CENTENNIAL LIBRARY
3 0327 00012 9586

State-Local Fiscal Study

HJ
9261.4
.M56
1978
c.2

Report on Debt



STATE PLANNING AGENCY
OFFICE OF LOCAL AND URBAN AFFAIRS

6279694

STATE PLANNING AGENCY

Office of Local and Urban Affairs

STATE-LOCAL FISCAL STUDY

REPORT ON DEBT

HJ
9261.4
.M56
1978
c.2

December, 1978

INTRODUCTION

This report examines bonded debt of Minnesota cities. It focuses on total debt, debt per capita, and the composition of city debt by type of bonds--general obligation, special assessment general obligation, revenue, and other bonds.

The purpose of the report is to describe debt levels in Minnesota cities. Comparison is the basic technique of the analysis. Debt characteristics and trends for cities--grouped by population size and metropolitan or nonmetropolitan location--are described and compared.

The report is written in five parts. Section I lists types and amounts of debt cities may incur. Section II is a detailed description of city debt data in 1976. Section III describes debt trends from 1967 to 1976. Section IV describes traditional measures of debt including statutory debt limits and shows how Minnesota cities comply with these limits. Section V discusses short-term debt.

Data for this report were obtained from several state agencies, most notably the State Auditor's Office, as well as the U.S. Census Bureau. Data on city revenues, expenditures, and debt have been put on computer tape and made available to the State Planning Agency by the University of Minnesota's Center for Urban & Regional Affairs - Fiscal Studies Project.

Since the data on city financial activities during the calendar year of 1976 was released by the State Auditor in December 1977, it was not possible to include it in the data base created at the University of Minnesota in time for this report. Consequently, calculations regarding 1976 debt were made by hand.

The focus of this report is on cities as individual financial entities. The report deals with averages or arithmetic means when examining city debt activities, such as average per capita debt. This method allows generalizations concerning the average city. Where the information described refers to the "average city's" per capita debt, it is listed as <u>average.</u> Where the information described was derived by dividing the <u>total</u> debt by the <u>total number of persons in cities</u>, it is listed as <u>total per capita debt.</u>

The following definitions will be used throughout the report*:

Bonds - A written promise to pay a specified sum of money, at a specified date or dates, together with specified amounts of interest. (<u>Notes</u> are short term, informal promises to repay money. <u>Bonds</u> are generally longer term, legally more formal promises to repay money.)

Debt - An obligation resulting from borrowing money or purchasing goods and services.

Bonded Debt - The portion of debt represented by bonds outstanding, frequently referred to simply as "debt."

---

*Definitions are taken from the National Committee on Governmental Accounting, <u>Governmental Accounting, Auditing Auditing and Financial Reporting</u>, Chicago, 1968.

General Obligation Bonds - Bonds for whose payment the full faith and credit of the issuing body are pledged. More commonly, but not necessarily, general obligation bonds are considered to be those payable from taxes and other general revenue.

Revenue Bonds - Bonds whose principal and interest are payable exclusively from earnings of a public enterprise.

Special Assessment Bonds - Bonds payable from the proceeds of special assessments. If the bonds are payable only from the collections of special assessments, they are known as "special assessment bonds." If in addition to the assessments, the full faith and credit of the governmental unit are pledged, they are known as "special assessment general obligation bonds."

TABLE OF CONTENTS

		Page
Summary of Major Findings		1
I.	Types and Purpose of Borrowing	7
	A. Purpose	7
	B. General Obligation Bonds	11
	C. Revenue Bonds	13
II.	Amounts of Debt in 1976	15
	A. Total Debt - Statewide	15
	B. Nonmetropolitan and Metropolitan Debt	16
	C. Debt and City Size	19
	D. Relationship to Other Local Government Debt	22
III.	Changes in Debt: 1967-1976	26
	A. Overview of Financial Changes	26
	B. Changes in Amounts of Debt: 1967-1976	28
	C. Changes in Average Per Capita Debt: 1967-1976	32
	D. Changes in Debt Per Household	35
	E. Changes in Debt Related to City Size	36
	F. Changes in Types of Debt	38
IV.	Debt Measures	47
	A. Purpose	47
	B. Types of Debt Measures	49

Page

C. Debt Measures 54

1. Credit Ratings 54

2. Debt Per Capita 62

3. Interest and Principal Payments 62

4. Debt as a Percent of Market Value 70

5. Composite Rankings of Debt Measures . . . 71

6. Debt Limitations 75

V. Examination of Short-Term Debt 79

A. Purpose 79

B. Definition of Short-Term Debt 79

C. Definition of "rolling over short-term debt". 79

D. Findings 80

Appendices 83

Appendix A - History of Debt Limits 83

Appendix B - Short-Term Debt Borrowed, 1967 to 1976 88

Appendix C - Moody's Bond Survy, March 6, 1978 Local Government Bond Ratings Withdrawn 93

Appendix D - Debt as a % of Indicated Market Value: 1976 (Cities over 2,500 Population) 94

Appendix E - Debt as a % of Indicated Market Value: 1976 (Cities over 2,500 Population listed by Population Class) 96

Appendix F - Proximity of Cities to Debt Limits . 98

SUMMARY OF MAJOR FINDINGS

SUMMARY OF FINDINGS

Amounts of City Debt

1. Minnesota law limits the net amount of general obligation (GO) debt cities may hold to 6 2/3% of the assessed value for statutory cities and 3 1/3% of market value for first class cities. (p. 12)

2. Although Minnesota law limits the amount of city debt, several types of bonds are excluded from the statutory debt limits through general and special legislation. These exclusions include special assessment GO bonds, revenue bonds, tax increment bonds, warrants, and other bond issues specifically authorized by the Legislature. Sometimes these bonds are supported by tax levies or other general revenues, as are bonds subject to the statutory debt limits. (p. 13)

3. No state agency is responsible for calculating cities' debt limits or for maintaining the limits. The state relies on private bond consultants and attorneys to control the amounts of debt cities issue. (p. 83)

City Debt in 1976

1. Minnesota cities account for the largest portion (41%) of local government debt, followed by, in order, school districts, other agencies, counties, and towns. (p. 23)

2. Minnesota cities over 2,500 population held a total of $1.325 billion in debt in 1976. Approximately three-fourths of this was held by cities in the seven-county

Twin Cities metropolitan area and one-fourth by cities outside that metropolitan area--the balance of the state. (p. 15)

3. The average metropolitan city has a higher total debt per capita than does the average nonmetropolitan city. (p. 18)

4. The average metropolitan city relies more heavily on GO and special assessment GO bonds than does the average nonmetropolitan city. Nonmetropolitan cities rely more heavily on revenue bonds than do metropolitan cities.

1976 Percent Composition of City Debt

Type of Debt	State-wide	Nonmetro	Metro
G.O. Debt	28%	20%	31%
Special Assessment G.O. Debt	48	37	52
Revenue Debt	16	37	9
Other Debt	8	7	8
Total	100%	100%	100%

1976 Average Per Capita Debt - Cities Over 2,500 Population

	State-wide	Nonmetro Cities	Metro Cities	Metro. Excluding Mpls. St. Paul	Mpls./ St. Paul
G.O. Debt	$ 83	$104	$ 62	$ 55	$351
Special Assessment G.O. Debt	302	180	428	438	35
Revenue Debt	110	176	43	42	72
Other Debt*	44	26	60	60	12
Total	$539	$486	$593	$595	$505

*Other debt includes refunding bonds, other debt payable from state street aid funds, and debt which cannot be classified.

5. Grouped by population size, metropolitan cities have more total debt per capita than nonmetropolitan cities in each size category. (p. 21)

6. Grouped by population size, nonmetropolitan cities have more GO debt per capita than metropolitan cities in each size category. (p. 21)

7. Nationally, long-term debt per capita increases as city size increases. Minnesota cities do not follow this trend. The highest debt per capita is found in cities in the 5,000-10,000 population range. As cities increase beyond 10,000 debt per capita decreases. (p. 24)

Changes in City Debt: 1967-1976

1. From 1967 to 1976, debt grew more slowly than did both revenues and expenditures of Minnesota cities. (p. 26)

2. Between 1967 and 1976, total debt for cities over 2,500 population increased from $554 million to $1,325 million, or 139%. (p. 26)

3. Total debt in the metropolitan cities grew 138% while nonmetropolitan debt grew 140%. (p. 30)

4. Minneapolis and St. Paul account for the largest part of the increase in average per capita debt in metropolitan cities. Minneapolis's and St. Paul's average per capita debt increased faster than the metropolitan suburbs and as fast as nonmetropolitan cities.

5. Composition of debt for nonmetropolitan and metropolitan cities has changed since 1967. Nonmetropolitan cities have come to rely more on self-supporting debt, rather than debt repaid by general revenues. Metropolitan

cities have come to rely less on self-supported debt, and more on debt repaid by general revenue including property tax. (p. 45)

Debt Measures

1. Debt measures are used by governmental officials and private bond buyers to evaluate the credit-worthiness of investment in a city's bonds. (p. 47)

2. The most comprehensive debt measure is the rating given a city's bonds by bond rating agencies. (p. 49)

3. Other debt measures list total debt, tax collections, defaults, and financial ratios including per capita debt, debt divided by current revenues or total expenditures, debt divided by property value, and others. (p. 50)

4. Some finance experts believe the only way to accurately compare debt amounts is by discounting future principal and interest payments to a present value. This accounts for differences in debt redemption schedules and allows more accurate comparisons between the debt level of one city and another. (p. 51)

5. Credit ratings of the 165 Minnesota cities over 2,500 population in 1977 were as follows:

Rating	# Cities
Aaa	2
Aa	12
A	73
Baa	43
Not Rated	35
Total	165

6. Comparing per capita debt and debt divided by assessed value with credit ratings shows a consistent pattern: the higher the rating, the lower the ratio of debt to assessed value. (p. 61)

7. The debt service costs of both nonmetropolitan and metropolitan cities reach and often exceed the dollar amount raised through local taxes. Debt service costs of metropolitan cities between 10,000 and 20,000 population are 2.91 times the local property tax dollars raised. (p. 67)

   This means that Minnesota cities are critically dependent upon other revenues such as special assessments or state municipal aids to help meet their debt service costs.

8. The highest ratios of debt to market value were found in nonmetropolitan cities, especially the smaller ones. This means nonmetropolitan cities bear relatively higher debt/market value burdens than do their metropolitan counterparts. (p. 70)

9. Cities were ranked by combining composite scores of per capita debt, debt divided by market value, and debt service divided by total expenditures. Results are listed in Table 23. (p. 73)

10. City debt limits were computed for average cities by geographic region and for individual cities. There is no evidence that cities are constrained or controlled by statutory debt limits. (p. 76)

11. This raises two important state policy questions:

    1. Is the cost of borrowing actually higher for cities because of the types of bonds sold to circumvent the debt limits, e.g., revenue bonds, special assessment GO bonds, tax increment bonds?

    2. What state policies do debt limits serve?

Short-Term Debt

1. Minnesota cities are not "rolling over short-term debt" from one year to the next in ever-increasing amounts. (p. 81)

2. There is no evidence that the use of short-term debt poses any danger for Minnesota cities. (p. 81)

I. TYPES AND PURPOSE OF BORROWING

I. TYPES AND PURPOSE OF BORROWING

A. Purpose

Minnesota state law determines the type, purpose, and amount of bonded debt cities may incur. State law sets a maximum limit on the amount of debt a city may hold as well as a maximum interest rate a city may pay. In addition, city charters sometimes place stricter limits on the amount of city debt.

Cities borrow money in the capital market for either short or long time periods, (periods longer than one year). (This report deals mainly with long-term debt, although short-term debt is discussed in Section V.) Nationally, the great majority (over 90%) of city debt is long-term, i.e., matures at least one year after issuance. In Minnesota, this percentage is higher. Minnesota cities use very little short-term debt.

Cities generally borrow money to make capital improvements, i.e., finance public improvements, construct buildings, or to make other improvements that increase their assets. Not all capital expenditures are financed with bonded debt. Some cities follow a pay-as-you-go policy whereby debt is avoided and capital improvements are financed from current revenues.

One reason often cited for financing capital projects with bonded debt is that the cost of the project is spread over the life of the project. In this way, those benefiting from the project at present share in paying its cost with those benefiting from the project in the future. A second reason frequently cited is that the costs are cheaper when spread out over time. A dollar spent today is more expensive than a dollar spent next year--because of inflation. Since cities market bonds at interest rates frequently lower than inflation rates, in times of high inflation, it may be economically advantageous for an individual city to borrow money for a project and repay it with cheaper dollars in the future. The longer the term of debt, the greater the amount "saved." However, this will only work economically for a short time. If the expected rate of inflation is low, it would be to a city's advantage to market bonds for short terms. If the expected rate is high, the city would borrow for longer terms.

A third reason for borrowing is to avoid drastic and sudden revenue/expenditure imbalances or large revenue/expenditure fluctuations from one year to the next. Bonds bridge the gap between expected revenues and planned expenditures. Bonds smooth a city's cash flow.

Of course, it may cost more because of interest costs to finance capital projects with bonds than to pay the cost immediately. The total interest paid out over the life of the bonds must be balanced against the present cost of raising current city revenues. Only when city finance officials believe that longer term financing costs are fairer to all taxpayers and more desirable than raising current revenue does bonding make good economic sense. Because these criteria are difficult to measure with precision, decisions to bond for capital improvements are often subjective.

Economists can quantify part of the subjective decision-making by "discounting" the future principal and interest costs of bonds to a present value and then comparing this value with the costs of the pay-as-you go method. If this is done, cities should then borrow to a point where the marginal costs of borrowing equal the marginal costs of the pay-as-you go.

Although state law determines the type, purpose, and amount of debt cities may incur, the private capital market exerts powerful control of its own. The private market is the money supplier regardless of state limits on local government borrowing. Its decisions determine what real debt limitations exist.

New York City's inability to obtain money in the bond market is the best recent example of the private market's control over local government debt. The private market's willingness to purchase bonds is related to its preceived "risk" of investment. The greater the "risk," the higher the interest rates the private market charges to supply money. The private market evaluates "risk" partly by the manner in which the bonds are secured.

The private market generally recognizes two types of bonds based on how they are secured. General obligation bonds are backed by the full faith and credit of the city. Revenue bonds are supported only by a specific source of revenue.

B. General Obligation Bonds

Minnesota cities issue basically two types of bonds: general obligation (GO) and revenue bonds.

General obligation bonds are supported by the full faith and credit of the city issuing them. This means that the city promises to do everything within its power to insure that the bonds are repaid. GO bonds are, in effect, a mortgage on the public and private wealth of a city. Since Minnesota cities rely primarily on the property tax for locally raised revenue, it is property taxes in Minnesota that are generally thought of as the "full faith" that secures the bonds and insures their repayment. Although property tax levies for general government functions are limited by law, levies for debt service are not limited. (See State-Local Fiscal Study "Report on Revenues.")

While an investor evaluates the investment risk of the bonds in terms of the security pledged, city finance officials treat G.O. bonds differently. They put GO bonds into two categories:
G.O. bonds subject to the net debt limits and
G.O. bonds not subject to the net debt limits.

G.O. Bonds Subject to the Net Debt Limit

These bonds are secured by the full faith and credit of the city issuing them. Minnesota Statute 475.53 limits the amount of such bonds outstanding to 6 2/3% of a city's assessed value for all cities except those of the first class.*

First class cities are subject to net debt limits of 3 1/3% of the city's market value of all real and personal value.

"Net debt" is defined as total debt outstanding less any cash or other assets available and earmarked for debt repayment and the aggregate of the following:

1. Special assessment bonds,
2. revenue bonds,
3. warrants or orders with no fixed maturity, and
4. certain other types of debt specified by law.

Net debt G.O. bonds are usually repaid from a city's property tax levy or other annually recurring revenue source, e.g., state aids to local governments.

---

*For a brief history of Debt Limits, see Appendix A.

G.O. Bonds Exempted from the Net Debt Limit

These bonds are also secured by the full faith and credit of the city issuing them, but they have been exempted from the net debt limit by the Legislature. Such bonds generally are often considered "self-supporting" but are sometimes supported by general revenues, as are net debt bonds.

Net debt bonds are sometimes called "deductible bonds" because they are subtracted from the debt limits. For example, special assessment general obligation bonds for street improvements such as paving would be backed by the city's full faith and credit but also generally repaid with revenues collected from those directly benefiting from the improvement. The beneficiaries are assessed at a rate proportionate to the quantity of benefit, such as paying a certain dollar amount per foot of street paving.

C. Revenue Bonds

Revenue bonds are repaid entirely from the revenues produced by the improvement they finance. The full faith and credit and taxing power of the city is not pledged as a security for the bonds. Because

of this greater risk, revenue bonds usually sell at higher interest rates than would G.O. bonds for a similar project.

Revenue bonds are usually sold by the city to finance public enterprises such as municipal utilities, hospitals, or liquor stores. Revenue bonds discussed throughout this report do not include industrial revenue bonds.

II. AMOUNTS OF DEBT IN 1976

II. AMOUNTS OF DEBT IN 1976

A. Total Debt - Statewide

Table 1 shows the amount of city debt outstanding as of December 31, 1976, the latest year for which data are available on a statewide basis. Cities over 2,500 population held approximately $1.325 billion. All cities in the state held approximately $1.513 billion (Table 1).

TABLE 1

1976 Debt Outstanding
Cities Over 2,500 Population

	Statewide	Non-Metro	Metro
G.O. Debt	$ 369,158,860	$ 67,180,412	$301,987,448
Special Assessment G.O. Debt*	639,269,917	122,917,368	516,352,549
Revenue Debt	215,508,514	124,415,514	91,093,000
Other Debt**	101,853,249	22,211,249	79,642,000
Total	$1,325,790,540	$336,724,543	$989,065,997

*Note: Special Assessment G.O. Bonds are treated as a separate type of G.O. bonds and, consequently, excluded from the G.O. amounts shown throughout this report. This is because the Legislature, city officials, and usually the private market view special assessment G.O. bonds as bonds distinct from other G.O. bonds. Special assessment G.O. bonds are usually repaid from the beneficiaries of the projects they finance, though they are still secured by the city's full faith and credit.

