two-and-one-half to three years before additional bonds are issued for this project.

University of Texas Expands Research Facilities

The University of Texas System, during fiscal year 1990, sold $165

TABLE 3
Texas Bonds Issued During Fiscal Year 1990

Issuer	Refunding Bonds	New-Money Bonds	Total Bonds Issued
Texas National Research Laboratory Commission		$250,000,000	$ 250,000,000
The University of Texas System	$24,760,000	169,500,000	194,260,000
Texas Housing Agency	46,600,000	141,695,000	188,295,000
Texas Public Finance Authority		133,250,000	133,250,000
Texas Turnpike Authority		133,070,000	133,070,000
University of Houston System	56,115,000		56,115,000
Texas Higher Education Coordinating Board		49,989,168	49,989,168
Texas Water Development Board		40,930,000	40,930,000
Texas Veterans Land Board	40,719,551		40,719,551
Texas A&M University		10,000,000	10,000,000
Stephen F. Austin State University		1,200,000	1,200,000
Texas National Guard Armory Board		1,000,000	1,000,000
TOTAL, BONDS ISSUED DURING FY 1990	**$168,194,551**	**$930,634,168**	**$1,098,828,719**

SOURCE: Texas Bond Review Board, Office of the Executive Director.

million in new-money bonds backed by the Permanent University Fund (PUF) and $4.5 million in variable-rate bonds backed by general fees.

The proceeds of these bonds will be used along with cash on hand from general fees, grants and gifts to finance construction, capital improvements, and land acquisition throughout the U.T. System. Nearly half of the bond proceeds will be used as partial financing for five research facilities.

The System will utilize $11.4 million in PUF bond proceeds as partial financing for the construction of the Microelectronics and Engineering Research Building at the Balcones Research Center in Austin, a $22.5 million project. The building will facilitate research for the College of Engineering Material Sciences and Engineering Program at U.T. Austin.

Another $13 million in PUF bond proceeds will go toward the design and development of a new $25 million Molecular Biology Building also located at the Balcones Research Center. The building will consolidate molecular biology research and facilitate the development of teaching and research programs.

An Engineering and Computer Sciences Building will be built at the University of Texas at Dallas, using $17.5 million in PUF bond proceeds and $2.5 million in funds from gifts and grants. The building will house research and institutional activities in electrical engineering and computer sciences.

The System will use another $40 million in PUF bond proceeds as partial financing for the North Campus Expansion at the University of Texas Southwest Medical Center at Dallas and a new Medical Research Building at Galveston.

Texas Housing Agency Expands Program

The Texas Housing Agency (THA) issued a total of $142 million in new-money bonds during fiscal year 1990, making THA the third largest issuer of new-money bonds during the year.

The proceeds from the new-money bonds are being used to purchase low-interest mortgage loans made by lenders to low- and moderate-income first-time homebuyers.

The largest portion of THA bonds were for a joint venture with the Resolution Trust Corporation (RTC). The RTC was created by the federal government in August 1989, to liquidate properties acquired from failed savings and loans.

The THA issued $93 million in new-money bonds (and another $47 million in refunding bonds) to finance the purchase by qualified borrowers of foreclosed real estate held by the RTC.

In March 1990, the RTC authorized the cooperative program with THA, the first such federal/state partnership. For its part, THA issued bonds to make mortgage loans available to qualified low- and moderate-income homebuyers and agreed to restrict loans for two years only to those which finance the purchase of properties held by the RTC. The RTC contributed $2.8 million in cash to pay lender commitment fees usually paid by the borrower. The RTC contribution is crucial since many borrowers who have adequate income to repay home loans lack the cash to pay up-front costs.

In a separate program, THA sold $48 million in new-money bonds and targeted foreclosed real estate owned by Texas lending institutions and THA itself. Twenty percent of the proceeds was earmarked for loans to low-income borrowers in economically distressed areas.

Turnpike Authority to Extend Dallas North Tollway

The Texas Turnpike Authority (TTA) issued $133.1 million in new-money bonds to finance the extension of the Dallas North Tollway.

The original 9.8 mile tollway was opened to traffic in 1968 as a four- and six-lane divided highway. In September 1982, the TTA sold revenue bonds to finance the first extension, increasing the tollway length to 14.9 miles.

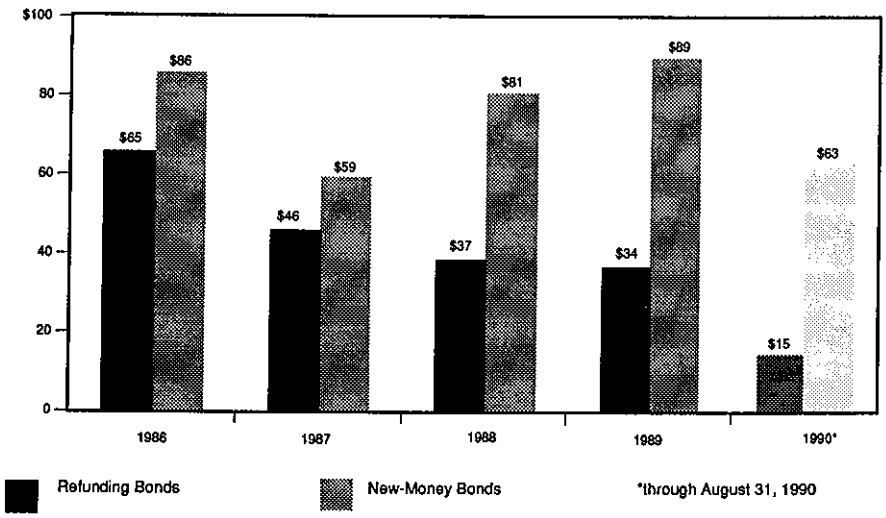
With this extension, the tollway will reach from near downtown Dallas to State Highway 121, north of Plano, over 21 miles. The TTA expects to complete this latest extension in 1994.

Issuance of Prison Bonds Slows

Approximately $57 million in general obligation bonds were issued by the Texas Public Finance Authority (TPFA) in fiscal year 1990 to finance prison construction, compared with $171 million in 1989 and $239 million in 1988. The TPFA issued another $31 million in general obligation bonds to finance projects undertaken by the Texas Department of Mental Health and Mental Retardation (MHMR) and the Texas Youth Commission (TYC).

The issuance of fewer bonds for prisons in 1990 reflects the fact that bonds issued this year were to cover primarily the design rather than the total construction costs of

FIGURE 9
Total U.S. Long-Term Municipal Bond Issuance - 1986 through 1990
(billions of dollars)



SOURCE: Bond Buyer.

a number of projects. Bonds are issued for the design phase first so that the most accurate cost estimates can be made before bonds are issued for construction.

Bonds issued during fiscal year 1990 will finance the design of projects in Beeville, Richmond, and Freestone County which—when completed with bonds issued during fiscal year 1991—will add another 3,800 beds to Texas' prison capacity. The fiscal year 1990 bonds also will cover the full construction costs of 1,000 bed facilities in Childress and Dilley and a 59-bed geriatric center.

These additional 5,859 beds will be added to the 9,628 new beds financed with $239 million in general obligation bonds issued during 1988 and 7,950 new beds financed with the $171 million in bonds issued during 1989.

MHMR is using its portion of 1990 bond proceeds for roof replacement, asbestos abatement and other major building renovations at eight state hospital and eleven state school facilities.

The TYC projects involve primarily major repairs and life safety code improvements to seven of its institutions, additions and alterations to the statewide reception center in Brownwood, roof replacement and repair at five training schools across the state and asbestos and other hazardous chemical abatement at seven TYC facilities.

The TPFA also issued $45 million in revenue bonds to renovate Texas School for the Deaf South Campus in Austin and to purchase a warehouse facility in Austin for the State Board of Insurance.

TOTAL REFUNDING ISSUES DOWN SHARPLY DURING 1990

State agencies and universities issued $168 million in refunding bonds during 1990, down sharply from the unusually large $962 million in 1989 refundings, and more in line with the $231 million in refundings during 1988 and the $227 million in refunding bonds sold during 1987.

Refundings in 1989 included a massive $512 million refunding, accomplished by the Texas Water Resources Finance Authority, and a $238 million Texas Turnpike Authority refunding issue.

This decline in refundings follows a nationwide pattern of fewer refundings, attributed to the level and moderate rise in interest rates during the year. Nationwide, 19 percent of the $78 billion in municipal bonds sold through August 1990 were refundings. Refundings accounted for 28 percent of bond issuance during 1989, thirty-one (31) percent during 1988 and 44 percent during 1987 *(Figure 9)*.

The University of Houston issued $56 million in refunding bonds, not for interest savings on existing debt, but to eliminate restrictive covenants and allow for future issuance of debt under a broadened pledge. In the past, Texas universities have issued bonds secured by a specific pledge of revenues derived from the project that is financed.

Under this new financing structure, the University's revenue bonds will be issued under a consolidated pledge of fee revenue. This provides additional debt service coverage, increases the security of the bonds and, therefore, lowers borrowing costs for the university.

The Veterans Land Board (VLB) issued $41 million in refunding bonds in 1990, again not for immediate savings, but to extend debt service to ease a projected temporary strain on cash flows of the land loan program. The VLB issues bonds to purchase land which is resold to eligible Texas veterans.

College Savings Bonds

Four million dollars of the VLB's refunding issue and $50 million in new-money bonds issued by the Texas Higher Education Coordinating Board were designated "college savings bonds."

These college savings bonds were marketed to small investors wishing to save money for future college expenses.

The college savings bonds were sold in $1,000 denominations and at a deep discount, instead of the customary $5,000 face value. For example, investors could buy a $1,000 bond, maturing in nineteen years, for approximately $240. No interest would be paid on the bond until maturity, but the investor would receive $1,000 for his original investment—equivalent to an annual interest rate of 7.6 percent. The bonds were sold in maturities from two years to nineteen years.

Although the bonds were marketed as college savings bonds, there were no restrictions on the use of the proceeds from the investment.

NEW LEASE- AND INSTALLMENT-PURCHASES

A total of $12.6 million in lease- and installment-purchases were approved by the Bond Review Board in 1990 *(Table 4)*. While it does not involve the issuance of state bonds, a lease- or installment-purchase is a method of making purchases over time and carries finance charges. These financing arrangements were used to buy computer equipment, land and office buildings during 1990.

The Bond Review Board is required to review all lease- or installment-purchases in excess of $250,000 in principal or with a term of more than five years.

BOND ISSUANCE OUTLOOK-1991

Texas state agencies and universities expect to issue $590 million in bonds during 1991, according to the results of an annual survey by the Bond Review Board. A description of each bond issue expected during fiscal year 1991 is included in Appendix B.

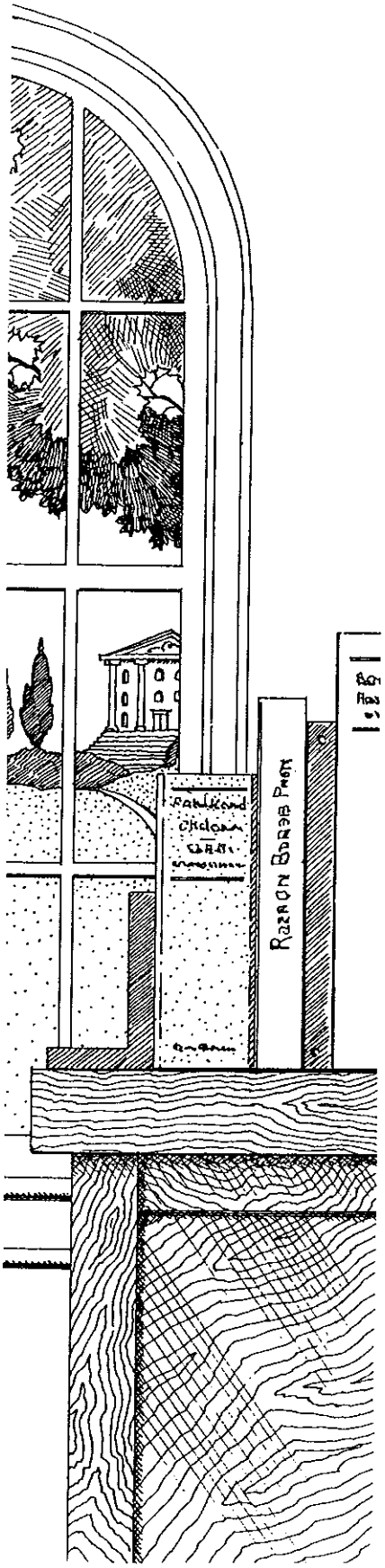
The survey provides only a preliminary schedule of bond issuance during the year. The list will probably expand as the year progresses.

The largest issuer is expected to be the Texas Public Finance Authority (TPFA) which will sell $179 million in bonds during the year. Approximately $103 million of this total will be general obligation bonds to finance projects on behalf of Texas Department of Criminal Justice and Texas Department of Mental Health and Mental Retardation. The remainder of TPFA's bond issuance will be lease-revenue bonds to construct state office buildings.

TABLE 4
Lease- and Installment-Purchase Agreements
Fiscal Year 1990

	Amount	Purpose	Interest Rate
Texas Department of Human Services	$6,256,221	Computer	6.97%
State Purchasing and General Services Commission	1,231,000	Computer	7.09
Texas Employment Commission	1,115,000	Land and Office Building	8.06
Texas Department of Mental Health and Mental Retardation	2,075,360	Computer	8.50
Texas Youth Commission	1,100,000	Computer	7.83
Texas Employment Commission	775,000	Land and Office Building	8.26
TOTAL	**$12,552,581**	**AVERAGE RATE**	**7.49%**

SOURCE: Texas Bond Review Board, Office of the Executive Director.