**Other debt includes refunding bonds, other debt payable from state street aid funds, and debt which cannot be classified.

Source: State Auditor Publications, "Revenues, Expenditures, and Debt of Minnesota Cities for Years Ending Between July 1, 1976 and June 30, 1977."

B. Nonmetropolitan and Metropolitan Debt

Cities' needs for capital improvements change as cities develop. Newer, emerging cities can be expected to have a greater need to develop physical facilities and can be expected to have more debt than do older, established cities. This remains the case until cities reach an age when their physical facilities need improvement or replacement. Then, older cities' debt may increase as they make an effort to replace or improve their facilities.

When the state's cities are examined by geographic region, the nonmetropolitan cities constitute approximately one-fourth of the state's total debt while the metropolitan cities hold three-fourths of the total debt.

Using the data in Table 1, the percent breakdown of debt by type is listed below.

1976 Percent Composition of City Debt

Type of Debt	State-wide	Nonmetro	Metro
G.O. Debt	28%	20%	31%
Special Assessment G.O. Debt	48	37	52
Revenue Debt	16	37	9
Other Debt	8	7	8
Total	100%	100%	100%

The composition of city debt shows that nonmetropolitan and metropolitan cities differ from one another in several important ways:

1. Metropolitan cities rely more heavily on G.O. bonds than do nonmetropolitan cities. (This is due to the large amounts of G.O. debt in Minneapolis and St. Paul.)

2. Metropolitan cities also rely more heavily on special assessment bonds than nonmetropolitan cities.

3. Nonmetropolitan cities rely more heavily on revenue bonds than do metropolitan cities.

Of the $1,325 billion debt in cities over 2,500 population, $516 billion (or 49%), as Table 1 indicates, is special assessment debt issued by metropolitan cities. Metropolitan cities' special assessment debt constitutes the largest single portion of debt within the state.

Table 2 lists average per capita debt for cities over 2,500 population in 1976 by total debt and by debt type. The average per capita debt is listed for cities by geographic region. This figure represents the per capita amount the "average" city in a given geographic region, such as the nonmetropolitan region, holds.

TABLE 2

1976 Average Per Capita Debt
Cities Over 2,500 Population

	Statewide	Nonmetro Cities	Metro Cities	Metro Excluding Mpls. St. Paul	Mpls./ St. Paul
G.O. Debt	$ 83	$104	$ 62	$ 55	$351
Special Assessment G.O. Debt	302	180	428	438	35
Revenue Debt	110	176	43	42	72
Other Debt*	44	20	60	60	12
Total	$539	$486	$593	$595	$505

*Other debt includes refunding bonds, other debt payable from state street aid funds, and debt which cannot be classified.

Source: State Auditor Publications, "Revenue, Expenditures, & Debt of Minnesota Cities for Years Ending Between July 1, 1976 and June 30, 1977", S.P.A. unofficial population and household estimates.

On a per capita basis, the average metropolitan city accounts for significantly more debt ($593 per capita) than does the average nonmetropolitan city ($496 per capita). Metropolitan cities other than Minneapolis/ St. Paul have about 22% more debt per capita than do nonmetropolitan cities. Metropolitan cities average per capita debt is higher than nonmetropolitan cities for the following types of debt: (1) total debt, (2) special assessment G.O. debt, and (3) other debt.

It is clear that Minneapolis and St. Paul account for Metropolitan cities' high G.O. debt ranking. Non-metropolitan cities outrank the metropolitan cities in per capita revenue debt. Nonmetropolitan cities have over four times the per capita revenue debt of metropolitan cities.

C. Debt and City Size

For purposes of examination, cities were broken down into the following six classes based on city population:

Under 2,500
2,500 - 5,000
5,000 - 10,000
10,000 - 20,000
20,000 - 100,000
Over 100,000

Total debt per capita and G.O. debt per capita exclusive of special assessments were calculated for cities based on the above population sizes for 1975. The results are displayed in Table 3 and Table 3A.

Table 3 shows that metropolitan cities have a higher total debt per capita than nonmetropolitan cities for all city sizes. Table 3 also shows that metropolitan cities' total debt per capita is somewhat bell-shaped.

As metropolitan cities increase in population from under 2,500 to 10,000, their total debt per capita increases. This reaches a peak in the 5,000 - 10,000 population range. Above the 5,000 - 10,000 population range, as metropolitan cities become larger, their total debt per capita becomes smaller.

Table 3 shows that nonmetropolitan cities' total debt per capita parallels the trends in metropolitan cities. After nonmetropolitan cities reach the 5,000 - 10,000 population range, as nonmetropolitan cities become larger, their total debt per capita becomes smaller. (Nonmetropolitan cities under 5,000 population exhibit no definite trend.)

Table 3A shows that nonmetropolitan cities have a higher G.O. debt per capita than do metropolitan cities in all city sizes except metropolitan cities over 100,000 in population, i.e., Minneapolis and St. Paul. Generally, the smaller the nonmetropolitan city, the larger its per capita G.O. debt. (The unusually high G.O. debt per capita for Minneapolis and St. Paul is discussed in the following section on trends.)

TABLE 3

1975 Total Debt Per Capita
By Metropolitan and Nonmetropolitan Cities
And By City Size

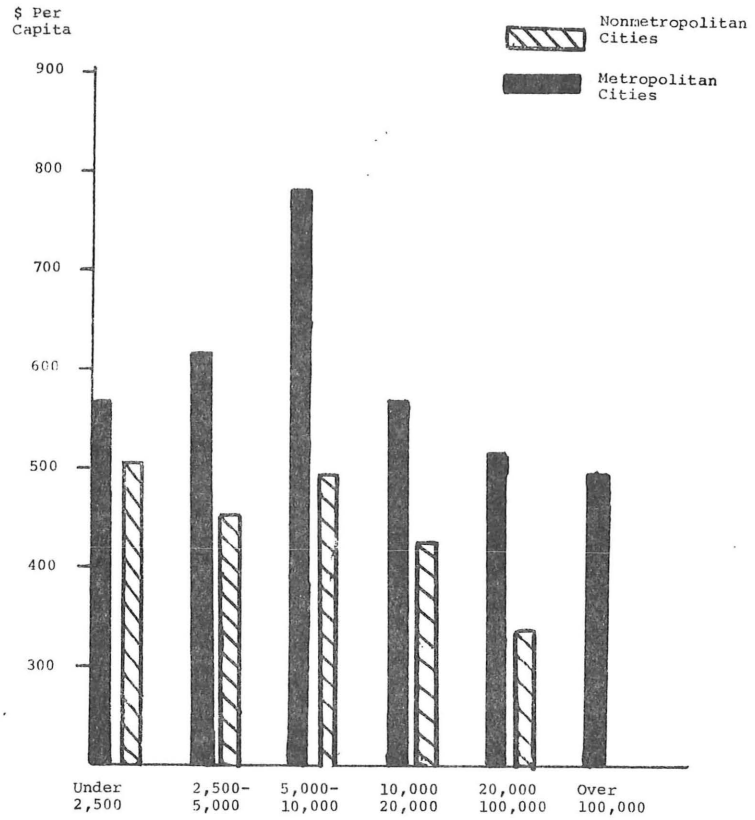
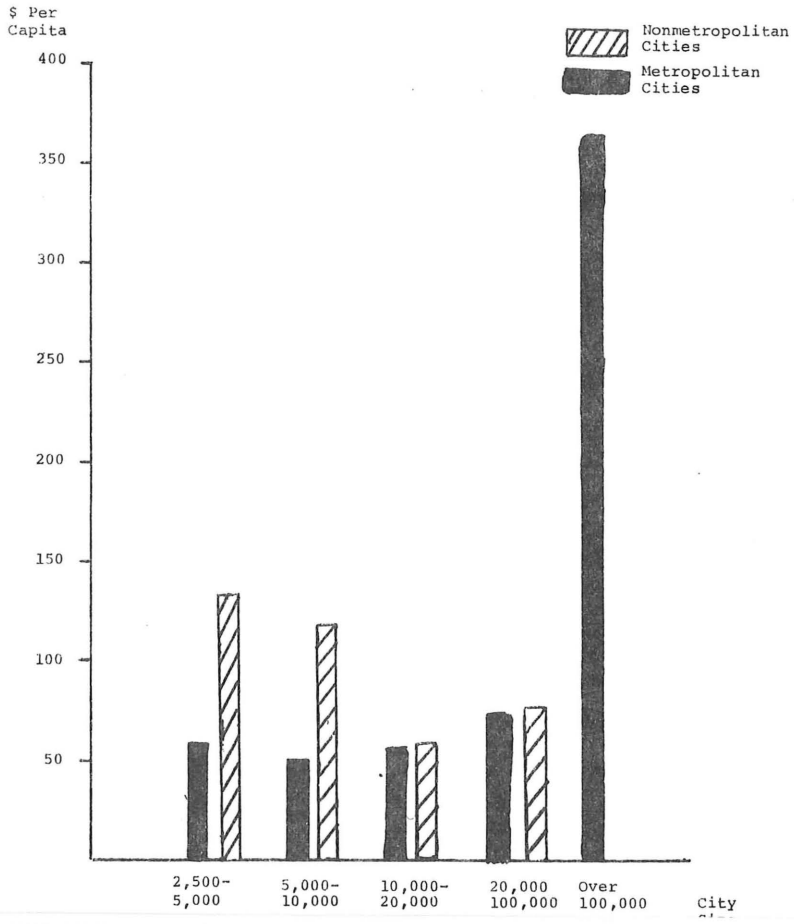


TABLE 3a

1975 G.O. Debt Per Capita
By Nonmetropolitan and Metropolitan Cities
And By City Size



The information in both Table 3 and Table 3A shows that:

1. Metropolitan cities have higher total debt per capita than do nonmetropolitan cities (Table 3).

2. Nonmetropolitan cities have higher G.O. debt per capita than do metropolitan cities (Table 3A).

D. Relationship to Other Local Government Debt

Cities account for the largest portion of local government debt. The exhibit following shows the amounts and percentage composition of Minnesota's local government debt and the composition of local government debt nationally.

MINNESOTA'S LOCAL GOVERNMENT'S DEBT

Local Government	$ Amount	Minnesota Composition Percent Of Total	National Composition Percent Of Total
Cities	$1,423,764,801	41%	42%
Counties	159,864,243	4	12
School Districts	1,208,297,974	35	22
Other Agencies*	684,986,110	20	21
Towns	9,306,453	0.2	2
Total	$3,486,219,581	100%	100%

*Other agencies include Metropolitan Council, Metropolitan Waste Control Commission, other metropolitan agencies, and numerous special districts such as hospital or watershed districts.

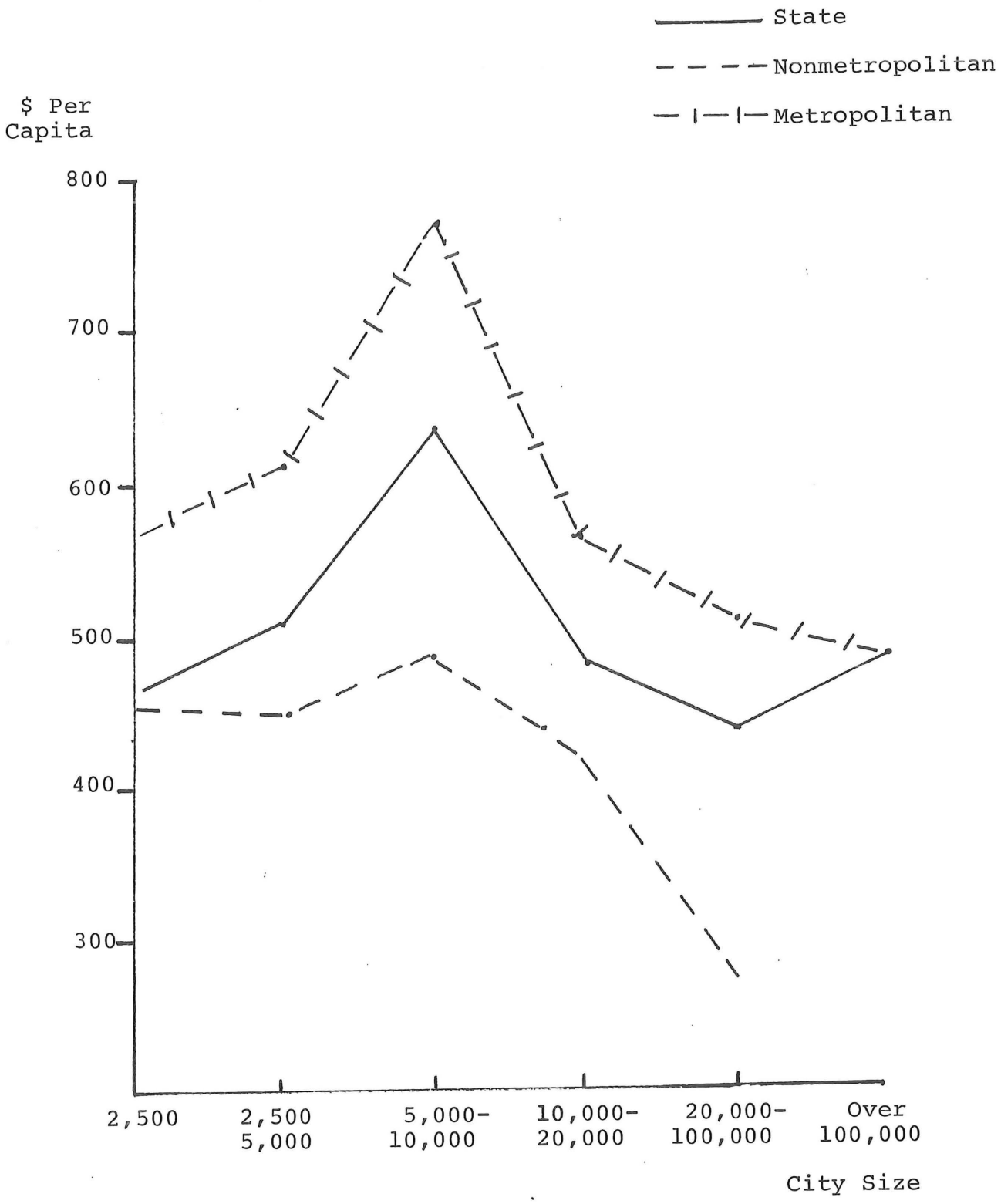
Source: Minnesota "Report of the State Auditor on the Revenue, Expenditures, and Debt of the Local Governments in Minnesota" for fiscal years ending during the period July 1, 1975 to June 30, 1976. August, 1977.

National quoted from U.S. Bureau of Census, Government Finance and Tax Foundation, Facts and Figures on Government Finance, in Lennox L. Moak and Alvert M. Hillhouse, Concepts and Practices in Local Government Finance, MFOA, August, 1975, p. 255.

While Minnesota cities are very close to the national norm--holding the single largest portion of local government debt--they do not conform to one national norm in a very important way. Nationally, as the size of a city increases, so does the per capita debt. For long-term debt, the following national distribution existed in 1971.

TABLE 4

1975 Debt Per Capita
By City Size and By Region



City Debt by Population Groups, 1970-71

Per Capita Long Term Debt	Over 1 Million	500,000-999,999	300,000-499,999	200,000-299,999	100,000-199,999	50,000-99,999	Under 50,000
	$651	$404	$375	$345	$279	$241	$215

Source: Census of Governments, quoted from Moak and Hillhouse, op. cit., p. 256.

Minnesota cities do not follow this national trend. Table 4 shows total per capita long term debt for Minnesota cities in 1975. When this data is compared with national trends, the highest per capita total debt for Minnesota cities occurs in the cities of 5,000-10,000 population rather than in the largest population size as in the national trend.

III. CHANGES IN DEBT: 1967-1976

III. CHANGES IN DEBT: 1967-1976

A. Overview of Financial Changes

Financial activities of Minnesota cities have changed significantly since 1967. In 1967, cities over 2,500 population received over $242 million in cash, spent approximately $274 million and held debts of $554 million. By 1976, these amounts had increased to approximately $787 million received, $816 million spent, and $1,325 million in debts. Although these financial activities show a substantial increase in all areas: revenues, expenditures, and debt, debt itself accounts for the smallest percent increase (Table 5).

TABLE 5

Changes in City Revenues, Expenditures, Debt
1967-1976

	1967	1976	% Change
Revenues	$242,818,968	$ 787,187,281	224%
Expenditures	274,556,995	816,611,863	197%
Debt	554,345,541	1,325,790,540	139%

During the 1967-76 interval, the population of the metropolitan area grew faster than did the population of the nonmetro area. By 1975, the latest year for which population estimates are available, the metropolitan area's population accounted for 47% of the

state's population, up from 44% in 1967. It is important to remember that during this same period, the population of Minneapolis and St. Paul declined by approximately 102,000 (or 13%). This means the metropolitan area's population increase occurred in the suburban areas surrounding Minneapolis and St. Paul. Partly because of this shift in population from the nonmetropolitan to the suburban metropolitan area, per capita revenues, expenditures, and debt grew less rapidly in the metropolitan area than they did in the nonmetropolitan area (Table 6).

TABLE 6

Changes in Total Per Capita Revenues, Expenditures, Debt
1967 - 1975
Nonmetropolitan and Metropolitan Cities

Nonmetro Cities

	1967	1975	% Change
Revenues	$ 98	$259	164%
Expenditures	102	282	176
Debt	185	382	106

Metropolitan Cities

	1967	1975	% Change
Revenues	$104	$263	153%
Expenditures	122	299	145
Debt	255	532	109

Tables 5 and 6 clearly illustrate that in both total dollar and per capita dollar amounts, debt always grew slower than did either revenues or expenditures of Minnesota cities from 1967 to 1975/1976.

B. Changes in Amounts of Debt: 1967-1976

Although debt has grown slower than revenues and expenditures, it still raises many important financial policy issues. Debt directly affects city revenues and expenditures. Some cities may choose to increase revenues for a short time rather than to finance a capital project with long term debt. Other cities may reduce expenditures for certain services in order to finance capital projects without debt. Good local financial management should ideally reflect a balanced combination of cash spending and borrowing that avoids drastic changes or wide variations in revenues or expenditures from year to year. This is one reason debt trends are important to examine.

Debt amounts reflect a city's long-term investment in its streets, sewers, buildings and other physical components. Cities' debt requirements change as cities pass through different phases of development.

Newer cities need to invest in their physical plan by building streets and sewers, for example, in order to serve new developments. Older cities may reach a point where their physical plants begin to wear out and need replacement. For these different reasons, describing debt trends by city size and by geographic location may help understand cities' debt cycles. This may aid in understanding cities' financial conditions.

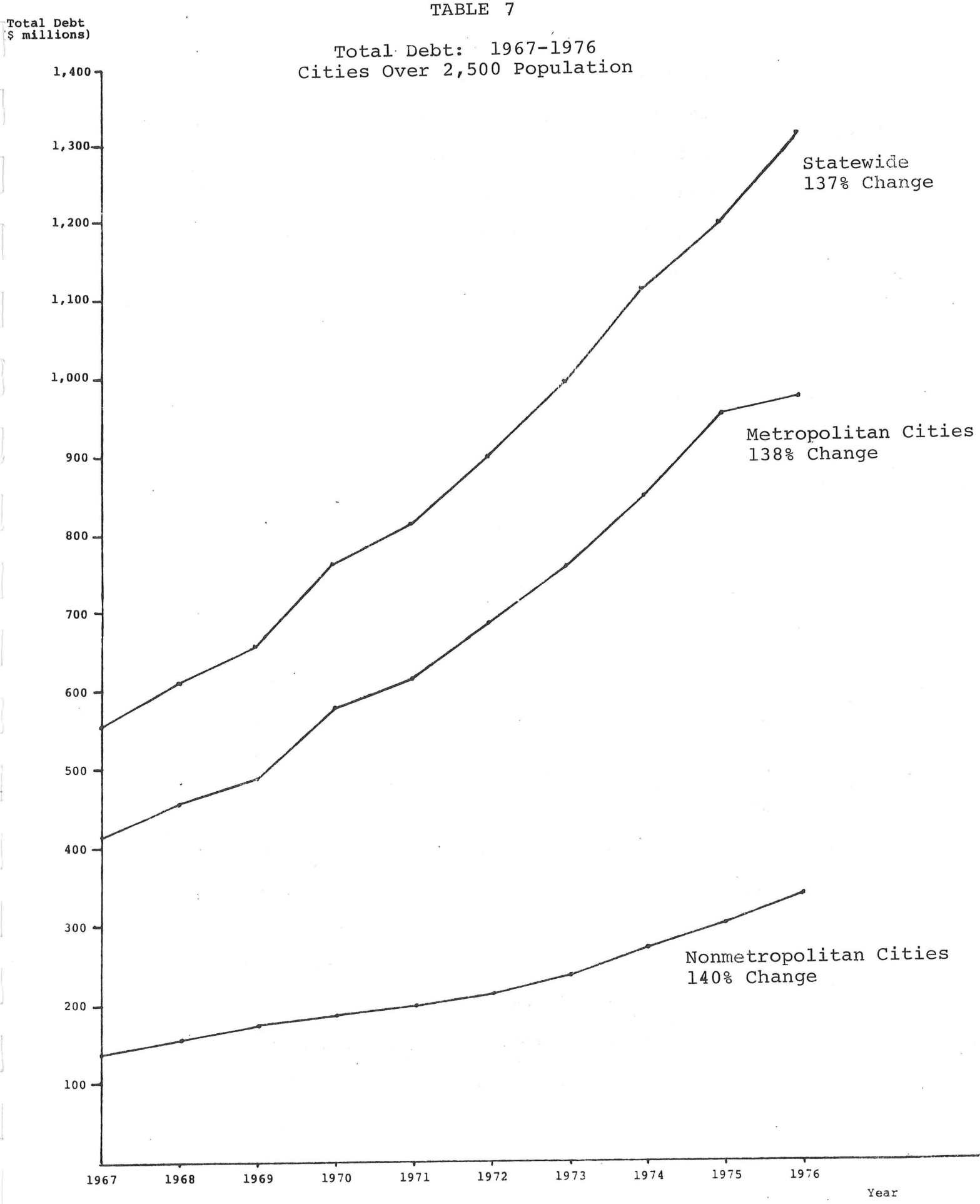
Growth of city debt is significant. Table 7 summarizes the total dollar amount of debt outstanding at the end of each calendar year from 1967-1976 for cities greater than 2,500 in population.

Table 7 shows that debt for all cities over 2,500 population in the state has grown from $554 million in 1967 to $1,325 million in 1976, an increase of 139%. Nonmetropolitan cities increased their debt from $140 million in 1967 to $336 million in 1976, an increase of 140%. Metropolitan cities increased their debt from $414 million to $989 million or $138%.

Metropolitan cities showed a sharp increase (18%) in debt between 1969 and 1970, from $486 million to $578

TABLE 7

Total Debt: 1967-1976
Cities Over 2,500 Population



million. This is the largest single annual increase of either the metropolitan or nonmetropolitan city groups. Nonmetropolitan cities experienced their largest single annual increase from 1973 to 1974 when they increased debt 14% from $236 million to $270 million.

The debt of metropolitan area cities excluding Minneapolis and St. Paul increased more rapidly from 1967 to 1976 than did Minneapolis and St. Paul debt (Table 8).

TABLE 8

Growth in Debt By Nonmetro and Metro Regions
1967 - 1976

Total Debt	1967	1976	% Change
Nonmetropolitan Cities	$140,171,376	$336,724,543	140%
Metropolitan Cities	414,172,165	989,065,997	138
Metro Cities (Excluding Minneapolis/St. Paul)	261,747,316	657,687,997	151
Minneapolis/St. Paul	152,424,849	331,378,000	117

Thus, most of the metropolitan area's growth in debt in absolute dollars as well as percentage can be attributed to growth of debt in suburban cities surrounding Minneapolis and St. Paul.

C. Changes in Average Per Capita Debt: 1967-1976

The growth in average per capita debt did not increase as rapidly as did the dollar amount of debt because of the increase in the state's population living in cities. Table 9 lists the average total per capita debt for statewide, nonmetropolitan, and metropolitan cities over 2,500 in population for 1967-1976.

TABLE 9

Total Average Per Capita Debt: 1967-1976

Year	Statewide	Nonmetro Cities	Metro Cities
1967	$240	$203	$283
1968	256	218	300
1969	278	237	324
1970	307	252	368
1971	339	263	422
1972	378	284	489
1973	427	329	541
1974	457	378	646
1975	508	438	584
1976*	539	486	593

*Estimate, based on 1975 population.

Table 9 shows that average per capita debt increased from $240 to $539 on a statewide bases, from $203 to $486 for nonmetropolitan cities, and from $283 to $593 for metropolitan cities.

Like total debt, total average per capita debt is higher for metropolitan cities in all years. In addition, both

nonmetropolitan and metropolitan cities' total average per capita debt has increased every year since 1967.

The rates of growth in average per capita debt for nonmetropolitan and metropolitan cities varied. Table 10 shows the amounts of and rates of change for average per capita total debt. Nonmetropolitan cities' average per capita debt has increased by 139% during the period examined while metropolitan cities' average per capita debt increased by 109%.

When average per capita debt for Minneapolis and St. Paul is subtracted from other metropolitan cities, several important changes occur. Minneapolis and St. Paul account for the largest portion of metropolitan cities' increase in average per capita debt. Furthermore, Minneapolis and St. Paul's average per capita debt increased faster than the metropolitan suburbs and as fast as nonmetropolitan cities (Table 10).

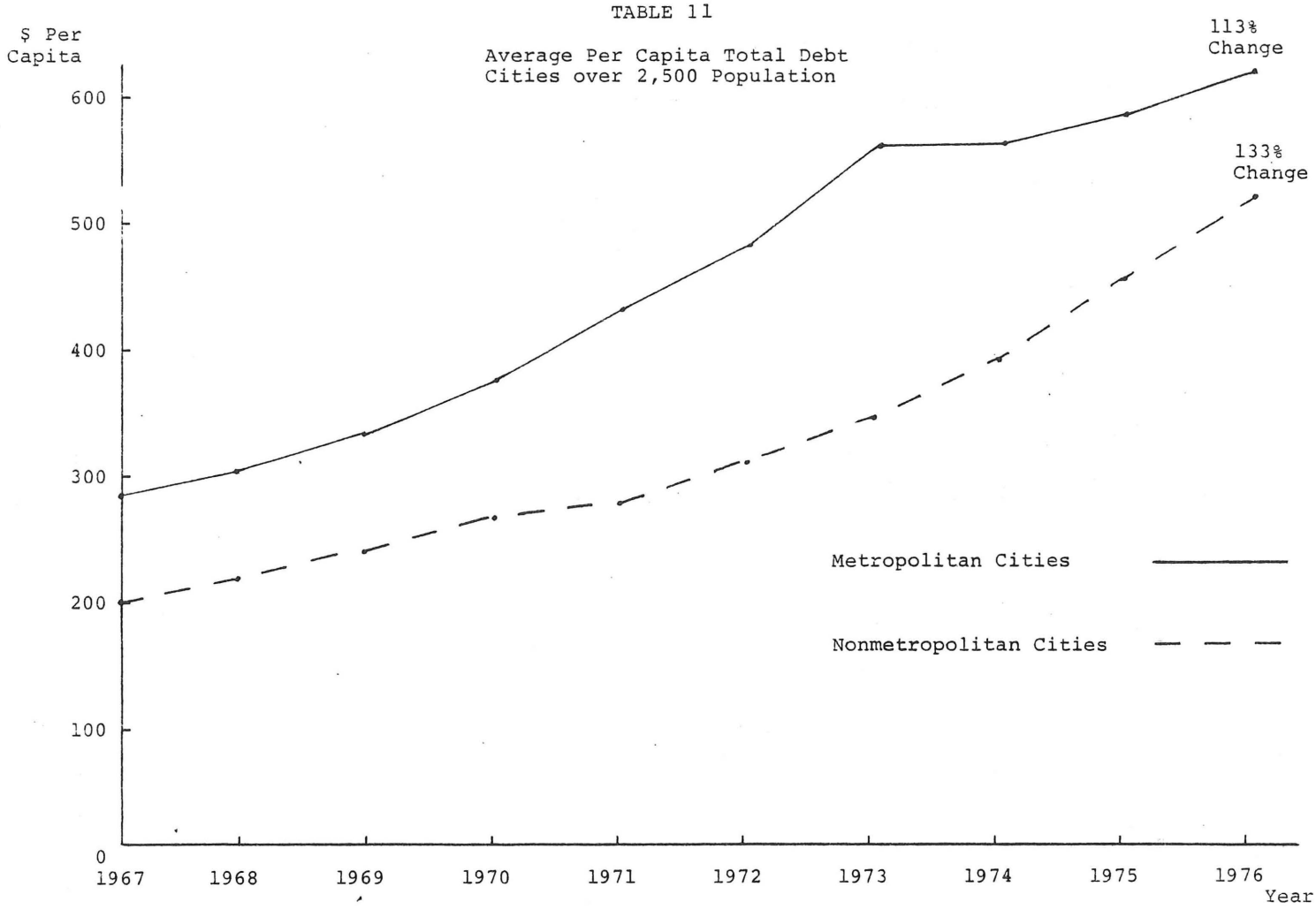
TABLE 10

Growth in Average Debt Per Capita
Cities Over 2,500 Population

	1967	1976	% Change
Nonmetropolitan Cities	$203	$486	139%
Metropolitan Cities	283	593	109
Metro Cities (Excluding Minneapolis/St. Paul)	285	595	108
Minneapolis/St. Paul	211	505	139

TABLE 11

Average Per Capita Total Debt
Cities over 2,500 Population



D. Changes in Debt Per Household

Counties and school districts deliver services primarily to individuals. Cities, in contrast, more often deliver services to households. City governments spend most of their money on public safety, sanitation, roads, and general government. Adequate levels of city street maintenance, sewer and water lines, and fire protection may be dependent more on the number of dwellings than on the number of persons in a city. Such services must be available regardless of the number of persons living in each dwelling. For these reasons, it may be more valid to measure the amount of debt per household than per capita. Table 12 lists total debt per household for cities over 2,500 population as well as restates per capita debt percentage change.

TABLE 12

Growth in Total Debt Per Household
Cities Over 2,500 Population

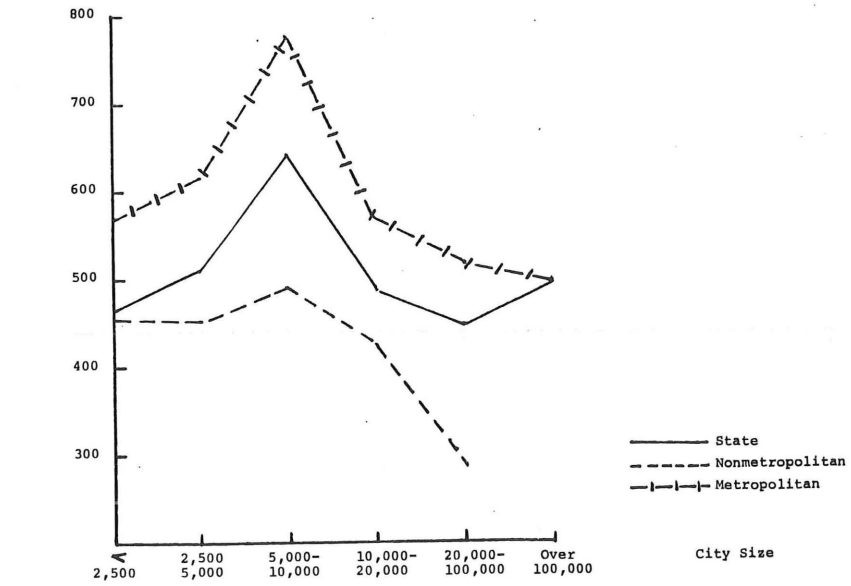
	1967	1975	% Change	Per Capita % Change
Statewide	$764	$1,575	106%	118%
Nonmetropolitan Households	614	1,307	113	133
Metropolitan Households	833	1,696	104	113

Debt per household increased faster in nonmetropolitan cities than in metropolitan cities. This ranking is consistent with the rate of change in debt per capita. In both nonmetropolitan and metropolitan cities, debt per household did not increase as rapidly as did per capita debt. This may be the result of increased formations of newer and smaller households throughout the state more than the result of changes in debt levels.

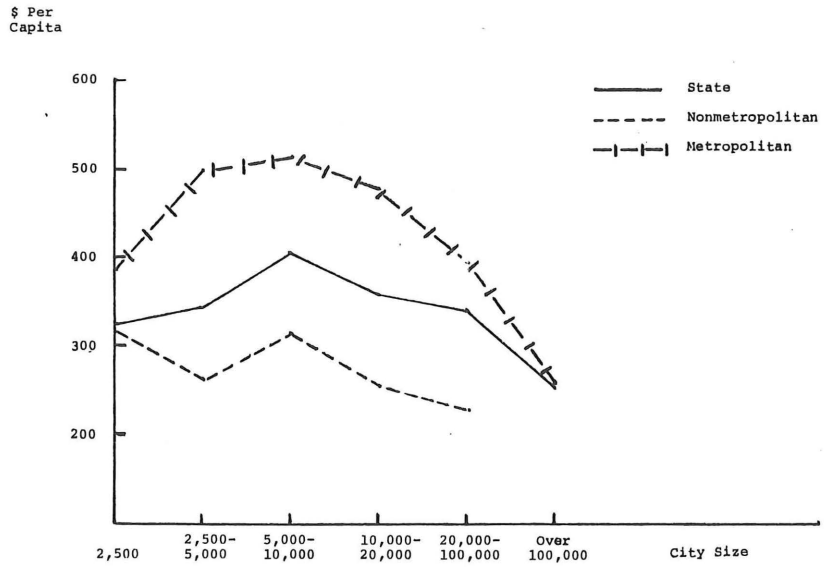
E. Changes in Debt Related to City Size

Table 13 illustrates total per capita debt by city size and region for 1967, 1971, and 1975. Table 13 illustrates that, during the period examined, the spread between per capita debt levels of nonmetropolitan and metropolitan cities has increased. In 1967 the per capita debt difference between the highest nonmetro and metro city size was $109. By 1975 this difference had increased to $290.

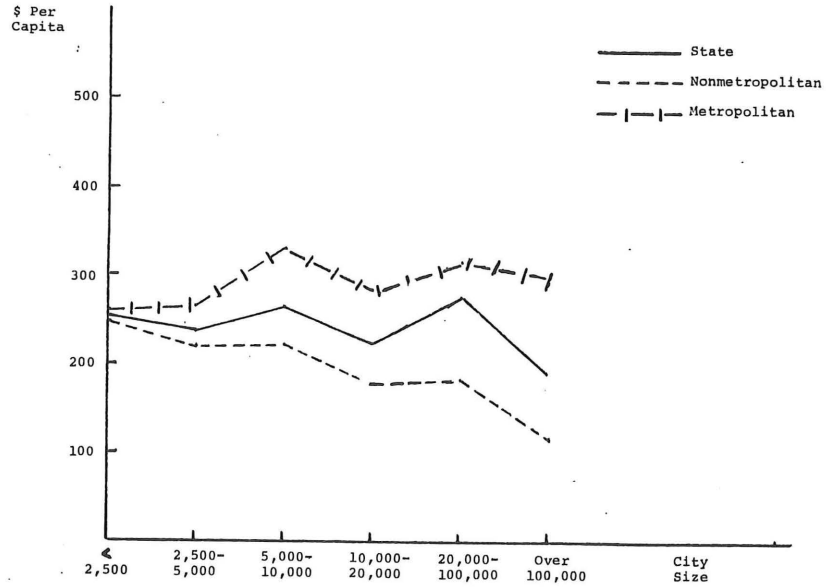
1975 Per Capita Debt
By City Size and By Region



1971 Per Capita Debt
By City Size and By Region



1967 Per Capita Debt
By City Size and By Region



F. Changes in Types of Debt

The composition of city debt has changed significantly since 1971. Table 14 lists percent changes by type of debt for cities over 2,500 population.