CHAPTER THREE

TEXAS BOND ISSUANCE COSTS

Issuance costs are composed of the fees and expenses paid to consultants to market Texas bonds to investors.

These issuance costs and the interest paid on the bonds purchased by investors are the two expenses involved when the state finances a program with a bond issuance. The interest paid on the bonds makes up the largest cost of borrowing, almost equalling the principal borrowed on a typical 20-year bond issue with an interest rate of seven percent. Issuance costs generally range from one to two percent of the principal borrowed.

Interest and issuance costs can be related. Services utilized to develop an effectively structured and marketed bond issue can more than pay for themselves through lower interest costs.

TYPES OF FEES

The following are the professional services most common in the marketing of all types of bond issues.

- **Underwriter**—The underwriter or underwriting team acts as a financial intermediary for the state, purchasing the state's bond issues for resale to investors. In a negotiated sale, the underwriter may also have a significant role in the structuring of the issue.

- **Bond Counsel**—Bond counsel prepares the necessary legal documents and ensures that a bond issue meets state and federal legal requirements. The legal and financial disclosure to bondholders regarding a bond issue is included in what is known as the "official statement." The bond counsel, in many cases, has primary responsibility for the official statement.

- **Financial Advisor**—The financial advisor structures the financing and assists in preparing and distributing the official statement, securing a bond rating, advertising, and conducting a bond sale. A financial advisor may be employed by an issuer to negotiate with the underwriter regarding fees and other terms of the sale.

- **Credit Rating Services**—The credit rating services evaluate and assign a rating to the credit quality or investor risk associated with each state bond issue. These evaluations are the industry standard used by investors in their decisions on which bonds to purchase.

- **Paying Agent/Registrar**—The paying agent and registrar are responsible for maintaining a list of bondholders and ensuring that they receive principal and interest payments on appropriate dates.

- **Printer** —The printer produces the official statement, notice of sale, and any bonds in the amount required by the transaction.

Texas state bond issuers paid an average of $653,725 per issue and $17.25 per $1,000 in issuance costs on bond issues sold during 1990 *(Table 5)*. (Appendix A includes an accounting of the issuance costs for each 1990 issue.)

The underwriter's spread is the largest component of issuance costs, averaging $498,675 per issue and $9.76 per $1,000 of bonds sold during 1990. This single component accounted for on average about 76 percent of the total cost of issuance.

Legal counsel fees were next in importance, averaging $57,403 per issue and $2.01 per $1,000 of bonds sold. Financial advisory fees averaged $48,326 per issue and $1.85 per $1,000 of bonds sold.

ECONOMIES OF SCALE

In general, the larger an issue is, the greater the issuance cost, but the lower the issuance cost as a percentage of the size of the bond issue. (Typically, this percentage is expressed as cost per $1,000 of bonds issued. Costs of one percent, for example, equal $10 per $1,000 of bonds issued.)

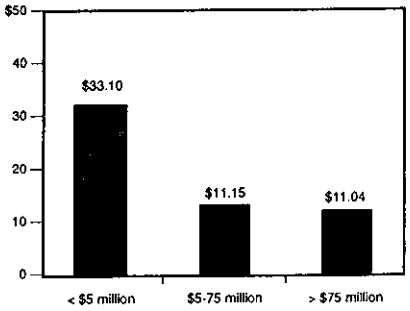
Issuance costs ranged from $43,840 on a $1.2 million issue by Stephen F. Austin University (SFA) to $2.25 million on a $250 million issue by the Texas National Research Laboratory Commission to finance initial stages of the Superconducting Super Collider.

The $43,840 in issuance costs on the $1.2 million SFA issue represents $36.53 per $1,000 (3.7 percent) of bonds sold, while the $2.25 million in costs on the $250 million Super Collider issue is $9.02 per $1,000 (0.9 percent) of bonds sold, illustrating the general principle that it is more economical to issue bonds in large blocks. This relationship is called "economies of scale" in bond issuance.

Economies of scale result because there are costs of issuance which do not vary proportionately with the size of a bond issue. Professional fees for legal and financial advisory services, document drafting and printing, travel and other expenses must be paid no matter how small the issue. On the positive side, however, these costs do not increase proportionately with the size of an issue.

As a result, the smallest issues are by far the most costly in percentage terms *(Figure 10)*. Total issuance costs for issues of less

FIGURE 10
Average Issuance Costs During 1990 by Size of Issue
(costs per $1,000 of bonds issued)



SOURCE: Texas Bond Review Board, Office of the Executive Director.

TABLE 5
Average Issuance Costs for 1990 Texas Bond Issues*

	Average Cost Per Bond Issue	Average Cost Per $1,000 in Bonds Issued
Average Issue Size–$59 Million		
Underwriter's Spread	$498,675	$9.76
Other Issuance Costs:		
Legal Fees	57,403	2.01
Financial Advisor Fees	48,326	1.85
Rating Agency Fees	23,200	2.02
Printer Fees	11,003	0.91
Paying Agent/Registrar Fees	3,798	0.26
Other	11,320	0.42
Total	**$653,725**	**$17.25**

**The calculations regarding average issuance costs include only those bonds sold via competitive or negotiated sale for which complete data were available. Bond insurance premiums are not included for purposes of average cost calculations. The figures are simple averages of the dollar costs and costs per $1,000 associated with each 1990 state bond issue.*

SOURCE: Texas Bond Review Board, Office of the Executive Director.

than $5 million averaged $50,536 per issue and $33.10 per $1,000 in bonds issued. Total costs for issues of between five and seventy-five million dollars averaged $514,390 per issue, but only $11.15 per $1,000. Bond issues over $75 million had total costs averaging $2 million per issue and $11.04 per $1,000.

Issuance costs increase with the complexity of the financing. Greater complexity translates into greater expenditures for financial advice, legal counsel and greater commissions and fees to the underwriters who are paid to sell Texas bonds on the state's behalf.

NEGOTIATED VS COMPETITIVE SALES

The more complicated financings during 1990 were marketed by negotiated sale.

In a negotiated sale, an underwriter is chosen by the issuer in advance of the sale date and agrees to buy the state's bonds at some future date and to resell them to investors.

With the knowledge that it has the bonds to sell, the underwriter can do whatever presale marketing is necessary to accomplish a successful sale. And in the more complicated financings, the presale marketing can be crucial to obtaining the lowest possible interest cost.

In a competitive sale, sealed bids from a number of underwriters are opened on a predetermined sale date with the state's bonds being sold to the underwriter submitting the best bid.

Underwriters bidding competitively usually do less presale marketing to investors, since in a competitive sale underwriters cannot be sure they own the state's bonds until the day the bids are opened.

To more accurately compare the average issuance costs per $1,000 on negotiated and competitively sold bonds, it is necessary to correct for size differences between negotiated and competitively sold bond issues—the smallest issues are much more likely to be sold competitively.

It is the responsibility of state bond issuers to determine the type of sale and level of services necessary to issue state bonds in the most cost-effective manner possible. And it is the goal of the Bond Review Board to ensure that this happens.

And smaller issues, as described above, tend to have much higher issuance costs per $1,000, regardless of their complexity.

During 1990, there were three bond issues of less than $5 million in size; all were sold competitively. The smallest negotiated financing was $41 million. Any comparison of average costs which include these small issues will overstate the costs of competitive sales. To partially control for this size difference, comparisons of average costs on negotiated and competitive financings for 1990 and past years will be based only on those issues over $5 million.

Among bond issues greater than $5 million, issuance costs for bonds sold via negotiated sale during fiscal year 1990 averaged $13.74 per $1,000, compared to an average cost of $8.87 per $1,000 for those bonds sold by competitive sale *(Table 6)*.

Most of the difference is due to higher average underwriter's spreads on negotiated sales. Average underwriter's spread on issues sold by negotiated sale was $10.60 per $1,000, while the average spread on competitively sold issues was $6.83.

Legal fees on negotiated financings were also greater than those on competitive financings, reflecting in part the greater complexity of these financings.

The average legal fee was $1.18 per $1,000 on the bond issues sold by negotiated sale, compared to $.83 per $1,000 on bonds competitively sold. Financial advisory fees on negotiated sales averaged $.62 per $1,000, slightly above the $.56 per $1,000 financial advisory fee on competitive sales.

Paying agent/trustee fees, travel and other expenses were also substantially higher on negotiated sales, reflecting the greater complexity of these issues.

RECENT TRENDS IN ISSUANCE COSTS

The 1990 averages continue to reflect the trend of declining issuance costs on state bonds. Total issuance costs averaged $11.30 per $1,000 for 1990 issues greater than $5 million, down from $13.19 per $1,000 in 1989 and a high of $18.13 per $1,000 in 1987, the first year for which data were collected *(Figure 11)*.

Underwriter's spreads have declined steadily from $12.08 per $1,000 in 1987 to an average of $8.72 per $1,000 in 1990.

Both competitive and negotiated financings have seen over a 30 percent decline in issuance costs over the last three years.

And the gap between the cost per $1,000 of competitive and negotiated financings has narrowed. In 1987, the average cost of issuing bonds through negotiated sale was $7.26 per $1,000 *higher* than the cost of a competitive sale; in 1990 that margin had declined to $4.87 per $1,000.

Underwriter's spread—the largest component of issuance costs—has declined substantially over the last three years on both negotiated and competitively sold bond issues. But underwriter's spreads remain higher on negotiated sales and in 1990 the difference widened, due primarily to a sharp drop in the average spreads on competitively sold issues. Competitive spreads averaged $6.83 per $1,000 in 1990, compared to $8.45 per $1,000 in 1989 and $9.01 in 1988.

This discussion is not meant to imply that the cost differences between negotiated and competitive financings are unreasonable. A negotiated sale tends to be used on those bond issues which are more difficult—and, therefore, more costly—to structure and to market.

It is the responsibility of state bond issuers to determine the type of sale and level of services necessary to issue state bonds in the most cost-effective manner possible. And it is the goal of the Bond Review Board to ensure that this happens.

TABLE 6
Average Issuance Costs for 1990 Texas Bond Issues of Greater than $5 Million Sold Through Negotiated and Competitive Sale

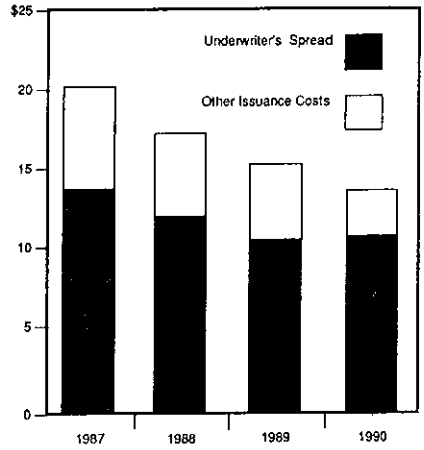
	Negotiated ($/1,000)	Competitive ($/1,000)
Underwriter's Spread	$10.60	$6.83
Other Issuance Costs:		
Legal Fees	1.18	0.83
Financial Advisor Fees	0.62	0.56
Rating Agency Fees	0.44	0.46
Printing	0.33	0.15
Paying agent/Registrar	0.14	0.02
Other	0.43	0.02
Total	**$13.74**	**$8.87**
Average Issue Size (in millions)	$70	$91

**The calculations regarding average issuance costs include only those bond issues of greater than $5 million sold via competitive or negotiated sale for which complete data were available. Bond insurance premiums are not included for purposes of average cost calculations. The figures are the simple average of the costs per $1,000 associated with each 1990 state bond issue.*

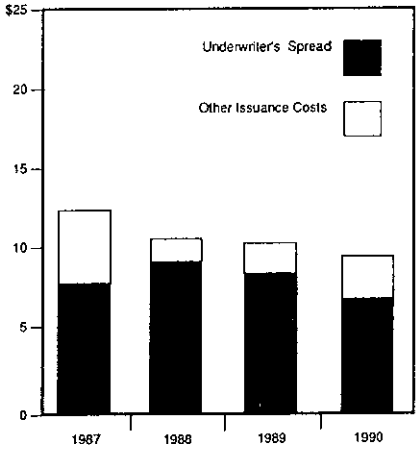
SOURCE: Texas Bond Review Board, Office of the Executive Director

FIGURE 11
Recent Trends in Issuance Costs for Texas Bonds, Average Cost per $1,000 for Issues Greater than $5 Million

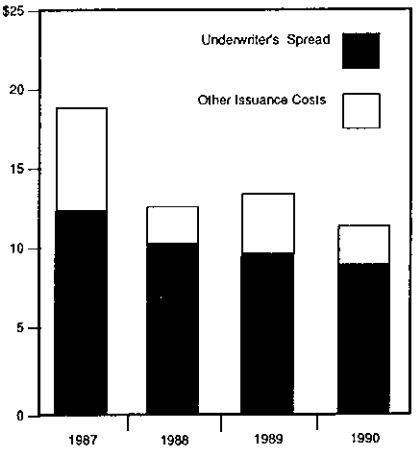
Bonds Issued via Negotiated Sale



Bonds Issued via Competitve Sale



All Bond Issues



SOURCE: Texas Bond Review Board, Office of the Executive Director.

TABLE 8
Debt Service Requirements of Texas State Bonds by Fiscal Year
(amounts in thousands)

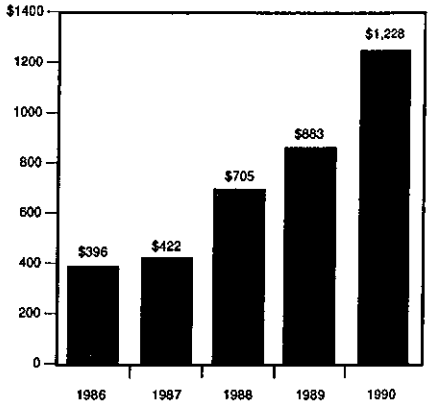
	1990	1991	1992	1993
GENERAL OBLIGATION BONDS				
Self-Supporting				
Veterans Land and Housing Bonds	$174,300	$177,444	$168,877	$164,381
Water Development Bonds	8,864	10,970	12,196	12,242
Park Development Bonds	2,834	3,264	3,172	3,556
College Student Loan Bonds	20,294	23,265	23,979	26,271
Farm and Ranch Security Bonds	900	900	900	900
Total, Self-Supporting	**$207,191**	**$215,844**	**$209,124**	**$207,349**
Not Self-Supporting[1]				
Higher Education Constitutional Bonds	37,336	37,638	37,238	36,555
Texas Public Finance Authority Bonds	41,262	50,746	53,280	53,067
Texas National Research Laboratory Commission	0	16,229	17,705	20,795
Total, Not Self-Supporting	**$78,598**	**$104,614**	**$108,222**	**$110,416**
GENERAL OBLIGATION BONDS, TOTAL	**$285,789**	**$320,458**	**$317,346**	**$317,765**
NON-GENERAL OBLIGATION BONDS				
Self-Supporting				
Permanent University Fund Bonds				
A&M	21,515	22,545	48,057	22,041
UT	46,172	51,896	63,210	63,591
College and University Revenue Bonds	105,287	108,872	110,113	109,557
Texas Hospital Equipment Finance Council Bonds	3,403	3,566	3,809	4,052
Texas Housing Agency Bonds	208,405	136,887	143,725	144,332
Texas Small Business I.D.C. Bonds	8,267	7,202	7,202	7,202
Texas Turnpike Authority Bonds	14,814	31,538	34,873	34,860
Texas Water Resources Finance Authority	46,732	48,282	49,071	50,155
Total, Self-Supporting	**$454,595**	**$410,788**	**$460,061**	**$435,790**
Not Self-Supporting[1]				
Texas Public Finance Authority Bonds	19,749	21,359	22,527	22,545
National Guard Armory Board Bonds	2,284	2,391	2,402	2,402
Total, Not Self-Supporting	**$22,033**	**$23,749**	**$24,930**	**$24,947**
NON-GENERAL OBLIGATION BONDS, TOTAL	**$476,627**	**$434,537**	**$484,990**	**$460,737**
GRAND TOTAL	**$762,417**	**$754,995**	**$802,336**	**$778,502**

[1]Bonds which are not self-supporting depend solely on the state's general revenue for debt service. Debt service from general revenue totalled $101 million during fiscal 1990, and will reach $128 million in fiscal 1991.

SOURCES: Texas Bond Review Board, Office of the Executive Director, and Texas Comptroller of Public Accounts. This table was compiled from the 1988 Texas Annual Financial Report: Audited GAAP Edition and unaudited 1989 information obtained from the state agencies involved.

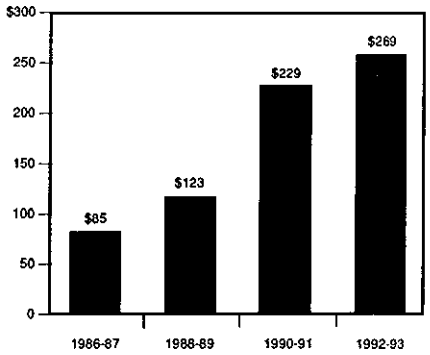
1994	1995 plus
$ 160,660	$ 1,711,634
12,882	211,208
3,417	32,560
26,667	241,109
900	11,350
$204,526	**$2,207,861**
36,582	36,609
52,962	814,950
20,781	542,173
$110,325	**$1,393,732**
$314,852	**$3,601,592**
22,525	352,579
63,006	767,848
108,701	1,074,310
4,296	40,786
196,010	3,622,264
7,202	329,792
34,859	1,268,271
53,946	739,550
$490,544	**$8,195,399**
22,550	417,809
2,405	21,814
$24,956	**$439,624**
$515,500	**$8,635,023**
$830,351	**$12,236,615**

FIGURE 12
Texas State Bonds Outstanding Backed Only by General Revenue
(millions of dollars)



SOURCE: Texas Bond Review Board, Office of the Executive Director.

FIGURE 13
Debt Service Paid from General Revenue During Two-Year Budget Periods
(millions of dollars)



SOURCE: Texas Bond Review Board, Office of the Executive Director.

DEBT SUPPORTED FROM GENERAL REVENUE CONTINUES RAPID GROWTH

There was a record increase during 1990 in that portion of the state's bond debt which is not self-supporting and, therefore, will draw all debt service from the state's general revenue fund.

At the end of fiscal year 1990, there was about $1.2 billion in bonds which must be paid back from the state's general revenue fund, up from $883 million in such bonds outstanding at the end of 1989 *(Figure 12)*.

The amount of general revenue that must go to pay debt service is, as expected, increasing along with the amount outstanding of bonds that are not self-supporting *(Table 8)*.

During the upcoming 1992-93 two-year budget period, the state will pay $134 million annually from general revenue for debt service on outstanding state bonds, up from $115 million annually during 1990-91, $62 million annually during 1988-89 and $43 million a year during the 1986-87 budget period *(Figure 13)*.

The primary force behind the growth in 1992-93 is the issuance over the last three years of bonds to finance corrections construction and the 1990 bond issue to finance the initial phase of the Superconducting Super Collider. These bonds alone will require $126.5 million in general revenue for debt service during 1992-93.

LONG-TERM CONTRACTS AND LEASE PURCHASES OUTSTANDING

Long-term contracts and lease- or installment-purchase agreements can serve as alternatives to bonds when the issuance of bonds is not feasible or practical. These agreements are, like bonds, a debt of the state. Payments on these contracts or agreements can be either general obligations of the state, or subject to biennial appropriations by the legislature. These contracts and agreements are not, however, classified as state bonds and must be added to bonds outstanding to get a complete picture of state debt.

The Texas Water Development Board (TWDB) has entered into a

TABLE 9
Texas Bonds Authorized But Unissued
(amounts in thousands)

	8/31/89	8/31/90
GENERAL OBLIGATION BONDS		
Self-Supporting		
Veterans Land and Housing Bonds	$ 405,000	$ 405,000
Water Development Bonds	1,089,500	1,548,570
Farm and Ranch Loan Bonds	500,000	500,000
Park Development Bonds	29,250	29,250
College Student Loan Bonds	0	25,011
Farm and Ranch Security Bonds	0	0
Texas Department of Commerce Bonds	0	45,000
Texas Agricultural Finance Authority Bonds	0	30,000
Agriculture Water Conservation Bonds	0	200,000
Total, Self-Supporting	**$2,023,750**	**$2,782,831**
Not Self-Supporting[1]		
Higher Education Constitutional Bonds	*	*
Texas Public Finance Authority Bonds[2]	25,490	337,390
Superconducting Super Collider Bonds	500,000	250,000
Total, Not Self-Supporting	**$525,490**	**$587,390**
GENERAL OBLIGATION BONDS, TOTAL	**$2,549,240**	**$3,370,221**
NON-GENERAL OBLIGATION BONDS		
Self-Supporting		
Permanent University Fund Bonds[3]		
A&M	81,384	87,809
UT	181,663	145,194
College and University Revenue Bonds	**	**
Texas Housing Agency Bonds	**	**
Texas Turnpike Authority Bonds	**	**
Texas Agricultural Finance Authority Bonds	500,000	500,000
Texas Department of Commerce Bonds	**	**
Texas Water Resources Finance Authority Bonds	**	**
Texas School Facilities Finance Program	750,000	750,000
Texas Water Development Bonds (Water Resources Fund)	**	**
Total, Self-Supporting	**$1,513,047**	**$1,483,003**
Not Self-Supporting[1]		
Texas Public Finance Authority Bonds	392,588	322,781
National Guard Armory Board Bonds	**	**
Superconducting Super Collider Bonds	500,000	500,000
Total, Not Self-Supporting	**$892,588**	**$822,781**
NON-GENERAL OBLIGATION BONDS, TOTAL	**$2,405,635**	**$2,305,784**
TOTAL	**$4,954,875**	**$5,676,005**

[1]Bonds which are not self-supporting depend solely on the state's general revenue for debt service.
[2]This figure represents the dollar amount of projects authorized by the legislature for which bonds have not been issued.
[3]Issuance of PUF bonds by A&M is limited to10 percent, and issuance by UT is limited to 20 percent of the cost value of investments and other assets of the PUF, except real estate.
*No limit on bond issuance, but debt service may not exceed $50 million per year.
**No issuance limit has been set by the Texas Constitution. Bonds may be issued by the agency without further authorization by the legislature. Bonds may not be issued, however, without the approval of the Bond Review Board and the Attorney General.

SOURCES: Texas Bond Review Board, Office of the Executive Director, and Texas Comptroller of Public Accounts.

long-term contract with the federal government to gain storage rights at two reservoirs under construction by the Federal Bureau of Reclamation. The balance due on the contract at the end of fiscal year 1990 was $42.3 million. This contract is a general obligation of the state, but the TWDB does not anticipate a draw on general revenue for contract payments.

Until recently, lease-purchase agreements represented a relatively small part of Texas debt. They were used for the short-term financing of furniture and equipment.

As of August 31, 1989, capital leases outstanding of furniture and equipment totalled approximately $31.8 million, 94 percent of which will be paid off within four years.

Recent lease-purchase agreements for prison facilities have greatly increased the significance of this type of debt.

During 1988, the Texas Department of Corrections (now a part of the Department of Criminal Justice) entered into four long-term lease-purchase agreements, totalling $142.6 million, for the purchase or construction of prison facilities. The lease-purchase payments for the prisons will come totally from appropriations of general revenue by the legislature to the Texas Department of Criminal Justice.

Lease purchases as of August 31, 1989, including furniture, equipment and prison facilities, totalled $166.2 million.

Inclusion of the lease purchases approved by the Bond Review Board during 1990 would add another $12.6 million to the total amount of lease purchases outstanding.

TEXAS BONDS AUTHORIZED BUT UNISSUED

As of August 31, 1990, Texas had $5.7 billion in authorized but unissued bonds *(Table 9)*. If all bonds authorized as of August 31, 1990, were issued, total outstanding debt would top $12.9 billion.

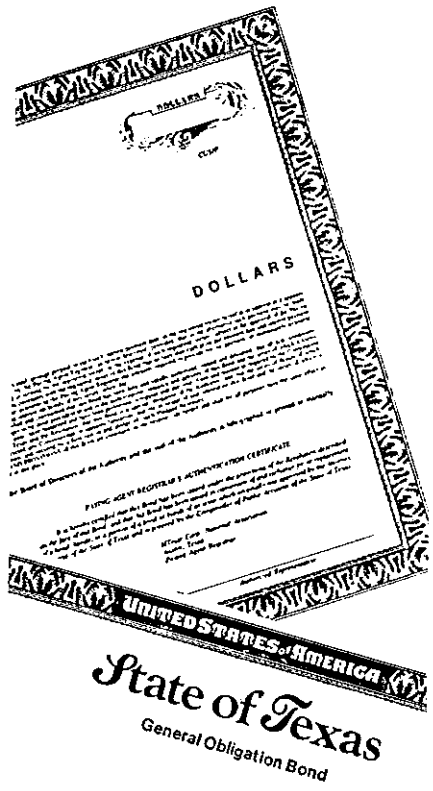
Approximately 59 percent of the bonds authorized but unissued at the end of 1990 are G.O., and 82 percent of this G.O. debt would be self-supporting.

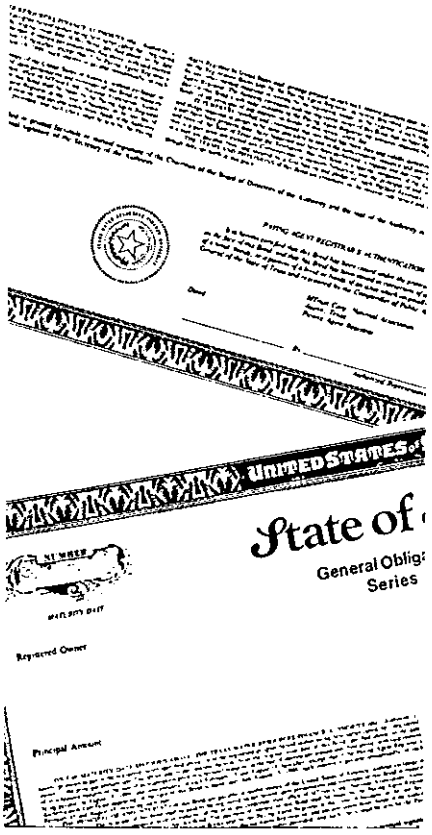
Overall, 75 percent of the bonds authorized but unissued at the end of fiscal year 1990 would be self-supporting and would not, therefore, require the payment of debt service from general revenue.