TABLE 14

Growth in City Debt
Cities Over 2,500 Population
By Region and By Debt Type

STATEWIDE

	1971	1976	% Change	Average Annual % Change
G.O. Debt	$159,758,174	$ 369,158,860	131%	26%
Special Assessment G.O. Debt	501,136,076	639,269,917	28	6
Revenue Debt	118,103,428	215,508,514	83	17
Other Debt**	31,197,227	101,853,249	227	45
Total	$810,194,905	$1,325,790,540	64%	13%

NONMETROPOLITAN CITIES

G.O. Debt	$ 52,198,324	$ 67,180,412	29%	6%
Special Assessment G.O. Debt	77,575,076	122,917,368	58	12
Revenue Debt	57,570,928	124,415,514	116	23
Other Debt**	10,405,727	22,211,249	113	23
Total	$197,750,055	$ 336,724,543	70%	14%

METROPOLITAN CITIES

G.O. Debt	$107,559,850	$ 301,978,448	181%	36%
Special Assessment G.O. Debt	423,561,000	516,352,549	22	4
Revenue Debt	60,532,500	91,093,000	51	10
Other Debt**	20,791,500	79,642,000	283	57
Total	$612,444,850	$ 989,065,997	62%	12%

METROPOLITAN EXCLUDING MINNEAPOLIS/ST. PAUL

G.O. Debt	$ 63,318,850	$ 75,872,448	20%	4%
Special Assessment G.O. Debt	328,451,000	490,394,549	49	10
Revenue Debt	28,024,500	40,884,000	46	9
Other Debt**	10,191,500	50,537,000	396	79
Total	$429,985,850	$ 657,687,997	53%	11%

MINNEAPOLIS/ST. PAUL

G.O. Debt	$ 44,241,000	$ 226,106,000	411%	82%
Special Assessment G.O. Debt	95,110,000	25,958,000	-72	-15
Revenue Debt	32,508,000	50,209,000	54	11
Other Debt**	10,600,000	29,105,000	174	35
Total	$182,459,000	$ 331,378,000	82%	16%

*Debt is first classified by type in 1971. Prior to 1971 debt is classified by purpose.

**Other debt includes refunding bonds, other debt payable from State street aid funds, and debt which cannot be classified.

Table 15 lists the percent composition of total debt by type of debt.

TABLE 15

% Composition of Total Debt
Cities Over 2,500 Population
By Region and By Debt Type

	Statewide		Non-Metro Cities		Metro Cities	
	1971	1976	1971	1976	1971	1976
G.O. Debt	19%	28%	26%	20%	17%	31%
Special Assessment G.O. Debt	61	48	38	37	69	52
Revenue Debt	14	16	28	37	9	9
Other Debt	3	8	5	7	3	8
	100%	100%	100%	100%	100%	100%

	Metropolitan Mpls./St. Paul		Mpls./St. Paul	
	1971	1976	1971	1976
G.O. Debt	15%	12%	24%	68%
Special Assessment G.O. Debt	76	75	52	8
Revenue Debt	7	6	18	15
Other Debt	2	8	6	9
	100%	100%	100%	100%

Note: Totals may not add to 100% due to rounding.

Based on Tables 14 and 15 the following observations concerning changes in types of debt from 1971 to 1976 can be made:

G.O. Debt

1. Exclusive of "other debt," metropolitan cities' G.O. debt is the fastest growing single category of debt.

2. Minneapolis and St. Paul G.O. debt accounts for the largest dollar and percentage increase (411%) of any debt category. The increase in growth of metropolitan cities' G.O. debt is due primarily to the increased growth of G.O. debt in Minneapolis and St. Paul.

3. General obligation debt accounted for almost twice the portion of total metropolitan debt in 1976 as in 1971.

4. General obligation debt in nonmetropolitan cities accounted for a smaller portion of total nonmetropolitan debt in 1976 than in 1971.

Special Assessment G.O. Debt

1. Special assessment G.O. debt comprised the largest portion of all city debt in both years for statewide debt.

2. Between 1971 and 1976, special assessment G.O. debt decreased as a portion of total debt from 61% of total debt in 1971 to 48% in 1976.

3. Special assessment G.O. debt as a portion of total debt in nonmetropolitan cities and in metropolitan cities excluding Minneapolis and St. Paul remained generally constant between 1971 and 1976 (38-37% for nonmetropolitan cities, 76-75% for metropolitan cities).

4. The decrease in special assessment G.O. debt as a portion of total debt statewide is due to the increased amount of G.O. debt in Minneapolis and St. Paul (Table 15).

5. The amount of special assessment G.O. debt outstanding for Minneapolis and St. Paul actually decreased from 1971 to 1976.

Revenue Debt

1. Revenue debt and special assessment G.O. debt accounted for the largest portions of nonmetropolitan cities' debt in 1976.

2. Revenue debt was the most rapidly growing type of debt for nonmetropolitan cities.

3. Nonmetropolitan cities' revenue debt grew signi-ficatnly faster (almost two and one-half times faster) than did metropolitan cities' revenue debt.

4. Revenue debt as a portion of metropolitan cities' total debt remained constant from 1971 to 1976.

Other Debt

Observations from the other debt category must be drawn carefully and viewed with caution. This category includes numerous types of bonds, especially refunding or "refinancing" bonds. As such, it is not possible to tell if the bonds refunded are G.O., revenue, or special assessment G.O. bonds.

1. Other debt for metropolitan cities has increased two times faster than it has for nonmetropolitan cities. This increase might result from refunding undertaken by suburban cities as they have developed and have improved their credit ratings.

2. For metropolitan cities, other debt, as a portion of total debt, doubled. This may also reflect the amount of bonds refunded.

Table 16 shows changes in the composition of per capita debt for the average nonmetropolitan, metropolitan, metropolitan excluding Minneapolis/St. Paul, and Minneapolis/St. Paul cities over 2,500 population from 1971 to 1976 by debt type. The differences in composition are important.

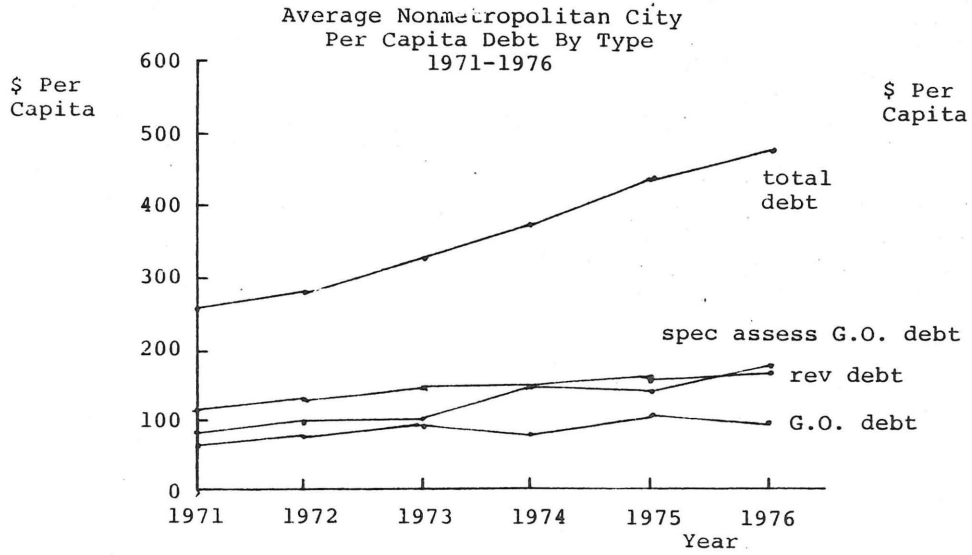
The average nonmetropolitan city's debt tends to be repaid mainly through revenues generated by or assessed for the improvement. It is not usually repaid through property tax. The debt repayment burden lies outside the city budget. The average metropolitan city, on the other hand, has higher per capita G.O. debt. This debt is expected to be repaid from general city revenues. This means that metropolitan cities commit higher portions of their budgets to debt repayment while nonmetropolitan cities do not.

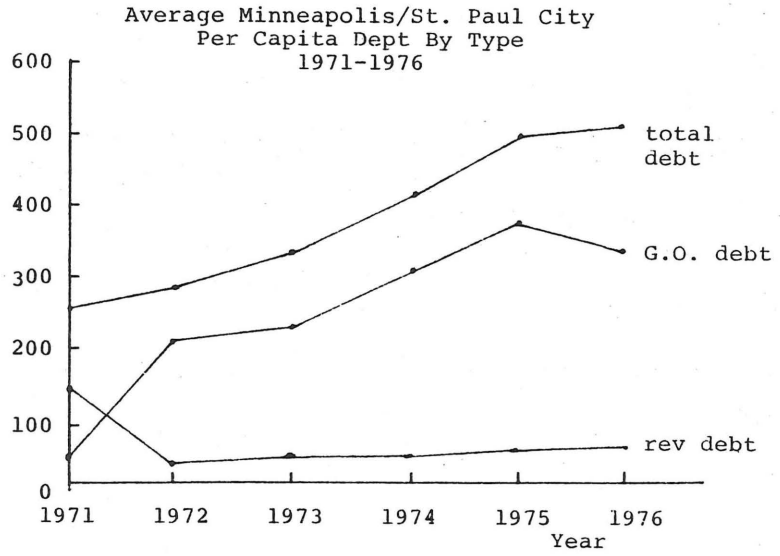
The tables show several important aspects of nonmetropolitan and metropolitan city debt:

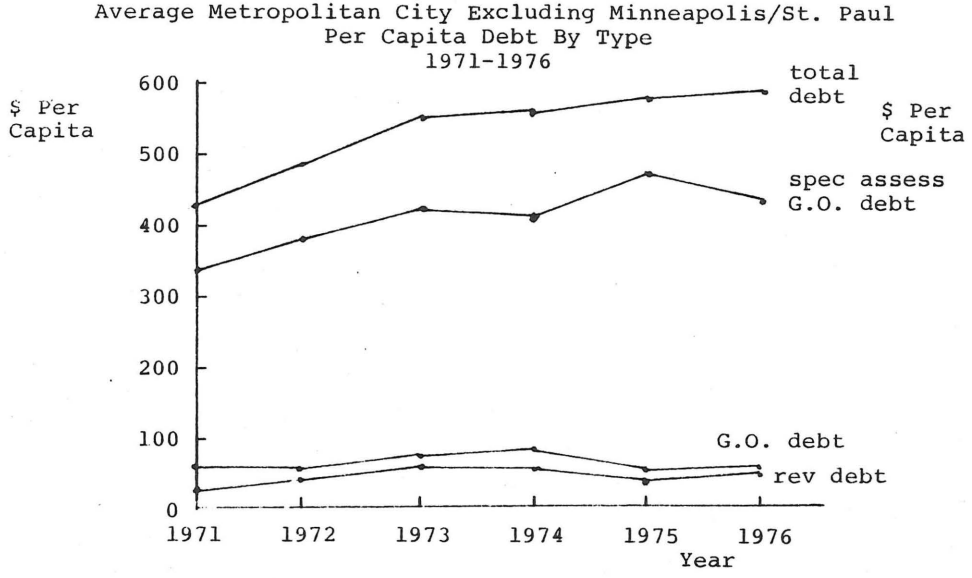
1. Most debt in the metropolitan cities is and has been special assessment debt, followed by G.O. debt, and revenue debt. This composition did not change its order during the years examined.
2. Minneapolis and St. Paul account for significantly larger portions of G.O. debt than do the balance of metropolitan cities.

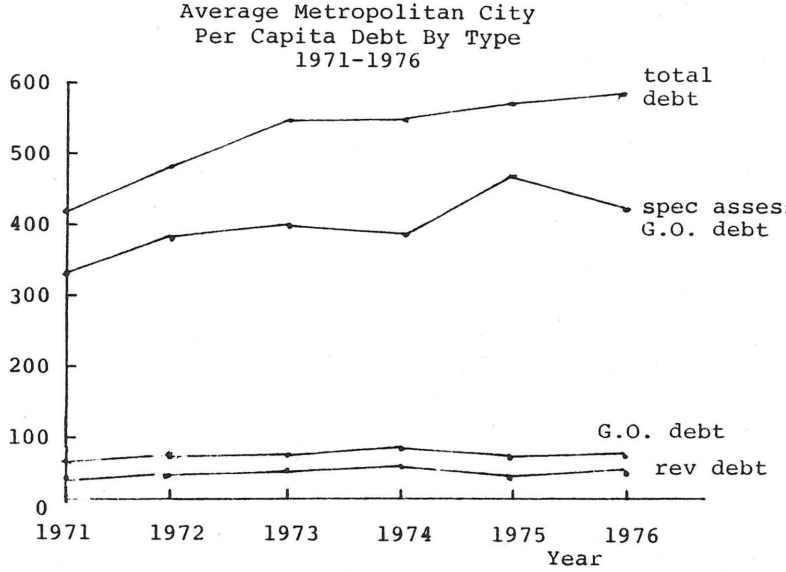
3. Debt of nonmetropolitan cities changed composition. In 1971, most debt in the nonmetropolitan cities was special assessment, followed by G.O. debt, and revenue debt, identical to the debt composition of metropolitan cities. Revenue debt surpassed special assessment debt in 1974. Since 1974, the average nonmetropolitan city's largest portion of debt has been revenue debt, followed by special assessment debt and G.O. debt.

Table 16


Average Nonmetropolitan City
Per Capita Debt By Type
1971-1976
$ Per Capita
600
500
400
300
200
100
0
total debt
spec assess G.O. debt
rev debt
G.O. debt
1971
1972
1973
1974
1975
1976
Year


Average Minneapolis/St. Paul City
Per Capita Dept By Type
1971-1976
$ Per Capita
600
500
400
300
200
100
0
total debt
G.O. debt
rev debt
1971
1972
1973
1974
1975
1976
Year


Average Metropolitan City Excluding Minneapolis/St. Paul
Per Capita Debt By Type
1971-1976
$ Per Capita
600
500
400
300
200
100
0
total debt
spec assess G.O. debt
G.O. debt
rev debt
1971
1972
1973
1974
1975
1976
Year


Average Metropolitan City
Per Capita Debt By Type
1971-1976
$ Per Capita
600
500
400
300
200
100
0
total debt
spec assess G.O. debt
G.O. debt
rev debt
1971
1972
1973
1974
1975
1976
Year

IV. DEBT MEASURES

IV. DEBT MEASURES

A. Purpose:

Debt measures are used by city and state government officials, bond rating agencies, and bond underwriters and buyers to evaluate the fiscal soundness and the credit-risk of investment in a city's bonds. Because debt measures select specific financial aspects, they are necessarily simplistic and may be superficial.

Debt measures have been developed by public officials and bond investors informally. Only recently has research attempted to understand how helpful debt measures are in predicting a city's financial soundness with respect to debt. Debt measures do not measure a city's financial condition. A city may meet its debt service payments but fail to deliver the types of services its citizens desire. As a result, the city may lose population, wealth, and future ability to meet debt service payments.

New York City's financial crises in 1975 raised serious questions about the usefulness of traditional debt measures. Ultimately it was the banking community, the largest underwriting group of New York City's bonds, that shut off the money supply to the city. The important lesson from New York City's

financial crisis is that debt evaluation requires more than simple debt ratios and bond ratings. The city defaulted on its bonds with a credit rating of 'A' - third best. Inaccurate financial reporting masked the city's true financial condition and made it impossible to determine whether the city could adequately handle present and projected debt levels. Simplistic debt measures did not take into account the city's declining social and economic base, its decreasing population and increasing poverty. In short, there were inadequacies in both the quantitative and qualitative measurements of the city's ability to repay debt. Debt measures were discarded, and the money supply was terminated.

The important implication of the New York City financial crisis for other cities is an intensified interest in examining city debt levels throughout the country to determine if they are holding "too much" debt. The bond market more closely scrutinizes the financial soundness of cities. This means it demands far more complete financial information when marketing bonds. Moody's Investment Service recently withdrew credit ratings of over 100 local governments in Minnesota because of their failure to submit financial information requested (see Appendix C).

Whether debt measures are accurate or inaccurate, good or bad, it is useful to examine how Minnesota cities

rank against some of them. Debt measures affect a city's access to the money market; they influence the costs of borrowing.

B. Types of Debt Measures

The most basic measure of risk involved in debt issuance is probably the risk to credit ratings. Credit ratings provide insight into the credit-worthiness of a city's bonds, and, indirectly, into the city's financial condition. Two major credit-rating firms produce credit ratings: Moody's Investment Service and Standard & Poors. Ratings from these firms are widely used by bond purchasers to evaluate the economic worth of a bond offering. Credit ratings help such people decide whether the cost and return on investment are reasonable, given the numerous and diverse types of municipal bonds sold.

The following credit ratings are offered by Moody's:

Aaa	-	Highest, most desirable rating, least risky investment.
Aa A		
Baa Ba B	-	Medium risk bonds.
Caa Ca C	-	Highest risk category

Ratings are based on both objective and subjective factors. Exact formulas for determining various

ratings are unknown. This is understandable since ratings are provided by profit-making institutions and there is a clear advantage in keeping the details of the trade a secret so that it cannot be duplicated.*

A Twentieth Century Fund report entitled "The Rating Game" contains a list of criteria often considered by credit rating agencies in rendering a credit rating. These measures include:

I. Amount and History of Debt

Gross indebtedness

Net indebtedness - Debt after making deductions for self-sustaining obligations, sinking funds, state assistance, etc.