As of August 31, 1990, Texas had $5.7 billion in authorized but unissued bonds. If all bonds authorized as of August 31, 1990, were issued, total outstanding debt would top $12.9 billion.

CHAPTER FIVE

TEXAS DEBT IN PERSPECTIVE





Texas' debt is currently well below levels that indicate fiscal stress. This low debt burden has allowed the state to maintain its AA bond rating and strong demand for its bonds among investors.

Recent trends, however, increase the need for caution and careful analysis of the ability of the state to authorize and issue additional debt without threatening our credit rating or the acceptance of our bonds by investors.

TEXAS' LOW DEBT BURDEN

Texas is among those states with the lowest state debt burden. Moody's Investors Service (Moody's) ranks Texas 38th among all states and 9th among the ten largest states in "tax-supported debt" per capita.[9]

Moody's tax-supported debt total includes only the bonds that the rating agency believes could place a draw on the state's general revenue fund. Their debt total also includes non-bond debt such as lease- and installment-purchase contracts which are paid from general revenue. The measure combines what this report labels "not self-supporting" bonds and the self-supporting general obligation bonds of the Texas Water Development Board, Veterans Land Board and Texas Parks and Wildlife Commission (See Chapter 4 for a discussion of self-supporting and not self-supporting bonds). The possibility is very remote that any of these self-supporting programs will ever draw on general revenue, making Moody's debt burden measure an upper limit.

Texas has $152 in tax-supported state debt per capita, compared to a nationwide median of $349 per capita and a median of about $411 per capita among the ten most populous states, according to Moody's.

Tax-supported debt outstanding is about 1.1 percent of state personal income, compared to a nationwide median of 2.2 percent and a median of 2.5 percent among the ten largest states. This measure is more reflective of the state's debt burden since it factors in the income producing ability of the state's population. On this measure also, Moody's ranks Texas 38th among the fifty states and 9th among the ten largest states.

Another measure—the ratio of annual debt service from general revenue to total annual general

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[9]Moody's Investors Service, *1990 Moody's Medians.*

revenue collections—focuses on the state's ability to meet the annual payments on its debt. And once again Texas bears a very low burden relative to other states.

During the 1990-91 budget period, general revenue debt service will account for an estimated 0.9 percent of general revenue collections available for debt service, well below the average for all states of around 5 percent and the 10 percent level considered dangerous by the bond rating agencies.

Based on these standard measures, Texas is a low-debt state with room to utilize additional debt without placing the state in financial jeopardy.

There are, however, three recent developments which indicate that caution is needed in the future authorization and issuance of state debt:

- Although Texas remains a low-debt state, recent growth in outstanding debt has been very rapid;
- Texas' substantial amount of authorized but unissued debt payable from general revenue has the potential to increase debt burden considerably; and
- Texas' low state debt is more than offset by high local government debt which places a burden on the same taxpayers called upon to make payments on state debt.

RAPID INCREASE IN DEBT CAUSE FOR CAUTION

While Texas' debt burden is low, the recent rate of increase in debt has been dramatic.

In 1988, Moody's calculated Texas' tax-supported debt outstanding as 0.8 percent of personal income, compared to a U. S. median of 2.3 percent. Moody's latest figures show that while the U.S. median ratio of debt to income had dropped to 2.2 percent by 1990, the figure for Texas has increased to 1.1 percent *(Figure 14)*.

Debt service from general revenue has grown by an average of 28 percent per year over the last five years while general revenue collections have increased by only 7 percent per year. During the 1986-87 budget period, debt service from general revenue averaged $43 million annually, just 0.5 percent of general revenue collections. Debt service from general revenue during the 1990-91 budget period will average $115 million annually, or 0.9 percent of general revenue collections.

The rapid growth in Texas' debt burden does not indicate any immediate fiscal danger because the burden itself is very low and state finances are strong.

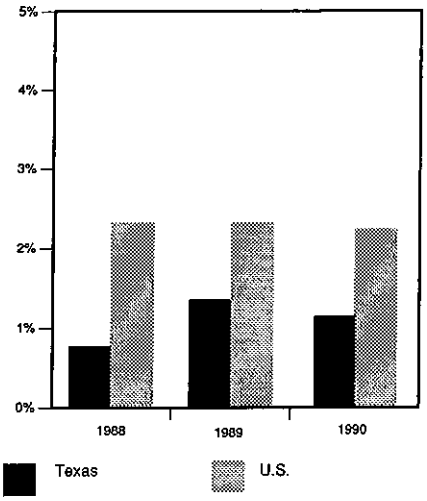
Bond rating agencies and other credit analysts, however, recognize this situation—debt outstanding and debt service requirements growing faster than the source of repayment—as reason for caution and warn that problems could result if the trend persists.

CURRENTLY AUTHORIZED BONDS WOULD ADD SUBSTANTIALLY TO DEBT BURDEN

Texas has the potential to substantially increase its debt burden, considering just the unused bond authorization currently on the books.

The issuance of all currently authorized bonds for those programs which Moody's counts as tax-supported would add another $4.0 billion to Texas' tax-supported debt outstanding—an increase of 150 percent.

FIGURE 14
Tax-Supported Debt as a Percentage of Personal Income, Texas and U.S.



SOURCE: Moody's Investors Service.

The potential exists, therefore, for Texas tax-supported debt outstanding to increase from 1.1 percent, reported by Moody's in 1990, to 2.8 percent of personal income, well above the current U.S. median of 2.2 percent.

With the issuance of all currently authorized bonds, debt service from general revenue would increase by 120 percent—from the current $115 million annually, 0.9 percent of general revenue collections, to $253 million annually, 2.1 percent of general revenue collections.

TEXAS' LOCAL DEBT BURDEN HIGH

Any encouragement given by the low *state* debt numbers must be tempered with the knowledge that Texas has very high *local* debt per capita. Ultimately, the same taxpayers pay principal and interest on both debts.

Although Texas ranks last among the ten largest states in total state debt per capita, the state ranks first in local debt per capita, according to the most recent data available from the U.S. Bureau of the Census *(Table 10)*. Local debt includes bonds issued by cities, counties, school districts, and special districts.

The census definition of state debt is broader than Moody's tax-supported debt measure, making the census' per capita state debt figure higher than that of Moody's and causing state rankings to differ slightly. Census data is used here because it is the sole source of local debt comparisions.

In 1988, local government accounted for 88 percent of the $59.3 billion in Texas' total state and local debt, according to the census bureau report; the average in that year for the ten largest states was 65.4 percent.

And Texas has the highest local government debt per capita—$3,111—compared to an average of $1,949 per capita for the ten largest states. The high local debt indicates the degree to which responsibility for local capital projects rests with local government and the minor role state government plays in local capital finance (e.g. schools, water and sewer services, and local roads).

The heavy local debt burden pushed Texas' ranking to number four based on combined state and local debt. Texas recorded a per capita state and local debt combined of $3,535, compared to an average of $3,026 per capita among the ten largest states.

Local governments' portion of total state and local debt in Texas has remained stable, in the 85 to 90 percent range since 1950 *(Figure 15)*. This is in contrast to the decline since 1950 in the importance of local debt nationwide.

DEBT POLICY CONSIDERATIONS

In spite of Texas' low debt burden, state policymakers should take note

TABLE 10
Total State and Local Debt Outstanding: Ten Largest States, 1988

	Total State and Local Debt			State				Local			
State	Per Capita Rank	Amount (millions)	Per Capita	Per Capita Rank	Amount (millions)	% of Total Debt	Per Capita	Per Capita Rank	Amount (millions)	% of Total Debt	Per Capita
NY	1	$80,378	$4,507	1	$41,882	52.1	$2,348	4	$38,496	47.9	$2,158
NJ	2	30,117	3,925	2	17,410	57.8	2,269	7	12,707	42.2	1,656
FL	3	43,262	3,599	8	8,296	19.2	690	2	34,966	80.8	2,909
TX	**4**	**59,320**	**3,535**	**10**	**7,120**	**12.0**	**424**	**1**	**52,200**	**88.0**	**3,111**
PA	5	39,423	3,301	7	9,303	23.6	779	3	30,120	76.4	2,522
CA	6	76,536	2,768	6	24,116	31.5	872	5	52,420	68.5	1,896
IL	7	28,145	2,430	3	13,149	46.7	1,135	8	14,996	53.3	1,295
NC	8	14,032	2,189	9	2,728	19.4	426	6	11,304	80.6	1,764
MN	9	19,605	2,130	4	8,464	43.2	920	9	11,141	56.8	1,210
OH	10	20,342	1,881	5	9,800	48.2	906	10	10,542	51.8	975
Total Mean		$411,160 $ 41,116	$3,026	Total Mean	$142,268 $ 14,227	34.6	$1,077	Total Mean	$268,892 $ 26,889	65.4	$1,949

SOURCE: U. S Department of Commerce, Bureau of the Census: Government Finances in 1987-1988

of a number of trends that indicate the need to exercise caution in issuing new state debt.

Texas has dramatically increased the amount of outstanding debt which is payable from general revenue. Debt service is competing at a rapidly increasing rate with current operating expenditures for tax revenues.

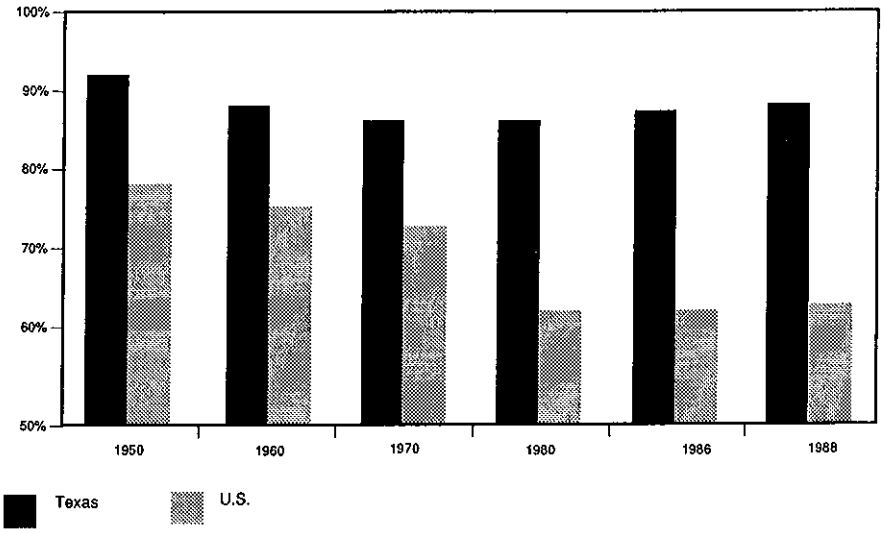
And recent sessions of the Texas Legislature have authorized the issuance of additional bonds which could more than double the amount of state tax-supported debt outstanding.

The rapid increase in tax-supported debt and the potential for continued growth make it crucial that the state monitor debt issuance and authorization closely to maintain the state's credit rating and ensure strong demand for the state's bonds.

Further, any policy on Texas state debt must recognize the overriding importance of local government debt in the state's total debt burden. The heavy burden local debt currently places on already strapped local tax bases causes, in many cases, debt issued by local governments to carry higher borrowing costs than state debt.

Any move, therefore, that lowers state debt by increasing local debt could increase the overall cost of debt to Texas taxpayers.

FIGURE 15
Local Debt as a Percentage of Total State and Local Debt
Texas and the U.S.



SOURCE: U.S. Department of Commerce, Bureau of the Census.

APPENDIX A

TEXAS BONDS ISSUED DURING 1990

Stephen F. Austin State University

Issue: Stephen F. Austin State University Combined Fee Revenue Bonds, Series 1990 - $1,200,000.

Purpose: Proceeds from the sale of the bonds were used to install an artificial surface at Homer Bryce Stadium.

Dates: Board Approval - March 22, 1990
Competitive Sale - April 23, 1990

Structure: The bonds mature serially from 1991 through 2005. The bonds are special obligations of the Board of Regents of Stephen F. Austin and are payable solely from certain pledged revenues of the Board.

Bond Ratings: Moody's - A
Standard & Poor's - A

Consultants: Bond Counsel - McCall, Parkhurst & Horton
Financial Advisor - Rauscher Pierce Refsnes

Effective Interest Rate: 7.35%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$5,307	$4.42
Financial Advisor	6,130	5.11
Paying Agent/Registrar	1,508	1.26
Rating Agency	8,500	7.08
Printing & Mailing	3,628	3.02
Miscellaneous	1,902	1.59
	$26,975	$22.48
Underwriter's Spread	$16,865	$14.05

Texas Higher Education Coordinating Board

Issue: College Student Loan Bonds, Series 1990 - $49,989,168.

Purpose: Proceeds from the bonds will be used to fund the Coordinating Board's student loan program which provides low interest loans to eligible students at Texas colleges and universities.

Dates: Board Approval - June 21, 1990
Negotiated Sale - July 13, 1990

Structure: The bonds were sold as capital appreciation bonds maturing from 1992 through 2009. These bonds were marketed as college savings bonds. In order to attract small investors, the bonds were sold in integrals of $1,000 instead of the standard $5,000 and are not callable.

Bond Ratings: Moody's - Aa
Standard & Poor's - AA

Consultants: Bond Counsel - McCall, Parkhurst & Horton
Financial Advisor - First Southwest

Effective Interest Rate: 7.29%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$61,936	$1.24
Financial Advisor	25,000	.50
Rating Agencies	19,500	.39
Printing/Advertising	30,751	.61
Paying Agent/Registrar	10,426	.21
Miscellaneous	46,410	.93
	$194,023	$3.88
Underwriter's Spread	$600,344	$12.01

Texas Housing Agency

Issue: Texas Housing Agency GNMA Collateralized Home Mortgage Revenue Bonds, Series 1989B - $48,250,000.

Purpose: Proceeds from the bonds were used to finance the purchase of low-interest mortgage loans made by lenders to first-time homebuyers of low to moderate income. Twenty percent of the lendable proceeds were reserved for loans to finance the purchase or construction of homes in certain targeted areas. The remaining 80% was reserved for a period of nine months for loans used to finance the purchase of real estate owned by the Agency and other lending institutions.

Dates: Board Approval - September 21, 1989
Privately Placed - October 19, 1989

Structure: The bonds are structured to be repaid on a monthly basis from October 1990 through June 2021. Principal payments and prepayments on mortgage loans will be used under mandatory redemption provisions to call bonds at par. The bonds are callable at 103 beginning in 1999, declining by 1% each year until par in 2002.

The bonds are secured by principal and interest payments on certificates of the Government National Mortgage Association and other income of the Texas Housing Agency. The bonds were privately placed with the Federal National Mortgage Association.

Bond Rating: Not Rated - Privately Placed

Consultants: Co-Bond Counsel - Vinson & Elkins
Placement Agents - Merrill Lynch Capital Markets;
Goldman, Sachs & Co.;
Apex Securites

Effective Interest Rate: Variable Rate

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$72,174	$1.50
FNMA Capitalized Interest	$120,625	$ 2.50
FNMA Counsel	45,000	.93
Agency Financing Expenses	16,500	.34
Trustee	16,500	.34
Miscellaneous	7,500	.16
	$278,299	$5.77
Placement Agents	$156,812	$3.25

Texas Housing Agency

Issue: Texas Housing Agency GNMA Collateralized Home Mortgage Revenue Bonds, Series 1990A, $46,600,000; and 1990B, $93,445,000.

Purpose: Proceeds from the bonds will be used to finance the purchase of low interest mortgage loans made by lenders to first-time homebuyers of low- and moderate-income. Series A bonds were issued to redeem an equivalent amount of THA's Single Family Mortgage Revenue Bonds issued between 1980 and 1989. Series B proceeds will be reserved for two years to buy mortgage loans to finance the purchase of real estate owned by the Resolution Trust Corporation.

Dates: Board Approval - April 19, 1990
Series A Negotiated Sale - June 29, 1990
Series B Private Placement - June 29, 1990

Structure: The Series A bonds were sold as a combination of serial bonds maturing from 1993 through 2001, and one term bond maturing in 2011. The bonds are callable at 102 beginning in 2000, declining by 1% to par in 2002. Series B was sold as a single term bond with scheduled redemptions from 2011 through 2023. The bonds are callable at 102 in 2000, declining by 1% to par in 2002.

The bonds are secured by principal and interest payments on certificates of the Government National Mortgage Association and other income of the Texas Housing Agency.

Bond Rating: Standard & Poor's - AAA

Consultants: Bond Counsel - Vinson & Elkins;
Sherman Stimley
Underwriters/Placement Agents -
Goldman, Sachs & Co.
Merrill Lynch Capital Markets
Grigsby, Brandford Powell

Effective Interest Rate: Series A - 7.39%
Series B - 7.85%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$183,079	$1.31
FNMA Counsel & Expenses	45,000	.32
Agency Financing Expenses	99,823	.71
Trustee	25,070	.18
Rating Agencies	35,000	.25
Printing	14,623	.10
Miscellaneous	23,361	.17
	$425,956	$3.04
Underwriter's Spread (Series A)	$525,648	$11.28
Placement Agent (Series B)	$467,225	$5.00

Texas National Guard Armory Board

Issue: Texas National Guard Armory Board Armory Improvement Revenue Bonds, Series 1990 - $1,000,000.

Purpose: Proceeds from the sale of the bonds will be used to upgrade and renovate National Guard Armory facilities across the state.

Dates: Board Approval - December 21, 1989
Competitive Sale - January 16, 1990

Structure: The bonds mature serially from 1991 to 2004 and are callable at par beginning in 2000. The bonds are special obligations of the Texas National Guard Armory Board and are payable solely from pledged revenues of the Board. Pledged revenues are primarily lease payments from the Office of the Adjutant General. These lease payments are subject to general revenue appropriation by the Texas Legislature.

Bond Ratings: Moody's - A
Standard & Poor's - AA-

Consultants: Bond Counsel - McCall, Parkhurst & Horton
Financial Advisor - First Southwest

Effective Interest Rate: 7.14%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$8,674	$8.67
Financial Advisor	10,000	10.00
Paying Agent/Registrar	1,000	1.00
Rating Agency	10,000	10.00
Printing	3,589	3.59
Miscellaneous	950	.95
	$34,213	$34.21
Underwriter's Spread	$16,350	$16.35

Texas National Research Laboratory Commission

Issue: Texas National Laboratory Commission General Obligation Bonds, Series 1990 - $250,000,000.

Purpose: The bonds were issued for land acquisition, construction of improvements and to fund intitial research and other expenses related to the Superconducting Super Collider Project.

Dates: Board Approval - April 26, 1990
Competitive Sale - May 15, 1990

Structure: The bonds were issued as a combination of serial bonds and two term bonds. The serial bonds mature from 1993 through 2008, and the term bonds are subject to mandatory redemption from 2009 through 2020. The bonds are callable at 102 in 2000 declining by 1/2% to par in 2004.

The bonds are general obligations of the State of Texas. All debt service on the bonds will be repaid from general revenue.

Bond Ratings: Moody's - Aa
Standard & Poor's - AA

Consultants: Co-Bond Counsel - Johnson & Gibbs; Ronquillo & Castaneda
Financial Advisor - Lazard Freres

Effective Interest Rate: 7.26%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$172,563	$.69
Financial Advisor	279,154	1.12
Rating Agencies	45,000	.18
Printing	8,043	.03
	$504,760	$2.02
Underwriter's Spread	$1,750,000	$7.00

Texas Public Finance Authority

Issue: Texas Public Finance Authority Revenue Bonds, Series 1990A - $45,150,000.

Purpose: Proceeds will be used to finance the acquisition, construction and renovation of the Texas School for the Deaf South Campus and a warehouse facility for the State Board of Insurance.

Dates: Board Approval - January 18, 1990
Competitive Sale - February 13, 1990

Structure: The bonds were issued as serials maturing from 1992 through 2010 and are callable at par beginning in 1998.

The bonds are special, limited obligations of the Texas Public Finance Authority and are payable only from lease payments made by the State Purchasing and General Services Commission on behalf of the using agencies. Lease payments are subject to general revenue appropriation by the Texas Legislature.

Bond Ratings: Moody's - A
Standard & Poor's - A+

Consultants: Bond Counsel - Wood, Lucksinger & Epstein
Financial Advisor - Eppler, Guerin & Turner

Effective Interest Rate: 7.25%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$37,922	$.84
Financial Advisor	10,352	.23
Trustee/Paying Agent	3,800	.08
Rating Agencies	23,500	.52
Printing	10,051	.22
Miscellaneous	137	.00
	$85,762	$1.90
Underwriter's Spread	$316,050	$7.00

Texas Public Finance Authority

Issue: Texas Public Finance Authority General Obligation Bonds, Series 1990A - $31,100,000.

Purpose: Proceeds will be used to fund construction projects for Texas Department of Mental Health and Mental Retardation and Texas Youth Commission.

Dates: Board Approval - April 19, 1990
Competitive Sale - April 24, 1990

Structure: The bonds were issued as serials maturing from 1991 through 2010 and are callable at par in 1999.

The bonds are general obligations of the State of Texas. All debt service will be paid from general revenue of the State.

Bond Ratings: Moody's - Aa
Standard & Poor's - AA

Consultants: Bond Counsel - Thompson & Knight
Financial Advisor - Eppler, Guerin & Turner

Effective Interest Rate: 7.26%

Issuance Costs: *

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$34,176	$1.10
Financial Advisor	10,852	.35
Rating Agencies	17,500	.56
Printing	4,851	.16
Miscellaneous	1,221	.04
	$68,600	$2.21
Underwriter's Spread	$238,118	$7.66

*Estimated

Texas Public Finance Authority

Issue: Texas Public Finance Authority General Obligation Bonds, Series 1990B - $57,000,000.

Purpose: Proceeds from the bonds will be used by the Texas Department of Criminal Justice to fund construction of two Regional Centers and fund design of other projects.

Dates: Board Approval - May 31, 1990
Competitive Sale - June 26,1990

Structure: The bonds were issued as serials maturing from 1991 through 2010 and are callable at par in 1999.

The bonds are general obligations of the State of Texas. All debt service will be paid from general revenue of the State.

Bond Ratings: Moody's - Aa
Standard & Poor's - AA

Consultants: Bond Counsel - Thompson & Knight
Financial Advisor - Eppler, Guerin & Turner

Effective Interest Rate: 7.03%

Issuance Costs:*

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$ - 0 -	$ - 0 -
Financial Advisor	- 0 -	- 0 -
Rating Agencies	20,000	.35
Printing	7,566	.13
Miscellaneous	783	.01
	$28,349	$.50
Underwriter's Spread	$470,250	$8.25

* Estimated

Texas Turnpike Authority

Issue: Texas Turnpike Authority Dallas North Tollway Revenue Bonds, Series 1990 - $133,070,000.

Purpose: The bonds were issued to complete the Phase II Extension of the Dallas North Tollway.

Dates: Board Approval - April 19, 1990
Negotiated Sale - May 31, 1990

Structure: The bonds were sold as a combination of serial bonds, maturing from 1995 to 2005, and three term bonds with mandatory redemption provisions from 2006 to 2020. All the bonds, except one term bond maturing in 2020, are callable at 102 beginning in 1999, declining by 1% per year to par in 2001.

The bonds are limited obligations of the Texas Turnpike Authority, payable solely from tolls and revenue of the tollway. The bonds maturing from 1999 to 2020 are insured.

Bond Ratings: Bonds maturing 1995 - 1998:
Moody's - A
Standard & Poor's - A-

Bonds maturing 1999 - 2020 (insured):
Moody's - Aaa
Standard & Poor's - AAA

Consultants: Bond Counsel - McCall, Parkhurst & Horton
Financial Advisor - First Southwest
Senior Underwriters - Dillon Reed; Merrill Lynch Capital Markets

Effective Interest Rate: 6.91%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$106,309	$.80
Issuer's Counsel	65,000	.49
Financial Advisor	106,283	.80
Trustee	10,002	.08
Rating Agencies	54,500	.41
Printing	20,272	.15
Miscellaneous	53,548	.40
	$415,914	$3.13
Underwriter's Spread	$1,321,385	$9.93

Texas Veterans Land Board

Issue: Veterans Land Refunding Bonds, Series 1989 - $40,719,550.70.

Purpose: Proceeds from the sale of the bonds were used to refund certain principal payments for Series 1985 and 1986 Veterans Land Refunding Bonds.

Dates: Board Approval - October 6, 1989
Negotiated Sale - October 6, 1989

Structure: The bond issue is a combination of one term bond that matures in 2009 and Capital Appreciation Bonds (CABS) that mature from 2004 to 2009. The current interest term bond is callable, in whole or in part, at 102 in 1999, declining by 1% per year until par. The CABS were issued as college savings bonds and are not callable prior to stated maturity.

The bonds are general obligations of the State of Texas. Principal and interest payments on the loans to veterans are also pledged to pay debt service on the bonds. The program is designed to be self-supporting and has never had to rely on general revenue.

Bond Ratings: Moody's - Aa
Standard & Poor's - AA

Consultants: Bond Counsel - Johnson & Gibbs
Financial Advisor - Donaldson, Lufkin & Jenrette
Lead Underwriter - Goldman, Sachs & Co.; Dean Witter Reynolds

Effective Interest Rate: 7.82%

Issuance Costs:

	Fees	Per $1,000 Bonds Issued
Bond Counsel	$34,331	$.84
Financial Advisor	13,253	.33
Rating Agencies	15,000	.37
Printing	11,018	.27
Miscellaneous	10,195	.25
	$83,797	$2.06
Underwriter's Spread	$427,555	$10.50

Texas Water Development Board

Issue: Texas Water Development Bonds, Taxable Series 1989C - $4,690,000.

Purpose: Proceeds from the sale of the bonds were used to provide funds for nonprofit water supply corporations for use in water conservation and development.

Dates: Board Approval - October 19, 1989
Competitive Sale - November 16, 1989

Structure: The bonds were issued in serials maturing from 1991 to 2014 and are callable at par begining in 2000.

The bonds are general obligations of the State of Texas. Principal and interest on bonds purchased from local water supply corporations is also pledged to pay debt service on the Water Development Bonds.

Bond Ratings: Moody's - Aa
Standard & Poor's - AA

Consultants: Bond Counsel - McCall, Parkhurst & Horton
Financial Advisor - First Southwest; Underwood, Neuhaus

Effective Interest Rate: 8.80%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$4,619	$.98
Financial Advisor	2,608	.56
Rating Agencies	7,400	1.58
Printing	7,107	1.52
Miscellaneous	1,658	.35
	$23,391	$4.99
Underwriter's Spread	$33,815	$7.21

Texas Water Development Board

Issue: Texas Water Development Board Texas Water Development Bonds, Series 1990A - $36,240,000.