Overlapping debt - Net debt plus the proportionate share of the indebtedness of any other governmental unit for which the community is liable.

Historical tax collections - Including records of levies, collections,and delinquencies.

Historical instances of default

---

*Of course it can be argued that this system is unfair since normal, freely fluctuating economic market conditions do not exist in the rating business. Two private firms hold a virtual monopoly in the rating business; there is little possibility for other firms to enter the market; there are no alternatives for cities to choose to market the bonds if they desire a nationally-recognized rating. Furthermore, local governments paying for a rating do not always know the standards it will be based upon and may not receive an explanation of why the rating is given or why it changes.

II. Financial Ratios

Debt per capita — Total outstanding tax-supported debt divided by the population. Acceptable per capita figures vary with the organization and size of the city.

Annual debt service payments as a percentage of total current revenue expenditures — Measures the current burden of debt service against the budget. This ratio should never exceed 20 to 25 percent.

Ratio of tax-supported debt to the assessed value of taxable real estate — Indicates unused debt capacity.

Overlapping debt as a percentage of per capita income.

Percentage of outstanding debt paid the previous year.

Percentage of capital outlays funded by current revenues - The higher the better.

Tax collections as a percentage of assessments - This should be greater than 95 percent and ideally 100 percent.

One additional debt measure is noteworthy. Lennox Moak, Director of Finance for the City of Philadelphia, and lecturer and professor of public finance at the Whorton School of the University of Pennsylvania asserts that total debt figures and net debt outstanding for cities may be misleading.* Moak believes that both principal and interest on debt payable at future dates should be reduced to a present value in order to understand the actual value of debt.

---

*Moak, Lennox L., and Hillhouse, Albert M., Local Government Finance in Theory and Practice, Municipal Finance Offices Association, Chicago, 1975, pp. 293-295.

Discounting future interest payments to a present value is called True Interest Cost (TIC) while the unweighted sum of interest payments is called Net Interest Costs (NIC). This concept works as follows.

A dollar today and a dollar one year from now do not have the same value. A dollar today could be invested to return an amount greater than one dollar one year from now. (Assuming a 6% interest rate, one dollar today can become $1.06 one year from now. Alternatively, at a 6% rate of interest, $.94 today would be needed to yield $1 one year from now.)

Consequently, when examining debt amounts and costs, it is important to know when the actual costs will occur. This is accomplished by calculating the present value of principal and interest. This procedure weights each bond payment by a discount factor for the appropriate year.

The present value for interest payments is the true interest cost (TIC). The following example illustrates this, assuming a 6% per year return on investment.

Method	Year Interest Paid						Total Interest Paid
	1978		1979		1980		
Net interest cost - NIC	$100	+	100	+	100	=	$300
True interest cost - TIC	$100	+	$\frac{100}{1.06}$	+	$\frac{100}{1.1236}$	=	$283.34

The repayment schedule can be changed without affecting the NIC. The TIC, however, changes dramatically with the time of repayment. If, for example, the $300 interest is not paid until 1980, the NIC shows the bill to be $300 while the TIC shows the value of the interest to be $267. This example deals only with interest on debt, but the same concept applies to debt principal. Using the TIC method, the value of debt outstanding depends on repayment schedules. Bond buyers would not consider the two examples to be equal, and neither should cities.*

---

*The State of Minnesota recognized this problem after experiencing an inefficient and embarrassing bond sale for the Highway Department in 1972. Twenty-five million dollars of twenty-year G.O. serial bonds were sold after the state accepted bids based on the net interest costs. While the NIC on all the bonds sold was 4.5%, interest on those bonds maturing during the first three years was 50%. Department of Finance bond experts estimate that the state lost $270,000 by not accepting the lowest bid and an additional $340,000 by using NIC. Thus, the state lost (or paid) an additional $610,000 because it based its bond-awarding decision partly on net interest costs.

The Department of Finance believes TIC forces disclosure of the lowest and most efficient bids to underwrite bonds. Since 1976, the Department of Finance only accepts bids based on TIC. However, this practice is not followed by all cities.

Research at the University of Minnesota indicates that cities are usually more concerned with the net interest cost than with the true interest cost when issuing bonds.* This means that city and state residents do not always obtain the most efficient bond arrangements possible. The implications for state policy are obvious: Does the state wish to take action to insure that cities more clearly understand the true costs of borrowing and true costs of debt outstanding?

C. Debt Measures

1. Credit Ratings

As noted in the beginning of this section, there are many ways to measure debt. Depending on the purpose for examining debt, various measurements are relevant. From the state's prospective, it is assumed that the purpose of measurement is to determine whether any Minnesota cities have excessive amounts of debt or whether they are misusing debt.

If cities do have excessive debt or are misusing debt, it would be known presumably. Moody's refusal to rate the St. Paul school system in 1976 shows that private money lenders do indeed communicate clearly. There is, however, no information that indicates Minnesota cities over 2,500 population have excessive debt or misuse debt.

---

*Ramsey, David, Optimal Financing of Local Government Capital Projects, PhD dissertation, Department of Economics, University of Minnesota, 1967.

Without this information, the best that can be done is to rank cities based upon criteria known to be relevant and indicative of debt levels. Ranking cities gives relative debt amounts outstanding. Ranking cities does not tell whether cities have too much debt. It does not follow that the higher the ranking, the worse a city is with respect to debt.

An important city debt measurement is its credit rating. On the following pages are the most recent credit ratings for cities over 2,500 population:

MOODY'S BOND RATINGS
MINNESOTA CITIES 1977
(Grouped by Rating)

Aaa

Minneapolis
Rochester

Aa

Bloomington
Edina
Fridley
Golden Valley
New Ulm
Red Wing
Richfield
Roseville
St. Louis Park
St. Paul
Virginia
Wayzata

A

Albert Lea
Alexandria
Arden Hills
Austin
Bemidji
Blue Earth
Brainerd
Breckenridge
Brooklyn Cneter
Burnsville
Caledonia
Chanhassen
Cloquet
Columbia Heights
Coon Rapids
Cottage Grove
Crookston
Deephaven
Duluth

A (Continued)

Eagan
Eden Prairie
Excelsior
Fairmont
Faribault
Fergus Falls
Grand Rapids
Granite Falls
Hastings
Hibbing
Hopkins
Hutchinson
Inver Grove Heights
Jackson
Le Sueur
Lino Lakes
Mankato
Maplewood
Mendota Heights
Minnetonka
Montevideo
Monticello
Moorhead
Mound
Mounds View
New Brighton
New Hope
North Mankato
North St. Paul
Northfield
Olivia
Orono
Owatonna
Pipestone
Plymouth
Redwood Falls
Rosemount
Sauk Rapids
Shakopee

A (Continued)

Shoreview
Shorewood
South St. Paul
Stewartville
Stillwater
St. Anthony
St. Cloud
St. James
St. Peter
Waseca
Wells
West St. Paul
White Bear Lake
Willmar
Winona
Worthington

Baa

Andover
Anoka
Apple Valley
Blaine
Brooklyn Park
Buffalo
Champlin
Crystal
East Grand Forks
Elk River
Farmington
Forest Lake
Glencoe
Hugo
Lake City
Lake Elmo
Lakeville
Litchfield
Little Canada
Little Falls
Long Prairie
Luverne
Maple Grove
Marshall
Medina
Minnetrista
Mora
Oakdale
Ortonville
Princeton
Prior Lake
Proctor

Baa (Continued)

Robbinsdale
Sartell
Sauk Centre
Savage
Spring Lake Park
Spring Valley
Thief River Falls
Two Harbors
Wadena
Waite Park
Windom
Woodbury

N.R. (not rated)

Afton
Aurora
Babbitt
Bayport
Benson
Cambridge
Chaska
Chisholm
Circle Pines
Dayton
Detroit Lakes
East Bethel
Ely
Eveleth
Falcon Heights
Gilbert
Ham Lake
Hermantown
Hoyt Lakes
International Falls
La Crescent
Mahtomedi
Morris
Mountain Iron
New Prague
Newport
Osseo
Park Rapids
Ramsey
Silver Bay
Sleepy Eye
Staples
St. Joseph
St. Paul Park
Vadnais Heights

Source: Moody's Investor's Service, Moody's Government Manual, 1978.

Minnesota cities rank in the upper half of the rating categories. No Minnesota city over 2,500 population has a rating below Baa; no Minnesota city has an unfavorable bond rating.

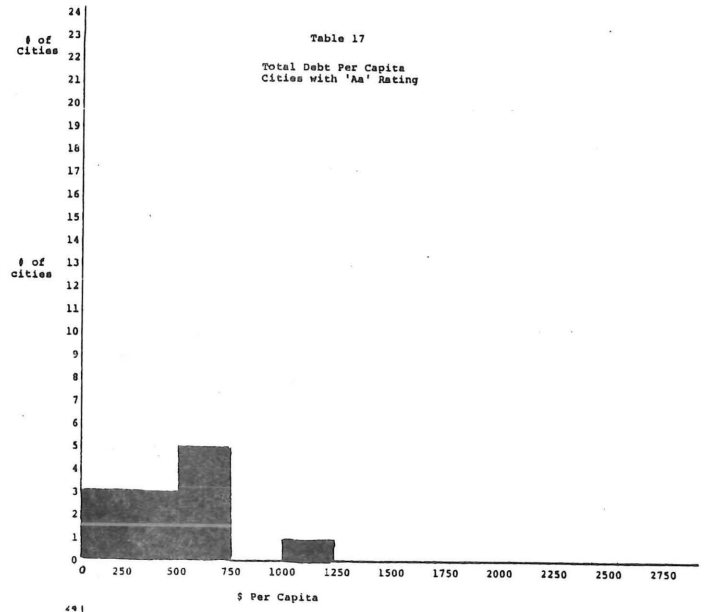
When ratings of metropolitan and nonmetropolitan cities are compared, there is a fairly even distribution between the two groups:

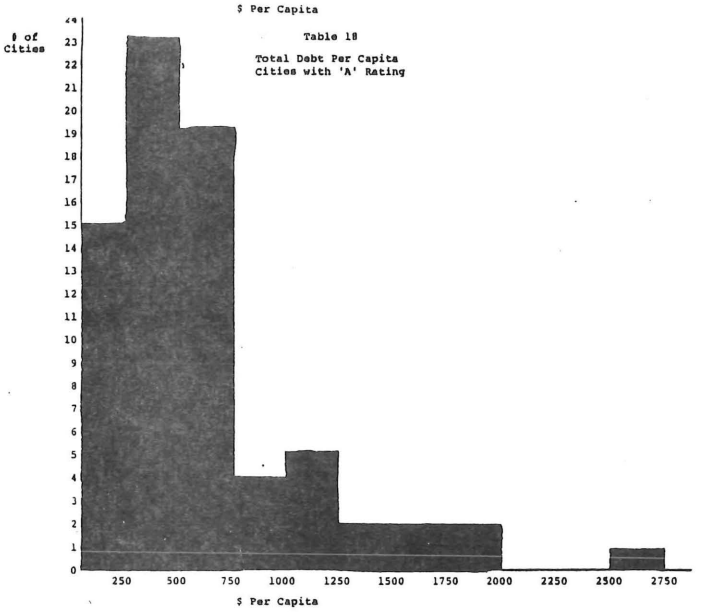
Rating	# Cities	% of Cities in Same Class
Rating - Aaa		
Metropolitan Cities	1	50%
Non-Metropolitan Cities	1	50%
Rating - Aa		
Metropolitan Cities	9	75%
Non-Metropolitan Cities	3	25%
Rating - A		
Metropolitan Cities	34	47%
Non-Metropolitan Cities	39	53%
Rating - Baa		
Metropolitan Cities	22	51%
Non-Metropolitan Cities	21	49%
Not rated:	35	
	165	Total

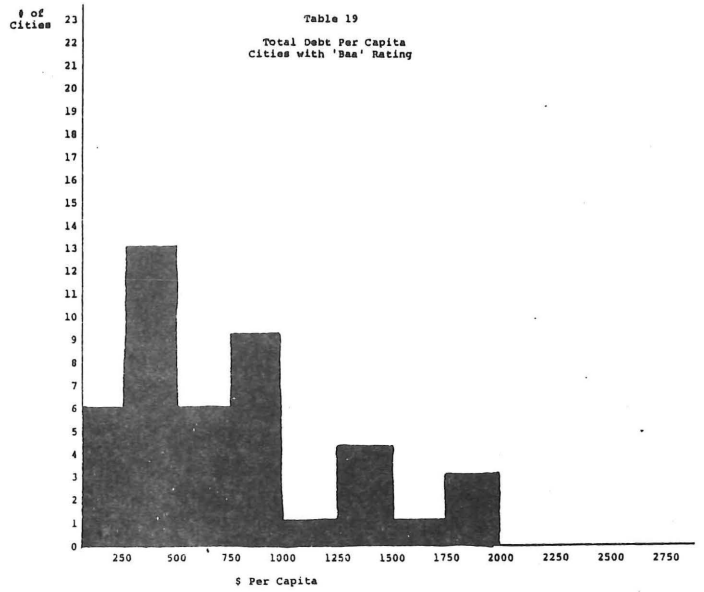
The exhibit above also shows that the greatest number of cities have an "A" rating, or third

highest. There is no normal or even distribution of ratings among Minnesota cities.

To determine whether a relationship exists between bond ratings and two traditional debt measures, ratings were compared to total debt per capita and debt as a percent of assessed value for individual cities. The following graph shows the number of cities listed by various per capita amounts for different ratings.


# of Cities
Table 17
Total Debt Per Capita
Cities with 'Aa' Rating
# of cities
0 250 500 750 1000 1250 1500 1750 2000 2250 2500 2750
$ Per Capita


# of Cities
Table 18
Total Debt Per Capita
Cities with 'A' Rating
250 500 750 1000 1250 1500 1750 2000 2250 2500 2750
$ Per Capita


# of Cities
Table 19
Total Debt Per Capita
Cities with 'Baa' Rating
250 500 750 1000 1250 1500 1750 2000 2250 2500 2750
$ Per Capita

As the above tables illustrate, the higher the per capital debt, the lower the credit rating. This trend is also evident when comparing average per capita debt for the three rating groups included in the tables. The higher the credit rating, the lower the per capita debt.

Rating	Per Capita Debt
Aa	$465
A	595
Baa	833

This same trend holds for debt as a percent of assessed value as well: The higher the credit rating, the lower the debt as a percent of assessed value.

Rating	Debt as % of Assessed Value
Aa	12.13%
A	19.55
Baa	29.77

Examining two traditional debt measures with respect to credit ratings shows a consistent pattern: The higher the rating, the lower the debt measure. This evidence supports the notion that there is a rational basis for credit ratings, i.e., ratings are based on specific data, or figures. Generally, cities with relatively high per capita debt or debt to assessed value ratios will have lower credit ratings.

2. Debt Per Capita

Debt per capita is probably the most frequently used debt measure. It was examined thoroughly in Sections II and III.

For this section it is useful to show the wide range in total debt per capita among Minnesota cities. The following ten cities held the highest total debt per capita in 1976.

	City	Total Debt Per Capita	Metro / Nonmetro
1.	Eden Praire	$2764	Metro - A
2.	Prior Lake	1973	Metro - Baa
3.	Minnetonka	1953	Metro - A
4.	Hutchinson	1871	Nonmetro - A
5.	Mora	1829	Non-metro- Baa
6.	Maple Grove	1798	Metro - Baa
7.	Chanhassen	1666	Metro - A
8.	Glencoe	1543	Nonmetro - Baa
9.	Plymouth	1536	Metro - A
10.	Minnetrista	1494	Metro - Baa

The highest cities are predominately metropolitan cities - seven out of ten cities. It is also important to remember that the "average" city in the state held per capita debt of $539. The spread in per capita values is very large.

3. Interest and Principal Payments

Interest and principal paid on debt are two other useful debt measures. They indicate the

portion of a city's revenues or expenditures that are "fixed" or predetermined with debt obligations. Also, cities with high amounts of debt outstanding and low interest or principal payments year after year are apparently not repaying their debt regularly.

Interest and Debt Service as a Percent of Expenditures

Table 20 provides information about the relationships of interest and debt service (principal plus interest) to expenditures for cities grouped by population. Table 20 shows that interest as a percent of current expenditures is highest in the metropolitan cities. This could be due to the recent development of metropolitan suburbs and their attendant growth in debt. Interest as a percent of current expenditures may be lower in the nonmetropolitan cities because their debt is older and was borrowed at lower interest rates.

Interest as a percent of current expenditures is highest in those city sizes of the highest per capita debt: Metropolitan cities between 5,000 and 20,000 population.

Both interest and debt service as a percent of expenditures are higher for metropolitan cities than for nonmetropolitan cities for every corres-

ponding city size. This not only reflects the metropolitan area's higher debt level in 1976, but also indicates that metropolitan cities devote considerably larger portions of their budgets to debt activities than do nonmetropolitan cities. The greater debt burden for metropolitan cities is significant. This may be due to metropolitan cities' heavy reliance on special assessment G.O. debt. Special assessment G.O. debt usually generates its own revenues though it is still secured by the city's full faith and credit.

When examined over time, debt service as a percent of total expenditures is consistently higher for metropolitan cities than for nonmetropolitan cities. Table 21 illustrates this trend from 1967 to 1976.

portion of a city's revenues or expenditures that are "fixed" or predetermined with debt obligations. Also, cities with high amounts of debt outstanding and low interest or principal payments year after year are apparently not repaying their debt regularly.

Interest and Debt Service as a Percent of Expenditures

Table 20 provides information about the relationships of interest and debt service (principal plus interest) to expenditures for cities grouped by population. Table 20 shows that interest as a percent of current expenditures is highest in the metropolitan cities. This could be due to the recent development of metropolitan suburbs and their attendant growth in debt. Interest as a percent of current expenditures may be lower in the nonmetropolitan cities because their debt is older and was borrowed at lower interest rates.

Interest as a percent of current expenditures is highest in those city sizes of the highest per capita debt: Metropolitan cities between 5,000 and 20,000 population.