Purpose: Proceeds from the bonds were used to provide financial assistance to political subdivisions for water quality enhancement purposes.

Dates: Board Approval - February 22, 1990
Competitive Sale - March 15, 1990

Structure: The bonds were issued as tax-exempt securities maturing serially from 1992 to 2012. The bonds are callable at par beginning in 2000.

The bonds are general obligations of the State of Texas. Principal and interest on the bonds purchased from local entities are also pledged to pay debt service on the Water Development Board bonds.

Bond Ratings: Moody's - Aa
Standard & Poor's - AA

Consultants: Bond Counsel - Vinson & Elkins
Financial Advisors - First Southwest; Lovett Underwood Neuhaus & Webb

Effective Interest Rate: 7.01%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$25,527	$.70
Financial Advisor	18,353	.51
Rating Agencies	20,500	.57
Printing/Mailing	6,681	.18
Miscellaneous	2,050	.06
	$73,111	$2.02
Underwriter's Spread	$205,480	$5.67

University of Houston System

Issue: Board of Regents of the University of Houston System Consolidated Revenue Refunding Bonds Series 1990 A & B - $56,115,000.

Purpose: The bonds were issued under a consolidated pledge of the University of Houston System to defease outstanding fee revenue bonds and to fix the interest rate on outstanding floating rate bonds.

Dates: Board Approval - April 26, 1990
Negotiated Sale - May 9, 1990

Structure: The bonds were issued as serial bonds and one term bond. The 1990A bonds mature from 1999 to 2007 and the 1990B bonds mature from 1991 to 1999. The term bond is subject to mandatory redemption provisions with maturities from 2007 to 2009. The bonds are callable at par beginning in 2000.

Interest and principal on the bonds is payable solely from pledged revenues of the University System. Both series are insured.

Bond Ratings: Moody's - Aaa
Standard & Poor's - AAA

Consultants: Co-Bond Counsel - Vinson & Elkins; Sherman Stimley
Financial Advisor - Masterson, Moreland, Sauer & Whisman
Lead Underwriter - Lovett Underwood Neuhaus & Webb

Effective Interest Rate: 7.39%

Issuance Costs:

	Fees	Per $1,000 of Bonds Issued
Bond Counsel	$75,000	$1.34
Financial Advisor	48,956	.87
Paying/Escrow Agent	15,045	.27
Rating Agencies	33,800	.60
Printing	15,491	.28
Miscellaneous	7,321	.13
	$195,613	$3.49
Underwriter's Spread	$559,597	$9.97

The University of Texas System

Issue: The University of Texas System General Revenue Subordinate Lien Notes, Series 1989C - $4,500,000.

Purpose: The notes were sold to finance the construction of the University of Texas at Austin Sports Recreation Center.

Dates: Board Approval - August 17, 1989
Private Placement - September 28, 1989

Structure: Variable rate, 20-year maturity. UT has subsequently redeemed the notes under the System's commercial paper program. The commercial paper will be redeemed by issuing fixed rate bonds.

Bond Ratings: Not Rated - Privately Placed

Consultants: Bond Counsel - Vinson & Elkins
Purchaser's Counsel - Piper & Marbury

Effective Interest Rate: Variable rate

Costs of Issuance:

	Fees	Per $1,000 Bonds Issued
Bond Counsel	$5,000	$1.11
Purchaser's Counsel	2,500	.56
	$7,500	$1.67

The University of Texas System

Issue: The University of Texas System Revenue Financing System Commercial Paper Notes, Series A - $24,760,000.

Purpose: The paper was issued to refund $24.76 million in variable rate notes that had been issued under the System's General Revenue Subordinate Lien Note Program. The paper will finance interim costs of various construction projects. When the projects are completed, the commercial paper will be refunded and replaced with fixed rate debt.

Bond Ratings: Moody's - P-1
Standard & Poor's - A1+

Consultants: Bond Counsel - McCall, Parkhurst & Horton
Remarketing Agent - Goldman, Sachs & Co.

Effective Interest Rate: Variable Rate

Costs of Issuance:

	Fees	Per $1,000
Legal Fees	$8,666	$.35
Rating Agencies	24,000	.97
Printing	2,167	.09
	$34,833	$1.41

APPENDIX B

TEXAS STATE BOND ISSUES EXPECTED

DURING FISCAL YEAR 1991

Issuer	Amount	Purpose	Approximate Issue Date
General Obligation Bonds:			
Texas Public Finance Authority	$20,000,000	Texas Department of Mental Health and Mental Retardation projects	December 1990
	40,000,000	Texas Department of Criminal Justice projects	March 1991
	42,900,000	Texas Department of Criminal Justice projects	August 1991
Texas Water Development Board	20,000,000	Water quality enhancement	January 1991
	8,500,000	Flood control	March 1991
	3,500,000	Economically distressed areas-water supply	July 1991
	3,000,000	Economically distressed areas-water quality enhancement	July 1991
Texas Agricultural Finance Authority*	25,000,000	Loans and loan guarantees	March 1991
	5,000,000	Rural Microenterprise Development Fund	March 1991
Texas Higher Education Coordinating Board	25,000,000	College student loans	January 1991
Texas Department of Commerce	7,000,000	Product Development Fund and Small Business Incubator Fund	June 1991
Non-General Obligation Bonds:			
Texas Housing Agency	150,000,000	Mortgage Revenue Bonds	February 1991
Texas Public Finance Authority	76,000,000	State Purchasing and General Services Commission-State Office Buildings for State Board of Insurance and State Treasury	April 1991
Texas State Treasury	30,000,000	Public School Facilities Funding Act	March 1991
Texas A&M University	10,000,000	Combined Fee Revenue System-construction and renovation of buildings	January 1991
	5,000,000		January 1991
	40,000,000		March 1991
Texas A&M University System (PUF)	10,000,000	Property acquisition, construction and renovation	March 1991
The University of Texas System	35,000,000	Commercial Paper for interim financing	March 1991
Texas State Technical Institute	30,000,000	Refunding and additional dormitories	Not Reported
Texas National Guard Armory Board	4,000,000	Renovation and construction	February 1991
TOTAL	**$589,900,000**		

*No estimate was given by the issuer. The figure listed is the total amount authorized but unissued.
See Chapter 4 for a discussion of the distinction between general obligation and non-obligation bonds.

Source: Texas Bond Review Board, Office of the Executive Director. Survey of Texas State Bond Issuers.

APPENDIX C

TEXAS STATE BOND PROGRAMS

COLLEGE STUDENT LOAN BONDS

Statutory/Constitutional Authority:
Article III, Sections 50b and 50b-1 of the Texas Constitution, adopted in 1965 and 1969, authorize the issuance of general obligation bonds by the Texas Higher Education Coordinating Board.

Purpose:
Proceeds from the sale of the general obligation bonds are used to make loans to eligible students attending public or private colleges and universities in Texas.

Security:
The bonds are general obligations of the State of Texas. The first monies coming into the state treasury, not otherwise dedicated by the constitution, are pledged to pay debt service on the bonds.

Dedicated/Project Revenue:
Principal and interest payments on the loans are pledged to pay debt service on the bonds issued by the Coordinating Board. All loans made through the Texas College Student Loan Program are guaranteed either by the Federal Insured Student Loan Program or the Guaranteed Student Loan Program. No draw on general revenue is anticipated.

Contact:
Mack Adams, Assistant Commissioner for Student Services
Texas Higher Education Coordinating Board
(512) 483-6340

COLLEGE AND UNIVERSITY REVENUE BONDS

Statutory Authority:
Section 55.13 of the Education Code authorizes the governing boards of institutions of higher education to issue revenue bonds. The statute that provides this authority (V.A.C.S., Art. 2909c-3) was enacted in 1969 by the 61st Legislature and designed to supplement or supersede numerous similar statutes which contained restrictions that often made it difficult or impossible to issue bonds under prevailing market conditions. Legislative approval is not required for specific projects or for each bond issue. The governing boards are required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuing bonds and are required to register their bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds are to be used to acquire, construct, improve, enlarge, and/or equip any property, buildings, structures, activities, services, operations, or other facilities.

Security:
The revenue bonds issued by the governing boards are pledged against the income of the institutions and are in no way an obligation of the State of Texas. Neither the state's full faith and credit nor its taxing power is pledged toward payment of the bonds.

Dedicated/Project Revenue:
Bonds are to be repaid from income from special fees of the institutions, including student use fees, a portion of tuition, dormitory fees, etc.

Contact:
Individual colleges and universities.

FARM AND RANCH LOAN BONDS

Statutory/Constitutional Authority:
Article III, Section 49f of the Texas Constitution, adopted in 1985, authorizes the Veterans Land Board to issue general obligation bonds for the purposes described below.

Purpose:
Proceeds from the sale of the general obligation bonds are used to make loans of up to $100,000 to eligible Texans for the purchase of farms and ranches.

Security:
The bonds are general obligations of the State of Texas. The first monies coming into the state treasury, not otherwise dedicated by the constitution, are pledged to pay debt service on the bonds.

Dedicated/Project Revenue:
Principal and interest payments on the farm and ranch loans are pledged to pay debt service on the bonds issued by the Veterans Land Board. The program is designed to be self-supporting. No draw on general revenue is anticipated.

Contact:
Bruce Salzer, Director of Funds Management
General Land Office
(512) 463-5198

FARM AND RANCH LOAN SECURITY BONDS

Statutory/Constitutional Authority:
Article III, Section 50c of the Texas Constitution, adopted in 1967, authorizes the Commissioner of Agriculture to issue general obligation bonds for the purposes described below.

Purpose:
Proceeds from the sale of the general obligation bonds are used to guarantee loans for purchases of farms and ranches, to acquire real estate mortgages or deeds, and to advance a borrower a percentage of principal and interest due on guaranteed loans.

Security:
The bonds are general obligations of the State of Texas. The first monies coming into the state treasury, not otherwise dedicated by the constitution, are pledged to pay debt service on the bonds.

Dedicated/Project Revenue:
Principal, interest, and other payments on the farm and ranch loans are pledged to pay debt service on the bonds issued by the Commissioner. The program is designed to be self-supporting. No draw on general revenue is anticipated.

Contact:
Sal Valdez
Texas Department of Agriculture
(512) 463-7571

HIGHER EDUCATION CONSTITUTIONAL BONDS

Statutory Authority:
Article VII, Section 17, of the Texas Constitution, adopted in 1985, authorizes the issuance of constitutional appropriation bonds by institutions of higher education outside the Texas A&M and University of Texas systems. Legislative approval of bond issues is not required. Approval of the Bond Review Board and the Attorney General is required for bond issues, and the bonds must be registered with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds are to be used by qualified institutions for land acquisition, construction, major repairs, and permanent improvements to real estate.

Security:
The first $100 million coming into the state treasury, and not otherwise dedicated by the constitution, goes to qualified institutions of higher education to fund certain land acquisition, construction, and repair projects. Fifty percent of this amount is pledged to pay debt service on any bonds or notes issued. While not explicitly a general obligation or full faith and credit bond, the stated pledge has the same effect.

Dedicated/Project Revenue:
None. Debt service is payable solely from the state's general revenue fund.

Contact:
Individual Colleges and Universities

NATIONAL GUARD ARMORY BOARD BONDS

Statutory Authority:
The National Guard Armory Board was created in 1935 by Title 4, Chapter 435, of the Government Code as a state agency and authorized to issue long-term debt. Legislative approval of bond issues is not required. The Board is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds are used to acquire land to construct, remodel, repair, and equip buildings for the Texas National Guard.

Security:
Any bonds issued are obligations of the Board and are payable from "rents, issues, and profits" of the Board. The Board's bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of Armory Board Bonds.

Dedicated/Project Revenue:
The rent payments used to retire Armory Board debt are paid primarily by the Adjutant General's Department, with general revenue funds appropriated by the legislature. Independent project revenue, in the form of income from properties owned by the Board, also is used to pay a small portion of debt service.

Contact:
William E. Beaty, Executive Director
Texas National Guard Armory Board
(512) 465-5129

PARK DEVELOPMENT BONDS

Statutory/Constitutional Authority:
Article III, Section 49e of the Texas Constitution, adopted in 1967, authorizes the Texas Parks and Wildlife Commission to issue general obligation bonds for the purposes described below.

Purpose:
Proceeds from the sale of the general obligation bonds are to be used to purchase and develop state park lands.

Security:
The bonds are general obligations of the State of Texas. The first monies coming into the state treasury, not otherwise dedicated by the constitution, are pledged to pay debt service on the bonds.

Dedicated/Project Revenue:
Entrance fees to state parks are pledged to pay debt service on the bonds issued by the Texas Parks and Wildlife Commission. The program is designed to be self-supporting. No draw on general revenue is anticipated.

Contact:
James E. Dickinson, Director of Finance
Texas Parks & Wildlife Department
(512) 389-4816

PERMANENT UNIVERSITY FUND BONDS

Statutory/Constitutional Authority:
Article VII, Section 18, of the Texas Constitution, initially adopted in 1947, as amended in November 1984, authorizes the Boards of Regents of the University of Texas and Texas A&M University systems to issue revenue bonds payable from the income of the Permanent University Fund (PUF) and secured by the corpus of the Fund. Neither legislative approval nor Bond Review Board approval is required. The approval of the Attorney General is required, however, and the bonds must be registered with the Comptroller of Public Accounts.

Purpose:
Proceeds are used to make permanent improvements and buy equipment for the two university systems.