Both interest and debt service as a percent of expenditures are higher for metropolitan cities than for nonmetropolitan cities for every corres-

ponding city size. This not only reflects the metropolitan area's higher debt level in 1976, but also indicates that metropolitan cities devote considerably larger portions of their budgets to debt activities than do nonmetropolitan cities. The greater debt burden for metropolitan cities is significant. This may be due to metropolitan cities' heavy reliance on special assessment G.O. debt. Special assessment G.O. debt usually generates its own revenues though it is still secured by the city's full faith and credit.

When examined over time, debt service as a percent of total expenditures is consistently higher for metropolitan cities than for nonmetropolitan cities. Table 21 illustrates this trend from 1967 to 1976.

TABLE 20

1976 Interest and Debt Service
As a Percent of Expenditures

Interest as Percent of Current Expenditures

City Size	Nonmetro Cities	Metro Cities
Under 2,500	10.4%	14.0%
2,500- 5,000	9.3%	19.4%
5,000-10,000	9.6%	27.7%
10,000-20,000	7.9%	20.9%
20,000-100,000	5.7%	17.6%
Over 100,000	---	5.9%

Debt Service as Percent of Total Expenditures

City Size	Nonmetro Cities	Metro Cities
Under 2,500	19.2%	23.3%
2,500- 5,000	13.5%	35.3%
5,000-10,000	15.6%	28.2%
10,000-20,000	18.5%	41.3%
20,000-100,000	10.0%	36.5%
Over 100,000	----	15.1%

TABLE 21

DEBT SERVICE AS % OF TOTAL EXPENDITURES:
Metropolitan, Nonmetropolitan Cities

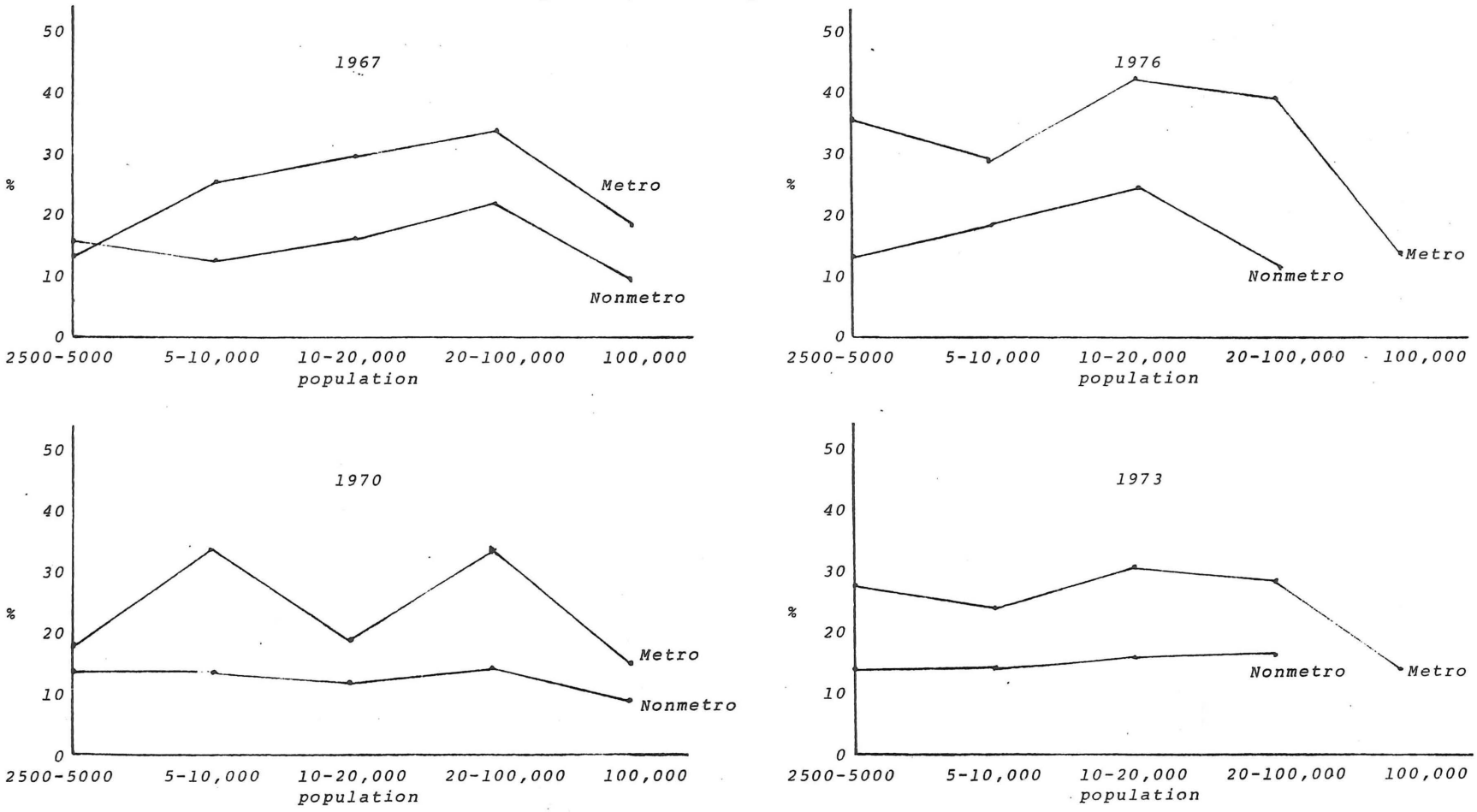


Table 22 provides information about the relationship of debt to locally raised taxes (property tax) in 1976.

Debt Service as a Percent of Local Taxes

Debt service (principal plus interest) metropolitan cities paid in 1976 as a portion of local taxes exceeded the amounts paid by nonmetropolitan cities. The amount of debt service metropolitan cities paid exceeded the amounts raised by local taxes for all but the smallest city size. Generally, as both metropolitan and nonmetropolitan cities become larger, debt service as a percent of local taxes decreases.

Table 22 shows that Minnesota's cities, especially the smaller cities, are dependent on other revenues such as special assessments or state municipal aids to help meet their debt service costs.

TABLE 22

1976 Debt Service as Percent of Local Taxes

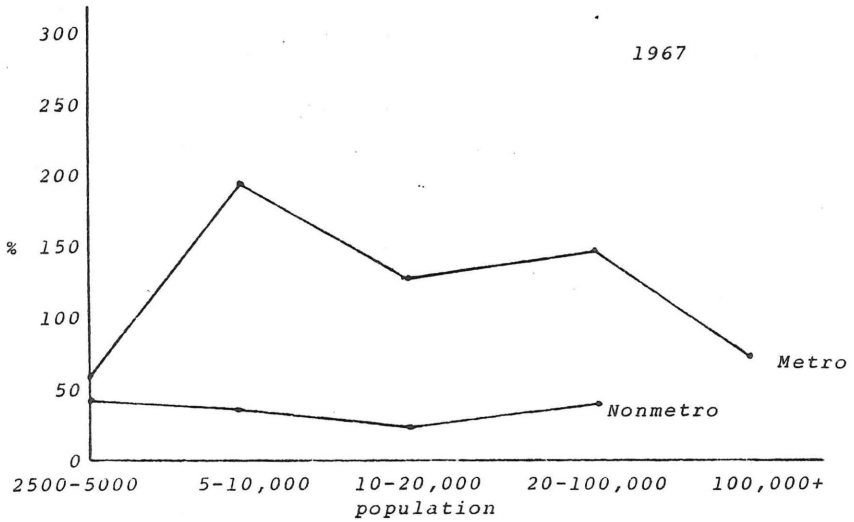
City Size	Nonmetro Cities	Metro Cities
Under 2,500	117%	97%
2,500-5,000	82%	191%
5,000-10,000	102%	248%
10,000-20,000	99%	291%
20,000-100,000	53%	226%
Over 100,000	---	101%

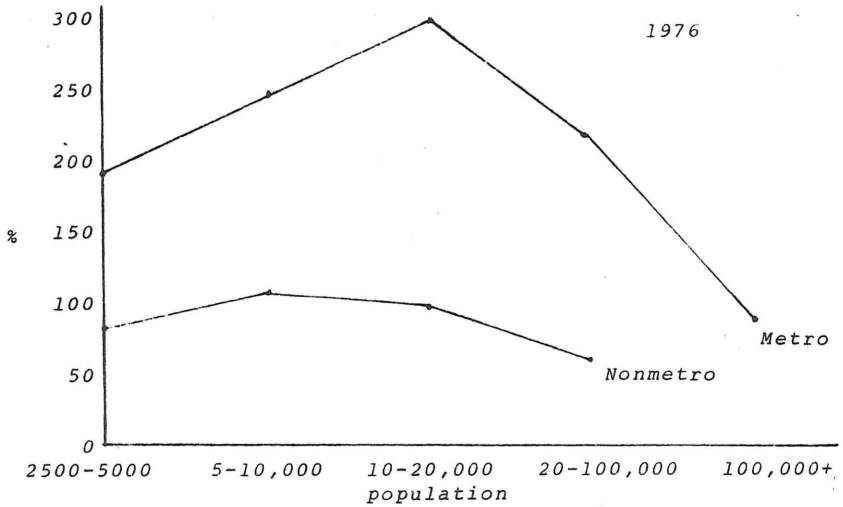
The dependence of smaller cities on other revenues is not a new phenomenon. It has occurred for most metropolitan city sizes since 1967. Table 23 illustrates this. As Table 22 illustrated for expenditures, the debt service as a percent of property taxes for metropolitan cities in Table 23 may be especially high due to their high use of special assessment G.O. debt. Nevertheless, Table 23 underscores the magnitude of of debt service costs compared with property taxes.

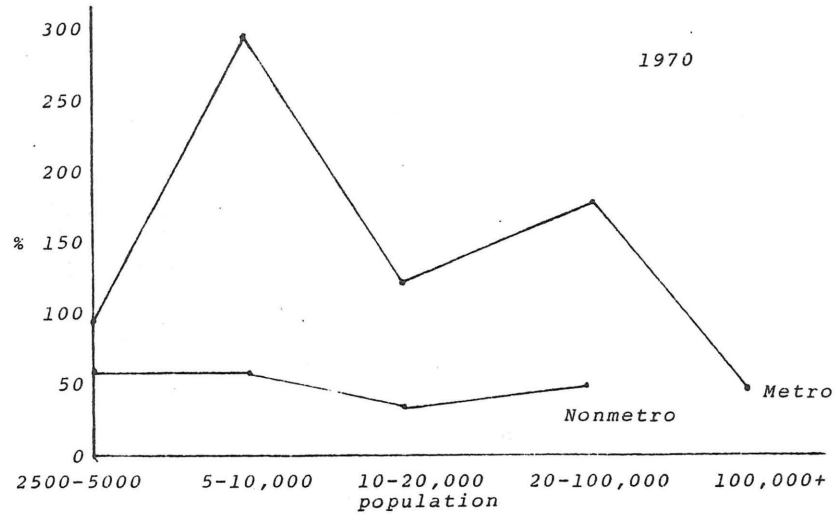
When debt service as a percent of property taxes, interest, and total expenditures are computed for individual cities for 1976, the highest ten ratios are for metropolitan cities in all three cases. This further supports the finding that metropolitan cities commit

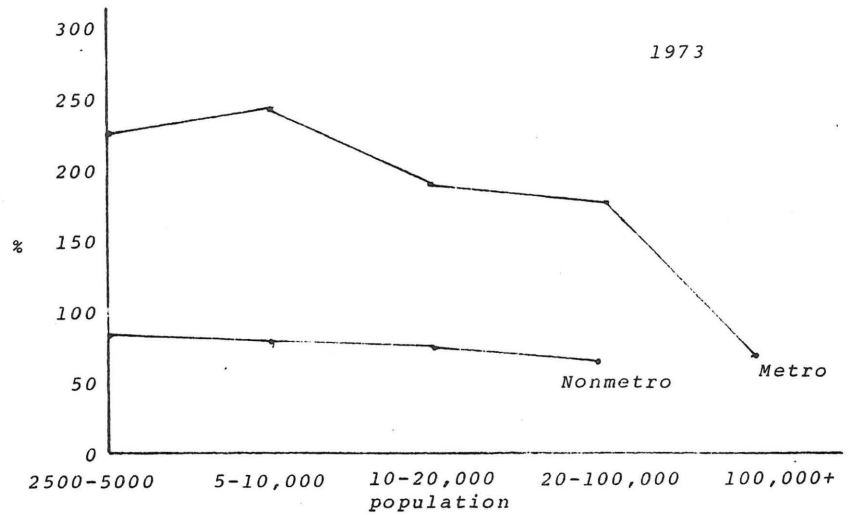
Table 23

DEBT SERVICE AS % OF PROPERTY TAX:
Metropolitan, Nonmetropolitan Cities









larger portions of local revenues and expenditures to pay interest and principal on debt.

4. Debt as a Percent of Market Value

Since the property tax is a city's ultimate security for debt repayment, debt outstanding related to property value provides a useful measure of the extent to which a city has "mortgaged" its wealth.

Total debt outstanding for 1976 was divided by the "true" 1976 market value of cities using Department of Revenue Sales ratio studies and tax abstracts. The results are listed in Appendices D and E.

The highest ratios were found in nonmetropolitan cities of the smallest population class - 2500 to 5000 population. Spring Valley and Mora held the highest ratios of debt to market value with 22.2% and 21.0% respectively. The ten highest debt-to-market-value ratios were:

	City	Debt/MV	Metro /Nonmetro
1.	Spring Valley	22.2	Nonmetro
2.	Mora	21.0	Nonmetro
3.	East Grand Forks	20.3	Nonmetro
4.	Hutchinson	19.0	Nonmetro
5.	Breckenridge	18.9	Nonmetro
6.	Marshall	17.4	Nonmetro
7.	Thief River Falls	17.4	Nonmetro
8.	Glencoe	16.7	Nonmetro
9.	Minnetonka	16.2	Metro
10.	Maple Grove	16.0	Metro

It is clear that the nonmetropolitan cities, particularly the smaller ones, bear relatively higher debt-to-market-value burdens than do their metropolitan counterparts.

5. Composite Rankings of Debt Measures

This section has listed Minnesota cities based on four debt measures: credit ratings, total debt per capita, interest and principal payments, and debt divided by market value. Credit ratings by rating firms is one composite measure of debt capacity. A combination of the remaining three measures - total debt per capita, debt service divided by expenditures, and total debt divided by market value - may offer a useful alternative list.

Table 24 displays the composite rankings using total debt per capita, debt service divided by expenditures, and debt divided by market value. Table 24 divides cities grouped in four groups according to the composite rankings: highest (I) to lowest (IV).

Group I, the highest scoring cities, consists mainly of growing metropolitan cities. There are, however, several important nonmetropolitan cities in Group I:

Hutchinson
Spring Valley
Windom
Glencoe
Mora
Stewartville
East Grand Forks
Worthington
Fairmont
Thief River Falls
Willmar
Breckenridge
Marshall

Additional examination of city debt should begin with those cities in Group I, particularly if they are losing population, property value, or personal income.

It should be noted that St. Paul and Minneapolis fall in the middle of the rankings.

Table 24

RANK SCORE ON
TOTAL DEBT PER CAPITA,
DEBT SERVICE DIVIDED BY EXPENDITURES,
DEBT DIVIDED BY MARKET VALUE-1976

Group I	Rank
Hutchinson	1
Minnetonka	2
Prior Lake	3
Plymouth	4
Vadnais Heights	5
Maple Grove	6
Spring Valley	7
Eden Prairie	8
Eagan	9
Shorewood	10
Windom	11
Shoreview	12
Glencoe	13
Mendota Heights	14
Apple Valley	15
Little Canada	15
Mora	16
Stewartville	17
Forest Lake	18
Oakdale	19
Deephaven	19

Group I (Continued)	Rank
East Grand Forks	20
Rosemount	21
Coon Rapids	22
Worthington	23
Fairmont	24
Mounds View	25
Inver Grove Heights	26
Theif River Falls	27
Farmington	28
Minnetrista	29
Woodbury	30
Willmar	31
Breckenridge	32
Chaska	33
Orono	34
Marshall	35
Maplewood	36
Bloomington	37
Burnsville	38
New Brighton	39
Elk River	40

Group II	Rank
Mankato	41
Lakeville	42
Waite Park	43
New Prague	44
Le Seuer	45
Circle Pines	46
Ortonville	47
Long Prairie	48
Stillwater	49
Medina	49
North St. Paul	49
Andover	50
Brooklyn Park	51
Sauk Center	51
Buffalo	51
North Mankato	52
Grand Rapids	53
Caledonia	54
Northfield	54
St. Paul	55
Virginia	56
Mound	57

Group II (Continued)	Rank
Blaine	58
West St. Paul	58
Richfield	58
Spring Lake Park	59
Fergus Falls	60
New Hope	61
Olivia	62
Lake City	63
Blue Earth	63
Bemidji	63
Cottage Grove	64
Sartelle	64
St. Cloud	65
Little Falls	66
Hastings	67
St. Louis Park	67
Newport	68
Albert Lea	69
Moorhead	69
Roseville	69

Group III

Fridley	70
Champlin	71
Wells	71
Minneapolis	72
Monticello	72
Red Wing	72
Crookston	73
New Ulm	74
Shakopee	74
South St. Paul	75
Arden Hills	76
Sauk Rapids	77
Cambridge	78
Mahtomedi	79
St. James	79
Austin	81
Granite Falls	82
Princeton	83
La Crescent	84
Brooklyn Center	85
Benson	86
St. Paul Park	87
Osseo	88
Redwood Falls	88
Hugo	89
Hermantown	90
Luverne	91
White Bear Lake	92
Lake Elmo	92
St. Peter	92
Staples	93
Golden Valley	93
Detroit Lakes	94
Edina	95
Crystal	96
Two Harbors	97
Sleepy Eye	98
Alexandria	99
Wayzata	100
Cloquet	101
Brainerd	101
Hibbing	101
St. Joseph	101

Group IV

Anoka	102
Faribault	103
Litchfield	103
Proctor	104
St. Anthony	105
Owatonna	105
Pipestone	106
Hopkins	107
Wadena	108
Excelsior	109
Morris	109
Duluth	110
Chisholm	111
Eveleth	112
Chanhassen	112
Montevideo	114
Jackon	115
Park Rapids	116
Rochester	117
Waseca	117
International Falls	117
Savage	119
Columbia Heights	120
Silver Bay	120
Falcon Heights	121
Winona	121
Hoyt Lakes	123
Lino Lakes	124
East Bethel	125
Mountain Iron	126
Aurora	127
Gilbert	128
Dayton	129
Robbinsdale	130
Ham Lake	131
Afton	132
Babbitt	132
Bayport	132
Ely	132
Ramsey	132

Clearly these composite rankings do not supercede Moody's credit ratings. Nor do they proport to be the definitive answer to which cities have "too much debt." (Not enough theoretical work has been done to answer the question, "What is too much debt?") These listings are based merely on factors discussed here, applying equal importance to each factor.

6. Debt Limitations

As noted in section I, state law imposes limits on net city debt outstanding of 6 2/3% of assessed value for statutory cities and of 3 1/3% of market value for charter cities. Appendix A discusses these limits, their historical development, and exceptions. Appendix A shows that these limits do not appear to be based on rational determination of how much debt a city can safely h hold or of what consitutes "too much debt." The limit is arbitrary. More important, many types of bonds are exempted from the limit. The statutory debt limits do not control debt.

TABLE 25

PROXIMITY OF CITIES TO DEBT LIMITS-
BASED UPON AVERAGE PER CAPITA LIMITS

State	Average P.C. Limit	= Average P.C. G.O Debt	+ Remaining Bonding Authority
1976	2,017	83	1,919
1975	1,810	91	1,663
1974	1,608	88	1,511
1973	1,520	84	1,436
1972*	1,218	62	1,403
1971*	1,321	58	1,147
Non-Metro			
1976	1,591	104	1,458
1975	1,412	115	1,287
1974	1,229	88	1,141
1973	1,207	96	1,112
1972*	1,131	71	919
1971*	1,083	64	892
Metro-Mpls./St. Paul			
1976	2,458	55	2,404
1975	2,248	57	2,083
1974	2,026	83	1,924
1973	1,863	67	1,796
1972*	1,698	49	1,553
1971*	1,573	52	1,419
Mpls./St. Paul			
1976	2,208	351	1,857
1975	2,104	382	1,722
1974	2,024	310	1,714
1973	1,955	232	1,724
1972*	1,926	208	1,304
1971*	1,845	55	1,682

*Adjusted for changes in assessment practices.
Note: Numbers will not add to total average due to rounding.

This can best be illustrated in the following manner. Assume that all Minnesota cities over 2500 population are statutory cities subject to the 6 2/3% debt limit. Further, assume that all city G.O. debt is subject to the 6 2/3% of assessed value debt limit. (It would be time-consuming if not impossible to compute the actual debt limits for each city.)

Table 25 lists the average per capita debt limit, the average per capita G.O. debt, and the average per capita bonding authority remaining for an "average" city in a given geographic location.

Table 25 indicates that, for all geographic groups and for all years examined, there is a large portion of remaining bonding authority. This implies that cities' use of debt is not controlled by statutory debt limits.

When averages for metropolitan and averages in nonmetropolitan cities are compared, it is clear that nonmetropolitan cities are more tightly constrained by the debt limits than

are metropolitan cities. (The ratio of average per capita remaining bonding authority to average per capita debt limit is higher for nonmetropolitan than for metropolitan cities.)

Appendix F shows the proximity of individual cities over 2500 population to debt limits. (The same assumptions made above are made in Appendix F.) Appendix F shows that no Minnesota city is significantly constrained by the debt limits.

Debt limits, therefore, do not appear to limit debt, which raises several important state policy questions:

1. Is the cost of borrowing actually higher for cities because of the types of bonds sold to circumvent the debt limits, e.g., revenue bonds, special assessment G.O. bonds, tax increment bonds?

2. Will cities borrow in spite of debt limits if not simply at higher interest rates?

3. What state policies do debt limits serve?

V. EXAMINATION OF SHORT-TERM DEBT

V. EXAMINATION OF SHORT-TERM DEBT

A. Purpose

A major concern of the Governor and Legislature, which led to the state-local fiscal study, was whether Minnesota cities were "rolling over" short-term debt. This condition led to the acute financial crisis New York City experienced in 1975. One of the specific tasks of the study was to prepare and submit to the Legislature a list of all cities over 2,500 population that have short-term operating debt which carries beyond the end of their fiscal year.

B. Definition of Short-Term Debt: Interest-bearing debt usually payable within one year from the date of issue, such as bond anticipation notes, bank loans, and tax anticipation notes and warrants. This includes obligations having no fixed maturity date if payable from a tax levied for collection in the year of their issuance.

C. Definition of "rolling over" short-term debt: Some Minnesota cities occasionally incur short-term debt to meet operating costs. This is a commonly accepted financial practice, provided it does not occur year after year in ever-increasing amounts. This is the situation that led to the New York City fiscal crisis and is termed rolling over short-term debt.

D. Findings

1. The number of Minnesota cities issuing short-term debt has increased from 27 in 1967 to 63 in 1975.

2. Tables 26 and 27 show that the dollar amount of short-term debt borrowed during the period examined has been erratic. It does not show a pattern of steady increase.

TABLE 26

Minnesota City Short-Term Debt - 1967-1976

	$ Borrowed (Millions)	Number of Cities Borrowing
1976	$ 2.300	44
1975	2.900	63
1974	10.200	44
1973	11.600	30
1972	1.800*	34
1971	.316	24
1970	3.900	21
1969	.526	24
1968	6.200	29
1967	10.600	27

*Corrected for a $12,160,000 reporting error where St. Paul City short term debt was converted to long term but misclassified in the state auditor reports.

3. To determine whether cities were rolling over short-term debt from 1967-1976, the State Planning Agency first examined data published by the State Auditor. This examination indicated

that no cities are rolling over short-term debt as defined above. However, state auditor's data were based on locally prepared financial reports and the Planning Agency found that local officials were using different definitions and procedures for reporting short-term debt. The Planning Agency examined local financial records of those cities that reported short-term debt between 1971-75.

4. This detailed case by case analysis of individual cities showed that no Minnesota city exhibited a pattern of rolling over short-term debt, i.e., no Minnesota city incurred short term debt in ever-increasing amounts.

5. Lacking a uniform definition of short-term debt, state auditor data on city short-term debt will not provide adequate information for continuing analysis of cities' short-term debt patterns. Until such definitions are established and enforced, efforts to determine whether cities are rolling over short-term debt must be done on a case-by-case basis.

6. The dollar amounts of short-term debt borrowed for individual cities from 1967 to 1976 are listed in Appendix B.

APPENDICES

Appendix A

HISTORY OF DEBT LIMITS

The earliest legislative efforts in Minnesota to limit the amounts of G.O. debt can be traced back to about 1870. In the state's first general municipal incorporation act, cities were limited to total debt of $15,000 unless approved by a referendum vote of two-thirds of the voters (1870 Session laws, Chapter 31, Subdivision 4, Section 7). By 1893, the State adopted a general debt limit which was expressed as a percentage of assessed value of property. Session laws of 1893, Chapter 205 gave cities the right to issue bonds for various permanent improvements for up to 5% of assessed value (AV) with the possible increase of up to 10% of AV or approved by a referendum vote of two-thirds. The law also restricted the duration of bonds to not longer than 30 years and limited the interest rate paid by the city to 5%. Minnesota's debt laws were revised and changed frequently between 1893 and 1927 -- with the 1927 statute defining "net debt" and allowing certain types of debt to be exempted from the net debt limits. The 1927 laws set the net debt limit at 10% of AV for cities other than the first class cities and at 5% for first class cities unless their charter permitted a higher debt. The 1927 law listed other important exceptions to the net debt limits. These included: special assessment bonds, warrants

or orders having no fixed maturity, permanent improvement fund bonds, and sinking fund bonds.

In 1949, the debt limits were increased from 10% to 20% of AV for non-first class cities and to 10% of market value for first class cities. Conversations with Fred Memmer, Chairman of the House Judiciary Committee, indicate that the debt limit was increased simply to give greater bonding power to cities. In 1973, the method of assessing property value was changed to bring the property closer to market value. This resulted in a reduction in the net debt limits by a factor of three: 20% became the present 6 2/3% net debt limit for cities other than first class, 10% became the present 3 1/3% net debt limit for first class cities.

At present the net debt limits set by law are not calculated by most cities. (Minneapolis and St. Paul are the only cities whose annual financial reports state their net debt limits.)

The attorney general's office confirms that no individual or agency in state government is responsible for the enforcement of debt limits. Bond attorneys provide the greatest safeguard in that they assure bond purchasers that all statutory and financial conditions have been met and that the bonds are valid and legal. (This is stated in a bond attorney's opinion.) This process could be

described as a type of honor or "self-policing" system. But the system is one the state has no record of or control over.

In addition to the changes in the net debt limits and exceptions, other types of bonds have been excluded from net debt computations since 1927. In 1949, revenue bonds were excluded from net debt limit; tax increment financing bonds were excluded in 1969. Furthermore, the Legislature frequently exempts bonds sold to finance specific projects from the net debt limits. Since these laws pertain only to individual cities, they are never codified in Minnesota statutes. Examples of these bonds are on the following page.

SPECIAL ACTS EXCLUDING CERTAIN BOND ISSUES FROM DEBT LIMITATIONS

Albany	Laws 1957 Chapter 909*	
Anoka	Laws 1967 Chapter 530	$750,000 Sports Rec. Facility
Aurora	Laws 1957 Chapter 457	$410,000 Sewage Plant
Babbitt	Laws 1961 Chapter 199	$1.2 Million Various Improvements
Belgrade	Laws 1955 Chapter 311	$75,000 Municipal Bldg.
Bigelow	Laws 1975 Chapter 11	$45,000 Fire Hall
Bloomington	Laws 1975 Chapter 195	$4 Million Housing Finance
Carver County	Laws 1967 Chapter 648	Highway Right-of-Way - Tied to Previous Two-Year Levy for Road and Bridge
Coon Rapids	Laws 1967 Chapter 33	Unspecified - Recreation also a Validating Act
Duluth	Laws 1974 Chapter 130	$2 Million Federal Matching Fund
Elk River	Laws 1974 Chapter 537	$260,000 Library
Ellendale	Laws 1974 Chapter 93	$120,000 - Unknown
Emmons	Laws 1973 Chapter 537	$30,000 Refunding
Hoyt Lakes	Laws 1959 Chapter 664	$1.5 Million Water - Sewer
Ivanhoe	Laws 1963 Chapter 372	Unspecified/Hospital-Nursing Home
Kimball	Laws 1967 Chapter 296	$35,000 Clinic
Mankato	Laws 1969 Chapter 239	Amount Unspecified - Storm Sewer
Maplewood	Laws 1967 Chapter 505	$250,000 Storm Sewers
Marble	Laws 1955 Chapter 334	$60,000 Water Facilities
Medford	Laws 1975 Chapter 109	$275,000 Fire Hall
Milaca	Laws 1959 Chapter 522	$140,000 Storm Sewers
Minneapolis	Laws 1971 Chapter 405**	
Orr	Laws 1976 Chapter 311	$125,000 Fire Hall
Otter Tail County	Laws 1955 Chapter 159	Unspecified-Ten Year Maturity Tied to 1/2 Mill Levy
Ramsey County	Laws 1973 Chapter 719 Laws 1974 Chapter 581	$400,000 Hospital $5.6 Million Hospital

St. Louis Park	Laws 1965 Chapter 443	$350,000 Highway Improvement
St. Paul	Laws 1955 Chapter 752	$500,000 Veterans Service Bldg.
	Laws 1955 Chapter 353	$650,000 Detention Facilities
	Laws 1957 Chapter 390	$500,000 Detention Facilities
	Laws 1957 Chapter 938	$11.6 Million Hospital
	Laws 1965 Chapter 708	$1 Million Flood Damage
	Laws 1967 Chapter 459	$13 Million Civic Center
	Laws 1973 Chapter 326	$5 Million Recreation
	Laws 1974 Chapter 351	$3 Million Housing Finance
	Laws 1975 Chapter 260	$2 Million Housing Finance
Sherburne County	Laws 1957 Chapter 331	Unspecified - County Fair Buildings
Silver Bay	Laws 1961 Chapter 95	$1.75 Million Various Improvements
	Laws 1965 Chapter 427	$425,000 General
S. St. Paul	Laws 1965 Chapter 144	$300,000 Flood Control
	Laws 1975 Chapter 195	$4 Million Housing Finance
Two Harbors	Laws 1967 Chapter 265	$300,000 Refunding
W. St. Paul	Laws 1967 Chapter 458	$900,000 Highway Improvement
Windom	Laws 1959 Chapter 401	$150,000 Street - Sewers
Winona	Laws 1957 Chapter 163	$120,000 Airport Hangar
	Laws 1959 Chapter 292	$250,000 Water Works
Winsted	Laws 1971 Chapter 465	$50,000 Clinic
Wykoff	Laws 1975 Chapter 22	$70,000 Fire Hall and Municipal Building

Source: Compiled by Louis W. Claeson, Jr.
then Assistant Senate Counsel
September 9, 1976

---

* Authorizes a debt of up to 50 percent of assessed value.
** Parkway improvement tied to twenty-year maturity as can be retired by annual levy of 3/4 mill.

APPENDIX B

SHORT TERM DEBT BORROWED--1967 TO 1976 1
78/04/13.

CITY	POPULATION	YEAR	SHORT TERM DEBT BORROWED
***			
* AITKIN	1881	1974	245575
* ALBERTA	144	1973	1000
* ALBERTA	139	1976	4000
* ALVARADO	295	1967	98000
* ANOKA	12674	1967	10000
* APPLETON	1749	1974	31000
* APPLETON	1793	1975	675000
* AUDUBON	281	1967	4186
* BEAVER BAY	354	1969	4560
* BEAVER BAY	346	1976	2250
* BECKER	477	1975	38000
* BELLE PLAINE	2481	1975	6350
* BENA	239	1976	800
* BIRCHWOOD	893	1969	10000
* BLOOMING PRAIRIE	1821	1971	28992
* BLOOMING PRAIRIE	1855	1973	15000
* BLUE EARTH	4035	1967	10000
* BLUE EARTH	3970	1971	24350
* BOYD	343	1967	500
* BRAINERD	11672	1976	50000
* BRANDON	401	1968	20000
* BRANDON	417	1971	11000
* BRANDON	421	1972	6000
* BRANDON	425	1973	4000
* BROOKLYN CENTER	31927	1967	9500
* BROOTEN	633	1972	95000
* BROWNTON	685	1971	17000
* BROWNTON	681	1973	52824
* BUHL	1333	1975	80000
* CAMBRIDGE	2681	1975	50000
* CARLTON	884	1970	13000
* CARLTON	937	1973	9000
* CARVER	608	1969	2000
* CARVER	669	1970	5500
* CASS LAKE	1295	1972	9308
* CHAMPLIN	6092	1972	8653
* CHAMPLIN	7111	1974	10672
* CHANHASSEN	3952	1968	9250
* CHANHASSEN	4415	1969	6141
* CHISHOLM	6047	1974	100000
* CHISHOLM	6074	1975	200000
* CHISHOLM	6074	1976	300000
* CLEARWATER	281	1969	4000
* CLEVELAND	494	1975	24722
* COLERAINE	1150	1976	50000
* COSMOS	553	1968	1000
* COSMOS	561	1969	1500
* COSMOS	618	1976	38675
* COTTAGE GROVE	14910	1972	200000

(Appendix B - Cont.)

SHORT TERM DEBT BORROWED--1967 TO 1976 2
78/04/13.

CITY	POPULATION	YEAR	SHORT TERM DEBT BORROWED
***			
* COTTONWOOD	837	1975	16000
* COURTLAND	287	1968	1000
* DAWSON	1667	1976	12000
* DEER CREEK	292	1968	5396
* DEER RIVER	850	1968	12500
* DEERWOOD	460	1971	4000
* DEERWOOD	539	1975	500
* DELAVAN	292	1972	8000
* DELAVAN	306	1976	5000
* DETROIT LAKES	6345	1976	100000
* DEXTER	286	1974	18284
* DULUTH	98232	1972	50000
* DULUTH	93971	1976	15000
* EAGLE LAKE	1046	1973	20994
* EAGLE LAKE	1007	1975	22000
* EDEN VALLEY	830	1975	76515
* EDINA	47989	1975	1000000
* ELK RIVER	2456	1971	95355
* ELK RIVER	2660	1972	60624
* ELK RIVER	2865	1973	171706
* ELLSWORTH	542	1974	20000
* ELMORE	837	1975	20000
* FAIRFAX	1382	1972	107000
* FAIRFAX	1271	1975	30000
* FAIRMONT	11181	1973	300000
* FARIBAULT	16255	1976	900000
* FERGUS FALLS	12368	1974	200000
* FISHER	388	1972	2500
* FLOODWOOD	650	1970	10000
* FRAZEE	1015	1970	46755
* GARY	234	1975	5000
* GENEVA	374	1973	315000
* GLENVILLE	730	1969	3150
* GOODHUE	590	1973	2000
* GOODVIEW	2341	1975	13130
* GRAND MEADOW	914	1972	144130
* GRAND MEADOW	951	1976	28000
* GRANITE FALLS	3239	1973	60000
* GROVE CITY	570	1975	7979
* HALLOCK	1467	1971	25908
* HANOVER	483	1974	15000
* HIBBING	16123	1976	200000
* HILLTOP	933	1968	3000
* HOKAH	695	1969	9000
* HOKAH	697	1970	12025
* HOKAH	743	1972	8980
* HUGO	3455	1976	10000
* INVER GROVE HEIGHT	9861	1968	9000

(APPENDIX B - Cont.)
SHORT TERM DEBT BORROWED--1967 TO 1976 3
78/04/13.