Security:
Any bonds issued are obligations of the UT and A&M systems. Neither the state's full faith and credit nor its taxing power is pledged toward payment of PUF bonds.

Dedicated/Project Revenue:
Bonds are to be repaid from income of the Permanent University Fund and are secured by the corpus of the Fund. The total amount of PUF bonds outstanding is limited to 30 percent of the value of the Fund, exclusive of land.

Contact:
Administrator
Permanent University Fund Bonds
210 West Sixth Street
Austin, Texas 78701

SUPERCONDUCTING SUPER COLLIDER BONDS

Statutory/Constitutional Authority:
The Texas National Research Laboratory Commission was created in 1987 by the 70th Legislature and given the authority to issue both revenue and general obligation bonds.

Article 4413, Section 47g, Vernon's Texas Civil Statutes authorizes the Commission to issue revenue bonds. Article III, Section 49g of the Texas Constitution authorizes the Commission to issue general obligation bonds.

Legislative approval of specific bond issues is not required. The Commission is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds will be used to finance construction of buildings, the acquisition of land, installation of equipment, and other "eligible undertakings" related to the development of the superconducting super collider facility.

Security:
The general obligation bonds pledge the first monies coming into the state treasury each fiscal year, not otherwise appropriated by the constitution.

Any revenue bonds issued are sole obligations of the Commission and are payable from funds of the Commission which may include appropriations from the legislature.

Dedicated/Project Revenue:
Debt service on the general obligation bonds is payable solely from the state's general revenue fund.

The revenue bonds pledge all revenue of the Commission, including appropriations from the legislature. Each revenue bond must state on its face that such revenues shall be available to pay debt service only if appropriated by the legislature for that purpose.

Contact:
Dr. Edward C. Bingler, Executive Director
Texas National Research Laboratory Commission
(214) 709-6481

TEXAS AGRICULTURAL FINANCE AUTHORITY BONDS

Statutory Authority:
The Texas Agricultural Finance Authority was created in 1987 (V.T.C.A., Agriculture Code Chapter 58) and authorized to issue revenue bonds. Legislative approval of bond issues is not required. The Authority is required to obtain the approval of the Attorney General's Office and the Bond Review Board prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds will be used to make or acquire loans to eligible agricultural businesses, to make or acquire loans to lenders, to insure loans, to guarantee loans, and to administer or participate in programs to provide financial assistance to eligible agricultural businesses.

Security:
Any bonds issued are obligations of the Authority and are payable from revenues, income, and property of the Authority and its programs. The Authority's bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of the bonds.

Dedicated/Project Revenue:
Mortgages or other interests in financed property, repayments of financial assistance, investment earnings, any fees and charges, and appropriations, grants, subsidies or contributions are pledged to the payment of principal and interest on the Authority's bonds.

Contact:
Sal Valdez
Texas Department of Agriculture
(512) 463-7571

TEXAS DEPARTMENT OF COMMERCE BONDS

Statutory Authority:
The Texas Department of Commerce was created by the 70th Legislature in 1987 (Art. 4413(301), V.A.C.S.) and given the authority to issue revenue bonds. Legislative approval of bond issues is not required. The Department is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance, and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds will be used to provide financial assistance to export businesses and to provide financial assistance to promote domestic business development.

Security:
Any bonds issued are obligations of the Department and are payable from funds of the Department. The Department's bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of Department bonds.

Dedicated/Project Revenue:
Revenue of the Department, principally from the repayment of loans and the disposition of debt instruments, is pledged to the payment of principal and interest on bonds issued.

Contact:
Dan McNeil, Manager of Business and Finance
Texas Department of Commerce
(512) 472-5059

TEXAS HOSPITAL EQUIPMENT FINANCING COUNCIL BONDS

Statutory Authority:
The Texas Hospital Equipment Financing Council was created in 1983 (Art. 4437e-3, V.A.C.S.) as a state agency and authorized to issue revenue bonds. The authority of

the Council to issue bonds was repealed by the 71st Legislature (S.B. 1387), effective September 1, 1989.

Purpose:
Proceeds from the sale of bonds are to be used to purchase equipment for lease or sale to health care providers, or to make loans to health care providers for the purchase of equipment.

Security:
Any bonds issued are obligations of the Council and are payable from lease or other project revenues. The Council's bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of the Council's bonds.

Dedicated/Project Revenue:
Bonds are to be repaid from revenues received by the Council from the repayment of loans from the program.

Contact:
Michel Munguia
(512) 463-5971
or
John Adkins
(713) 951-5858

TEXAS HOUSING AGENCY BONDS

Statutory Authority:
The Texas Housing Agency was created in 1979 (Art. 1269*l*, V.A.C.S.) and authorized to issue revenue bonds. Legislative approval of bond issues is not required. The Agency is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance, and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds are used to make construction, mortgage, and energy conservation loans at below-market interest rates.

Security:
Any bonds issued are obligations of the Agency and payable entirely from funds of the Agency. The Agency's bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of Agency bonds.

Dedicated/Project Revenue:
Revenue to the Agency from the repayment of loans and investment of bond proceeds is pledged to the payment of principal and interest on bonds issued.

Contact:
Tish Gonzalez, Executive Administrator
Texas Housing Agency
(512) 474-2974

TEXAS PUBLIC FINANCE AUTHORITY BONDS

Statutory/Constitutional Authority:
The Texas Public Finance Authority is authorized to issue both revenue and general obligation bonds.

The Authority was created by the legislature in 1983 (Article 601d, Vernon's Annotated Civil Statutes) and given the authority to issue revenue bonds. The legislature approves each specific project and limits the amount of bonds issued by the Authority.

Article III, Section 49h of the Texas Constitution, adopted in 1987, authorized the Texas Public Finance Authority to issue general obligation bonds for correctional and mental health facilities.

The Authority is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to bond issuance and register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of revenue bonds are to be used to purchase, renovate, and maintain state buildings. Proceeds from the sale of the general obligation bonds are to be used to finance the cost of constructing, acquiring, and/or renovating prison facilities, youth correction facilities, and mental health/mental retardation facilities.

Security:
Revenue bonds issued are obligations of the Authority and are payable from "rents, issues, and profits" resulting from leasing projects to the state. These sources of revenue come primarily from legislative appropriations. The general obligation bonds pledge the first monies coming into the state treasury each fiscal year, not otherwise appropriated by the constitution, to pay debt service on the bonds.

Dedicated/Project Revenue:
Debt service on the general obligation bonds is payable solely from the state's general revenue fund. Debt service on the revenue bonds is also payable from general revenue appropriated by the legislature. The legislature, however, has the option to appropriate debt service payments on the bonds from any other source of funds that is lawfully available.

Contact:
Glen Hartman, Executive Director
Texas Public Finance Authority
(512) 463-5544

TEXAS SCHOOL FACILITIES FINANCE PROGRAM

Statutory/Constitutional Authority:
The 1989 Texas Legislature adopted the Public School Facilities Funding Act (S.B. 951, 71st Legislature). The Act authorizes the Bond Review Board to make loans or purchase the bonds of qualifying public school districts. The Board is authorized to direct the state treasurer to issue revenue bonds to finance the school district loans.

Purpose:
The proceeds of bonds issued under this program are to be used to make loans to qualifying school districts for the acquisition, construction, renovation, or improvement of instructional facilities. Districts will be qualified on the basis of need.

Security:
The bonds are special obligations of the program and payable only from program revenues. The bonds are not a general obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of the bonds.

Dedicated/Project Revenue:
Repayment of principal and interest on local school district loans is pledged to pay debt service on the state bonds. In the event of a loan delinquency, the program may draw on the state foundation school fund payment otherwise due the school district.

Contact:
Anne Schwartz
Public Finance Programs
Texas State Treasury
(512) 463-6000
or
Sonja Suessenbach, Director
Public School Facilities Funding Program
Bond Review Board
(512) 463-1741

TEXAS SMALL BUSINESS INDUSTRIAL DEVELOPMENT CORPORATION BONDS

Statutory Authority:
The Texas Small Business Industrial Development Corporation (TSBIDC) was created in 1983 (Art. 5190.6, Secs. 4-37, V.A.C.S.) as a private nonprofit corporation, created pursuant to the Development Corporation Act of 1979, and authorized to issue revenue bonds. The authority of TSBIDC to issue bonds was repealed by the legislature, effective September 1, 1987.

Purpose:
Proceeds from the sale of the TSBIDC bonds are to be used to provide financing to state and local governments and to other businesses and nonprofit corporations for the purchase of land, facilities, and equipment for economic development.

Security:
Any bonds issued are obligations of the Corporation. The Corporation's bonds are in no way an obligation of the State of Texas or any political subdivision of the state, and neither the state's full faith and credit nor its taxing power is pledged toward payment of Corporation bonds.

Dedicated/Project Revenue:
Debt service on bonds issued by the TSBIDC is payable from the repayment of loans made from bond proceeds and investment earnings on bond proceeds.

Contact:
Dan McNeil, Manager of Business and Finance
Texas Department of Commerce
(512) 472-5059

TEXAS TURNPIKE AUTHORITY BONDS

Statutory Authority:
The Texas Turnpike Authority was created in 1953 (Art. 6674V, V.A.C.S.) as a state agency and authorized to issue revenue bonds. Legislative approval is not required for specific projects or for each bond issue. The Authority is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to bond issuance, and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds are used for the construction, operation, and maintenance of toll roads, bridges, and tunnels.

Security:
Any bonds issued are obligations of the Authority and are payable from tolls or other project revenues. The Authority's bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of Turnpike Authority Bonds.

Dedicated/Project Revenue:
Bonds are to be repaid from tolls and other project revenues.

Contact:
Robert Neely, Executive Director, or
Harry Kabler, Secretary/Treasurer
Texas Turnpike Authority
(214) 522-6200

TEXAS UNEMPLOYMENT COMPENSATION FUND BONDS

Statutory Authority:
The Texas Employment Commission was created in 1936. The 70th Legislature authorized the issuance of bonds by the Commission (Art. 5221b-7d, V.A.C.S.) to replenish the state's unemployment compensation fund. Legislative approval of bond issues is not required. The Commission is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds will be used to replenish the state's unemployment compensation fund.

Security:
Any bonds issued are obligations of the Commission and are payable from Commission funds. The bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of Commission bonds.

Dedicated/Project Revenue:
Revenue of the Commission in the form of special unemployment taxes on employers is pledged to the payment of principal and interest on the bonds.

Contact:
William Grossenbacher, Administrator
Texas Employment Commission
(512) 463-2652

TEXAS WATER RESOURCES FINANCE AUTHORITY BONDS

Statutory Authority:
The Texas Water Resources Finance Authority was created in 1987 (V.T.C.A., Water Code, Chapter 20) and given the authority to issue revenue bonds. Legislative approval of bond issues is not required. The Authority is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of bonds will be used to finance the acquisition of the bonds of local government jurisdictions, including local jurisdiction bonds that are owned by the Texas Water Development Board.

Security:
Any bonds issued are obligations of the Authority and are payable from funds of the Authority. The Authority's bonds are in no way an obligation of the State of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of Authority bonds.

Dedicated/Project Revenue:
Revenue from the payment of principal and interest on local jurisdiction bonds it acquires is pledged to the payment of principal and interest on bonds issued.

Contact:
Sue Brookmole, Manager of Development Fund
Texas Water Development Board
(512) 463-7867

VETERANS LAND AND HOUSING BONDS

Statutory/Constitutional Authority:
Article III, Section 49b of the Texas Constitution, initially adopted in 1946, currently authorizes the issuance of general obligation bonds to finance the Veterans Land Program. And Article III, Section 49b-1 of the Texas Constitution, adopted in 1983, authorizes the issuance of general obligation bonds to finance the Veterans Housing Assistance Program.

Purpose:
Proceeds from the sale of the general obligation bonds are loaned to eligible Texas veterans for the purchase of land or housing or for home improvements.

Security:
The bonds are general obligations of the State of Texas. The first monies coming into the state treasury, not otherwise dedicated by the constitution, are pledged to pay debt service on the bonds.

Dedicated/Project Revenue:
Principal and interest payments on the loans to veterans are pledged to pay debt service on the bonds. The programs are designed to be self-supporting and have never had to rely on the general revenue fund.

Contact:
Bruce Salzer, Director of Funds Management
General Land Office
(512) 463-5198

TEXAS WATER DEVELOPMENT BONDS

Statutory Authority:
The Texas Water Development Board is authorized to issue both revenue and general obligation bonds.

The Texas Water Resources Fund, administered by the Board, was created by the 70th Legislature in 1987 (Chapter 17.853, Water Code, Ch. 17.853) and authorized to issue revenue bonds.

Article III, Sections 49c, 49d, 49d-1, 49d-2, 49d-4, 49d-6, and 50d of the Texas Constitution, initially adopted in 1957, contain the authorization for the issuance of general obligation bonds by the Texas Water Development Board.

Further Legislative approval of specific bond issues is not required. The Board is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose:
Proceeds from the sale of revenue bonds will be used to provide funds to the State Water Pollution Control Revolving Fund and to provide financial assistance to local government jurisdictions through the acquisition of their obligations. Proceeds from the sale of the general obligation bonds are used to make loans to political subdivisions of Texas for the performance of various projects related to water conservation, transportation, storage, and treatment.

Security:
Any revenue bonds issued are obligations of the Board and are payable solely from the income of the program, including the repayment of loans to political subdivisions. The general obligation bonds pledge, in addition to program revenues, the first monies coming into the state treasury not otherwise dedicated by the constitution.

Dedicated/Project Revenue:
Principal and interest payments on the loans to political subdivisions for water projects are pledged to pay debt service on the bonds issued by the Board. The Water Development Bond Programs are designed to be self-supporting. No draw on general revenue has been made since 1980, and no future draws are anticipated.

Contact:
Sue Brookmole, Manager of Development Fund
Texas Water Development Board
(512) 463-7867

APPENDIX D

BOND REVIEW BOARD RULES

Sec. 181.1 DEFINITIONS. The following words and terms, when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

Board - The Bond Review Board, created by Acts of the 70th Legislature, 1987, particularly Senate Bill 1027.

State bond -

(A) a bond or other obligation issued by:

(i) a state agency;

(ii) an entity expressly created by statute and having statewide jurisdiction; or

(iii) any other entity issuing a bond or other obligation on behalf of the state or on behalf of any entity listed in clause (i) or (ii) of this subparagraph; or

(B) an installment sale or lease-purchase obligation issued by or on behalf of an entity listed in clause (i), (ii), or (iii) of this subparagraph that has a stated term of longer than five years or has an initial principal amount of greater than $250,000.

Sec. 181.2. NOTICE OF INTENTION TO ISSUE.

(a) An issuer intending to issue state bonds shall submit a written notice to the bond finance office no later than three weeks prior to the date requested for board consideration. The director of the bond finance office shall forward one copy of the notice to each member of the board.

Prospective issuers are encouraged to file the notice of intention as early in the issuance planning stage as possible. The notice is for information purposes only, to facilitate the scheduling of board review activities.

(b) A notice of intention to issue under this section shall include:

(1) a brief description of the proposed issuance including, but not limited to, the purpose, the tentative amount, and a brief outline of the proposed terms;

(2) the proposed timing of the issuance with a tentative date of sale and a tentative date for closing;

(3) a request to have the bond issue scheduled for consideration by the board during a specified monthly meeting; and

(4) an agreement to submit the required application set forth herein in Sec. 181.3 of this title (relating to application for board approval of state bond issuance) no later than two weeks prior to the requested board meeting date.

(c) An issuer may reschedule the date requested for board consideration of the state bonds by submitting an amended notice of intention at any time prior to the application date in the same manner as provided in this section.

(d) The requested date for board consideration shall be granted whenever possible; however, if it becomes necessary in the board's discretion to change the date of the board meeting for consideration of the proposed issuance of state bonds, written notice of such change shall be sent as soon as possible to the issuer. Priority scheduling for consideration at board meetings shall be given to refunding issues and to those state bonds which also require a submission to the Department of Commerce to obtain a private activity bond allocation.

Sec. 181.3. APPLICATION FOR BOARD APPROVAL OF STATE BOND ISSUANCE.

(a) An officer or entity may not issue state bonds unless the issuance has been approved or exempted from review by the bond review board. An officer or entity that has not been granted an exemption from review by the board and that proposes to issue state bonds shall apply for board approval by filing one application with original signatures and six copies with the director of the bond finance office. The director of the bond finance office shall forward one copy of the application to each member of the board and one copy to the Office of the Attorney General.

(b) Applications must be filed with the bond finance office no later than the first Tuesday of the month in which the applicant requests board consideration. Applications filed after that date will be considered at the regular meeting only with the approval of the governor or three or more members of the board.

(c) An application for approval of a lease-purchase agreement must include:

(1) a description of, and statement of need for, the facilities or equipment being considered for lease-purchase;

(2) the statutory authorization for the lease-purchase proposal;

(3) evidence of all necessary approvals from any state boards, state agencies, etc.; and

(4) a detailed explanation of the terms of the lease purchase agreement including, but not limited to, amount of purchase, trade-in allowances, interest charges, service contracts, etc.

(d) An application for all state bonds other than lease-purchase agreements must include:

(1) a substantially complete draft or summary of the proposed resolution, order, or ordinance providing for the issuance of state bonds;

(2) a brief description of the program under which the state bonds are proposed to be issued, which may include a

reference to a legislative enactment or to existing rules if the program is established in accordance with an existing statute or existing rules;

(3) the applicant's plans for use of state bond proceeds, including a description of, statement of the need for, and cost of each specific project for which bond proceeds are proposed to be used;

(4) the applicant's plans for the administration and servicing of the state bonds to be issued, including, when applicable, a disbursement schedule of bond proceeds, the proposed flow of funds, the sources and methods of repayment, and an estimated debt service schedule;

(5) a description of the applicant's investment provisions for bond proceeds including any specific provisions for safety and security and a description of the duties and obligations of the trustee and paying agent/registrar as applicable;

(6) a timetable for financing that contains dates of all major steps in the issuance process, including all necessary approvals;

(7) if the applicant has authority to issue both general obligation and revenue bonds and the proposed issuance is of one of these, a statement of the applicant's reasons for its choice of type of state bonds;

(8) a statement of the applicant's estimated costs of issuance, listed on an item by item basis, including, as applicable, the estimated costs for:

(A) bond counsel
(B) financial advisor
(C) paying agent/registrar
(D) rating agencies
(E) official statement printing
(F) bond printing
(G) trustee
(H) credit enhancement
(I) liquidity facility
(J) miscellaneous issuance costs;

(9) an estimate, if bond sale is negotiated, of underwriter's spread, broken down into the following components, and accompanied by a list of underwriters' spreads from recent comparable bond issues:

(A) management fee
(B) underwriter's fees
(C) selling concessions
(D) underwriter's counsel
(E) other costs;

(10) a list of the firms providing the services reported in subsections (8) and (9) of this section and a statement of prior representation of the issuer by each firm;

(11) a justification of the decision of whether or not to apply for municipal bond insurance or other credit enhancement, including a comparison of expected bond ratings and borrowing costs for the issue with and without the particular enhancement(s) considered;

(12) a statement of any potential liability of the general revenue fund or any other state funds resulting from the issuance;

(13) a copy of any preliminary written review of the issuance that has been made by the attorney general;

(14) a statement addressing the participation of women and minorities. The purpose of this section is to promote economic opportunity by affording equal access to the procurement of contracts for professional services for the financing of bonds by state issuers. Therefore, the following information about each participant (including, but not limited to, bond counsel, underwriters, underwriter's counsel, and financial advisor) must be included:

(A) the degree of ownership and control of each participant firm by minorities and women;

(B) the number and percentage of professionally employed women and minorities in each participant's firm; and

(C) a brief description of the effort made by each participant to encourage and develop participation of women and minorities. This description can include internal firm recruitment efforts, any offers tendered for apportioning responsibilities by subcontract or joint venture, and the equal opportunity goals and policies of each participant's firm.

(15) The notification procedures used by or on behalf of the issuer to select the participants referenced in subsection (14) above.

(e) In addition to the information required by Subsections (c) or (d) of this section, an application under this section may include any other relevant information the applicant wants to submit to the board.

(f) At any time before the date for consideration of an application by the board, an applicant may withdraw the application. Revisions to an application must be submitted in writing not less than seventy-two (72) hours prior to the board meeting.

Sec. 181.4. MEETINGS.

(a) The regular meeting of the board shall be held the Thursday following the third Tuesday of each month.

(b) As chairman of the board, the governor may call additional meetings of the board and is responsible for filing notice of meetings as required by Texas Civil Statutes, Article 6252-17, and giving timely notice of meetings to members of the board. On the petition of three or more members of the board, the governor shall call an additional meeting of the board or cancel a meeting.

(c) A planning session will be held regarding applications pending before the board on or before the second Tuesday of each month. Planning sessions regarding applications to be heard at additional meetings of the board will be held as far in advance of the additional board meeting as is practicable. At a planning session, board members, their designated representatives, or their staff representatives may discuss pending applications, but may not conduct board business. Applicants may be required to attend a planning

session and may be asked to make a presentation and answer questions regarding their application. Applicants may be asked to submit written answers to questions regarding their application in lieu of, or in addition to, their attendance at a planning session.

(d) At a meeting of the board, a board member or designated representative may allow an applicant to make an oral presentation to the board.

(e) At a meeting, the board may, by order, resolution, or other process adopted by the board, approve an issuance of state bonds as proposed in the application, may approve an issuance of state bonds on conditions stated by the board, or may fail to act on a proposed issuance. If the board does not act on a proposed issuance during the meeting at which the application is scheduled to be considered, the application is no longer valid on the occurrence of the earlier of the expiration of 45 days from the date of the meeting at which the application was scheduled to be considered or immediately following the board's next meeting if the board fails to act on the proposed issuance at that meeting. If an application becomes invalid under this subsection the applicant may file a new application for the proposed issuance.

(f) The executive director of the bond finance office shall notify applicants in writing of any action taken regarding their application. A letter of approval shall contain the terms and conditions of the issue as approved by the board. Issuers must inform the director of the bond finance office of changes to the aspects of their application which are specified in the approval letter. Such changes may prompt reconsideration of the application by the bond review board. A copy of the approval letter shall be forwarded to the attorney general.

(g) If applicable law requires the approval by the attorney general of an issuance of state bonds that are not exempt from review by the board, attorney general approval must be obtained after approval by the board.

(h) If there is a dispute among members regarding the conduct of board meetings, standard parliamentary rules shall apply.

Sec. 181.5. SUBMISSION OF FINAL REPORT.

(a) Within 60 days after the signing of a lease-purchase agreement or delivery of the state bonds and receipt of the state bond proceeds, the issuer or purchaser, as applicable, shall submit one original and one copy of a final report to the bond finance office and a single copy of the final report to the Texas Comptroller of Public Accounts.

(b) A final report for lease-purchases must include a detailed explanation of the terms of the lease-purchase agreement including, but not limited to, amount of purchase, trade-in allowance, interest charges, service contracts, etc.

(c) A final report for all state bonds other than lease-purchase agreements must include:

(1) all actual costs of issuance including, as applicable, the specific items listed in Secs. 181.3(d)(8) and (9), as well as the underwriting spread for competitive financings and the private placement fee for private placements, all closing costs, and any other costs incurred during the issuance process; and

(2) a complete bond transcript including the preliminary official statement and the final official statement, private placement memorandum, if applicable, or any other offering documents as well as all other executed documents pertaining to the issuance of the state bonds. The issuer also must submit a copy of the winning bid form and a final debt service schedule (if applicable).

(d) Submission of this final report is for the purpose of compiling data and disseminating information to all interested parties. The cost of reproduction of any and all portions of the final documents shall be borne by each requesting party.

(e) The bond finance office shall prepare and distribute to the members of the bond review board a summarization of each final report within 30 days after the final report has been submitted by the issuer. This summarization shall include a comparison of the estimated costs of issuance for the items listed in Sections 181.3(d)(8) and (9) contained in the application for approval with the actual costs of issuance listed in Section 181.5(c)(1) submitted in the final report. This summarization must also include such other information, which in the opinion of the bond finance office, represents a material addition to, or a substantial deviation from, the application for approval.

Sec. 181.6. OFFICIAL STATEMENT.

(a) The official statement or any other offering documents prepared in connection with issuance of bonds approved by the board must conform, to the extent feasible, to the Disclosure Guidelines for State and Local Government Securities published by the Government Finance Officers Association (January 1988). The preliminary official statement, or other offering documents, shall be submitted to and reviewed by the director of the bond finance office prior to mailing. Issuers should submit early drafts of the preliminary official statement to the director of the bond finance office to allow adequate time for review. Review of the preliminary official statement by the director of the bond finance office is not to be interpreted as a certification as to the accuracy, timeliness, and completeness of the specific data in the document. These standards remain the responsibility of the provider(s) of the data.

(b) The comptroller shall certify the accuracy and completeness of statewide economic and demographic data, as well as revenues, expenditures, current fund balances, and debt service requirements of bonded indebtedness of the state contained in the preliminary official statement. This data shall be used unchanged in the final official statement unless changes are approved in writing by the comptroller. The comptroller may execute a waiver of any part of this subsection.

Sec. 181.7. DESIGNATION OF REPRESENTATION. A member of the board may designate another person to represent the member on the board by filing a designation to that effect with the director of the bond finance office. A designation of representation filed under this section is effective until revoked by a subsequent filing by the member with the bond finance office. During the time a designation of representation is in effect, the person designated has all powers and duties as a member of the board, except the authority to make a designation under this section.

Sec. 181.8. ASSISTANCE OF AGENCIES. A member of the board may request the Legislative Budget Board, the Office of the Attorney General, or any other state agency to assist the member in performing duties as a member of the board.

Sec. 181.9. EXEMPTIONS. The board may exempt certain bonds from review and approval by the board. The board may from time to time publish in the *Texas Register* a list of state bonds that are exempt.

Sec. 181.10. ANNUAL ISSUER REPORT. All state bond issuers whose bonds are subject to review by the board must file a report no later than September 15 of each year with the bond finance office to include:

(1) the investment status of all unspent state bond proceeds (i.e., the amount of proceeds, name of institution, type of investment program or instrument, maturity and interest rate);

(2) an explanation of any change during the fiscal year previous to the deadline for this report, in the debt retirement schedule for any outstanding bond issue (e.g. exercise of redemption provision, conversion from short-term to long-term bonds, etc.); and

(3) a description of any bond issues expected during the fiscal year, including type of issue, estimated amount, and expected month of sale.

Issued in Austin, Texas, on September 5, 1990.

Tom K. Pollard
Executive Director
Texas Bond Review Board

Effective September 26, 1990

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