CITY	POPULATION	YEAR	SHORT TERM DEBT BORROWED
*5 * JANESVILLE	1547	1974	5000
* JANESVILLE	1565	1976	10000
* JORDAN	2067	1972	9592
* KASOTA	882	1975	11022
* KELLIHER	298	1976	30000
* KELLOGG	411	1968	8500
* KENNETH	77	1972	4000
* KIESTER	681	1970	2737
* KIESTER	626	1972	4127
* KILKENNY	157	1975	6566
* KIMBALL	692	1976	3635
* KINGSTON	109	1971	200
* KINNEY	360	1971	10000
* LA CRESCENT	3479	1976	21000
* LAFAYETTE	419	1976	1500
* LAKE BRONSON	325	1973	175000
* LAKE BRONSON	375	1975	5737
* LAKELAND	1077	1972	7410
* LAKELAND SHORES	72	1971	1500
* LANCASTER	401	1972	45000
* LANCASTER	395	1976	12000
* LEONIDAS	157	1971	15000
* LEXINGTON	2023	1968	3800
* LEXINGTON	2228	1971	5000
* LEXINGTON	2291	1972	40287
* LILYDALE	301	1969	10000
* LILYDALE	322	1970	10000
* LILYDALE	303	1975	10000
* LINDSTROM	1132	1967	7896
* LITTLE CANADA	4665	1972	720000
* LYND	267	1970	2500
* MADISON	2182	1976	40000
* MANTORVILLE	483	1971	5000
* MAPLE GROVE	8569	1974	30000
* MAPLE GROVE	9958	1976	26000
* MAYER	310	1969	5000
* MAYER	336	1971	2000
* MAYNARD	478	1975	7500
* MC GREGOR	377	1974	51000
* MCGREGOR	387	1975	11428
* MCGREGOR	387	1976	17900
* MEDINA	2303	1969	7500
* MENAHGA	831	1969	7821
* MILACA	1935	1972	24123
* MILACA	1933	1973	73634
* MILACA	1985	1976	30000
* MILAN	425	1976	4126
* MINNEAPOLIS	388551	1974	2900000
* MINNEAPOLIS	378112	1975	200000

(APPENDIX B - Cont.)

SHORT TERM DEBT BORROWED--1967 TO 1976 4
78/04/13

CITY	POPULATION	YEAR	SHORT TERM DEBT BORROWED
***			
* MINNEOTA	1315	1968	25000
* MINNEOTA	1320	1970	9000
* MINNESOTA LAKE	707	1975	20000
* MIZPAH	101	1975	1000
* MORRIS	5422	1975	50000
* MORRISTOWN	687	1975	5000
* MOTLEY	409	1972	8000
* MOTLEY	409	1975	31000
* NASHWAUK	1280	1973	48026
* NASHWAUK	1273	1976	30000
* NASSAU	108	1975	2500
* NEVIS	330	1972	5000
* NEVIS	348	1975	5150
* NEW BRIGHTON	20167	1976	58725
* NEW GERMANY	294	1975	10000
* NISSWA	1251	1974	16000
* NISSWA	1289	1975	7000
* NISSWA	1289	1976	17000
* NORTH MANKATO	7204	1969	325000
* NORWOOD	1136	1976	20000
* OLIVIA	2655	1974	39417
* ONAMIA	740	1975	5000
* ORR	365	1975	6600
* OTTERTAIL	180	1973	13000
* OWATONNA	16206	1974	340000
* PARKERS PRAIRIE	865	1973	30000
* PAYNESVILLE	1898	1972	90000
* PEQUOT LAKES	570	1976	27314
* PINE CITY	2285	1976	12000
* PIPESTONE	4904	1974	60578
* PLAINVIEW	2133	1971	35000
* PLAINVIEW	2229	1976	50000
* PLEASANT LAKE	65	1972	3300
* PLEASANT LAKE	66	1974	120
* PLYMOUTH	16377	1968	100000
* PLYMOUTH	17227	1969	72000
* PRESTON	1428	1968	80000
* PRINSBURG	461	1971	10000
* PRINSBURG	488	1973	3000
* RAYMOND	523	1973	60000
* REDWOOD FALLS	5018	1973	500
* RENVILLE	1434	1976	11000
* ROGERS	527	1969	7563
* ROLLINGSTONE	444	1969	1000
* ROLLINGSTONE	458	1972	17500
* ROLLINGSTONE	462	1974	57056
* ROLLINGSTONE	462	1976	84171
* ROSEAU	2558	1972	192263
* ROUND LAKE	488	1967	4000

(APPENDIX B - Cont.)

SHORT TERM DEBT BORROWED--1967 to 1976 5

78/04/13

CITY	POPULATION	YEAR	SHORT TERM DEBT BORROWED
***			
* RUSHMORE	390	1967	5000
* SAUK CENTRE	3688	1976	9162
* SAUK RAPIDS	5219	1976	70000
* SILVER LAKE	707	1975	8500
* SOBIESKI	201	1975	1110
* SOBIESKI	201	1976	1196
* SOUTH INTL. FALLS	2359	1975	18000
* SO. INTERNATL FALLS	2224	1967	7000
* SO. INTERNATL FALLS	2188	1968	8000
* SO. INTERNATL FALLS	2116	1970	16000
* SO. INTERNATL FALLS	2130	1971	2000
* SPRING VALLEY	2650	1975	59000
* STAPLES	2684	1974	32726
* STAPLES	2661	1975	34560
* STEWART	652	1971	24000
* STEWARTVILLE	3466	1976	9000
* STILLWATER	9626	1967	107251
* ST. ANTHONY	9546	1975	30000
* ST. JOSEPH	2946	1976	25044
* ST. LEO	157	1975	7000
* ST. MARTIN	185	1976	13000
* ST. PAUL	310930	1967	10420000
* ST. PAUL	310575	1968	6000000
* ST. PAUL	309866	1970	2090000
* ST. PAUL	296216	1972	12160000
* ST. PAUL	288392	1973	10300000
* ST. PAUL	283963	1974	6000000
* ST. VINCENT	189	1967	5500
* TONKA BAY	1426	1975	19500
* TOWER	713	1976	2800
* TROSKY	115	1975	577
* VADNAIS HEIGHTS	3411	1970	1629595
* VICTORIA	722	1967	6500
* VICTORIA	765	1968	2000
* VICTORIA	787	1975	10000
* WAUBUN	345	1969	50000
* WAUBUN	345	1970	75000
* WHEATON	2027	1974	52623
* WILLMAR	13924	1974	26400
* WINNEBAGO	1763	1976	27370
* WOODSTOCK	192	1976	12845
* ZUMBROTA	1997	1975	100000

PREPARED BY SPA--FISCAL STUDIES DJD

APPENDIX C

MOODY'S BOND SURVEY, MARCH 6, 1978
LOCAL GOVERNMENT BOND RATINGS WITHDRAWN

Minnesota

Bagley
Blooming Prairie
Glenwood
Hibbing
Lino Lakes
Melrose
Moose Lake
Mountain Lake
New Richland
Pine City
Pipestone
Winsted
Zumbrota

APPENDIX D

DEBT AS A % OF INDICATED MARKET VALUE:*
1976 (CITIES OVER 2,500 POPULATION)

Metro Cities	Debt as a % of IMV	Metro Cities	Debt as a % of IMV
Minnetonka	16.2	New Brighton	4.7
Maple Grove	16.0	Minneapolis	4.6
Chanhassen	14.0	Medina	4.5
Eden Prairie	12.7	Andover	4.4
Vadnais Heights	11.8	Maplewood	4.1
Forest Lake	11.0	Bloomington	4.0
Minnetrista	9.4	Newport	3.8
Oakdale	9.2	West St. Paul	3.7
Plymouth	8.9	Orono	3.3
Mendota Heights	8.6	St. Louis Park	3.3
Apple Valley	8.4	Anoka	3.2
Coon Rapids	8.2	Hugo	3.0
Little Canada	8.2	New Hope	2.9
Shorewood	8.2	Mahtomedi	2.8
Farmington	7.8	Roseville	2.7
Shorview	7.4	St. Paul Park	2.7
Circle Pines	7.2	White Bear Lake	2.7
Mounds View	6.9	Brooklyn Center	2.3
Lakeville	6.7	Excelsior	2.3
Deephaven	6.3	Fridley	2.3
Eagan	6.2	Arden Hills	2.0
Chaska	5.9	Lake Elmo	2.0
Blaine	5.9	Crystal	1.8
Inver Grove Hgts.	5.7	Golden Valley	1.7
Woodbury	5.6	Osseo	1.7
Rosemount	5.5	Hopkins	1.4
Hastings	5.4	Wayzata	1.4
Stillwater	5.4	Columbia Hgts.	1.3
Richfield	5.2	St. Anthony	1.2
South St. Paul	5.2	Edina	1.1
Champlin	5.1	Lino Lakes	0.7
North St. Paul	5.1	Falcon Hgts.	0.6
St. Paul	5.1	East Bethel	0.1
Brooklyn Park	5.0	Robbinsdale	0.1
Cottage Grove	5.0	Dayton	0.03
Spring Lake Park	5.0	Ham Lake	0.02
Burnsville	4.8	Afton	...
Mound	4.8	Bayport	...

*Indicated Market Value refers to the actual market value of real and personal property as estimated by the Department of Revenue.

(Appendix D Continued)

Non-Metro Cities	Debt as a % of IMV	Non-Metro Cities	Debt as a % of IMV
Spring Valley	22.2	Redwood Falls	5.0
Mora	21.0	St. Peter	5.0
East Grand Forks	20.3	Bemidji	4.8
Hutchinson	19.0	Austin	4.7
Breckenridge	18.9	Albert Lea	4.6
Marshall	17.4	New Ulm	4.6
Theif River Falls	17.4	Sauk Rapids	4.6
Glencoe	16.7	Cloquet	4.4
Ortonville	15.5	Alexandria	4.2
Long Prarie	14.7	Detroit Lakes	4.1
Le Seuer	14.3	Sleepy Eye	4.1
Prior Lake	13.8	Hibbing	4.0
Virginia	12.4	Wadena	4.0
Sauk Center	12.3	Princeton	3.9
Windom	11.7	Cambridge	3.8
Elk River	10.4	Litchfield	3.6
Stewartville	10.4	Shakopee	3.5
Caledonia	9.5	Duluth	3.4
Granite Falls	9.2	Morris	3.0
New Prague	8.5	Pipestone	2.9
Willmar	8.4	Brainerd	2.8
Worthington	8.3	Monticello	2.7
Waite Park	7.6	Montevideo	2.6
Fairmont	7.5	Owatonna	2.5
Little Falls	7.5	La Crescent	2.4
Two Harbors	7.2	Jackson	2.3
Mankato	7.1	Silver Bay	2.3
Blue Earth	7.0	Park Rapids	1.9
Lake City	7.0	Red Wing	1.9
Grand Rapids	6.9	Faribault	1.7
Buffalo	6.4	International Falls	1.7
Olivia	6.4	Waseca	1.7
North Mankato	6.2	Winona	1.5
Fergus Falls	6.0	Gilbert	1.1
Wells	5.8	Aurora	1.0
Moorhead	5.7	Chisholm	1.0
Sartelle	5.4	Hoyt Lakes	1.0
Staples	5.4	Eveleth	0.9
Crookston	5.3	Hermantown	0.9
St. Cloud	5.3	Rochester	0.9
Luverne	5.2	Mountain Iron	0.8
Proctor	5.2	Savage	0.6
St. James	5.2	Babbitt	...
Northfield	5.1	Ely	...
St. Joseph	5.1	Ramsey	...
Benson	5.0		

APPENDIX E

DEBT AS A % OF INDICATED MARKET VALUE 1976
(CITIES OVER 2,500 POPULATION LISTED BY POPULATION CLASS)

Metro Cities	Debt as a % of IMV
Over 99,999:	
St. Paul	5.1
Minneapolis	4.6
20,000-99,999:	
Minnetonka	16.2
Plymouth	8.9
Coon Rapids	8.2
Blaine	5.9
Richfield	5.2
South St. Paul	5.2
Brooklyn Park	5.0
Burnsville	4.8
New Brighton	4.7
Maplewood	4.1
Bloomington	4.0
St. Louis Park	3.3
Anoka	3.2
New Hope	2.9
Roseville	2.7
White Bear Lake	2.7
Brooklyn Center	2.3
Fridley	2.3
Crystal	1.8
Golden Valley	1.7
Columbia Hgts.	1.3
Edina	1.1
10,000-19,999:	
Apple Valley	8.4
Shoreview	7.4
Moundsview	6.9
Eagan	7.2
Inver Grove Heights	5.7
Hastings	5.4
Stillwater	5.4
North St. Paul	5.1
Cottage Grove	5.0
West St. Paul	3.7
Hopkins	1.4
Robbinsdale	0.1
5,000-9,999:	
Maple Grove	16.0
Chanhassen	14.0
Eden Prairie	12.7
Oakdale	9.2
Mendota Heights	8.6
Little Canada	8.2
Lakeville	6.7
Chaska	5.9
Woodbury	5.6
Champlin	5.1
Spring Lake Park	5.0
Mound	4.8
Andover	4.4
Orono	3.3
St. Paul Park	2.7
Arden Hills	2.0
St. Anthony	1.2
Falcon Heights	0.6
2,500-4,999	
Vadnais Heights	11.8
Forest Lake	11.0
Minnetrista	9.4
Shorewood	8.2
Farmington	7.8
Circle Pines	7.2
Deephaven	6.3
Rosemount	5.5
Medina	4.5
Newport	3.8
Hugo	3.0
Mahtomedi	2.8
Excelsior	2.3
Lake Elmo	2.0
Osseo	1.7
Wayzata	1.4
Lino Lakes	0.7
East Bethel	0.1
Dayton	0.03
Ham Lake	0.02
Afton	...
Bayport	...

(Appendix E Continued)

Non-Metro Cities	Debt as a % of IMV
20,000-99,999:	
Mankato	7.1
Moorhead	5.7
St. Cloud	5.3
Austin	4.7
Duluth	3.4
Winona	1.5
Rochester	0.9
10,000-19,999:	
Marshall	17.4
Virginia	12.4
Willmar	8.4
Worthington	8.3
Fairmont	7.5
Fergus Falls	6.0
Northfield	5.1
Bemidji	4.8
Albert Lea	4.6
New Ulm	4.6
Cloquet	4.4
Hibbing	4.0
Brainerd	2.8
Owatonna	2.5
Red Wing	1.9
Fairbault	1.7
5,000-9,999:	
East Grand Fords	20.3
Hutchinson	19.0
Marshall	17.4
Little Falls	7.5
Grand Rapids	6.9
North Mankato	6.2
Crookston	5.3
Redwood Falls	5.0
St. Peter	5.0
Sauk Rapids	4.6
Alexandria	4.2
Detroit Lakes	4.1
Litchfield	3.6
Shakopee	3.5
Morris	3.0
Montevidio	2.6
International Falls	1.7
Waseca	1.7
Chisholm	1.0
Hermantown	0.9
2,500-4,999:	
Spring Valley	22.2
Mora	21.0
Breckenridge	18.9
Glencoe	16.7
Ortonville	15.5
Long Prairie	14.7
Le Sueur	14.3
Prior Lake	13.8
Sauk Center	12.3
Windom	11.7
Elk River	10.4
Stewartville	10.4
Caledonia	9.5
Granite Falls	9.2
New Prague	8.5
Waite Park	7.6
Two Harbors	7.2
Blue Earth	7.0
Lake City	7.0
Buffalo	6.4
Olivia	6.4
Wells	5.8
Sartell	5.4
Staples	5.4
Luverne	5.2
Proctor	5.2
St. James	5.2
St. Joseph	5.1
Benson	5.0
Sleepy Eye	4.1
Wadena	4.0
Princeton	3.9
Cambridge	3.8
Pipestone	2.9
Monticello	2.7
La Crescent	2.4
Jackson	2.3
Silver Bay	2.3
Park Rapids	1.9
Gilbert	1.1
Aurora	1.0
Hoyt Lakes	1.0
Eveleth	0.9
Mountain Iron	0.8
Savage	0.6
Babbitt	...
Ely	...
Ramsey	...

APPENDIX F

PROXIMITY OF CITIES TO DEBT LIMITS 1

78/05/24.

CITY	DEBT LIMIT	DEBT SUBJECT TO LIMIT	REMAINING BONDING AUTHORITY
***			
* AFTON	6148855.656	0	6148855.656
* ALBERT LEA	33685729.218	570000	33115729.218
* ALEXANDRIA	11011679.298	50000	10961679.298
* ANDOVER	13682906.064	0	13682906.064
* ANOKA	30411286.272	915000	29496286.272
* APPLE VALLEY	30176412.048	998000	29178412.048
* ARDEN HILLS	19099811.070	0	19099811.070
* AURORA	2225290.482	0	2225290.482
* AUSTIN	39328925.706	1230250	38098675.706
* BABBITT	2178641.178	0	2178641.178
* BAYPORT	5558079.690	0	5558079.690
* BEMIDJI	10654319.682	203675	10450644.682
* BENSON	4202015.778	412000	3790015.778
* BLAINE	40253767.272	45000	40208767.272
* BLOOMINGTON	278120512.422	10148000	267972512.422
* BLUE EARTH	5301762.264	350000	4951762.264
* BRAINERD	16731432.486	50000	16681432.486
* BRECKENRIDGE	3827367.468	215000	3612367.468
* BROOKLYN CENTER	74698597.296	1885000	72813597.296
* BROOKLYN PARK	69949963.350	1190000	68759963.350
* BUFFALO	5689876.428	40000	5649876.428
* BURNSVILLE	99148536.216	2520000	96628536.216
* CALEDONIA	2695125.510	1448000	1247125.510
* CAMBRIDGE	5074712.874	233000	4841712.874
* CHAMPLIN	13624603.758	245000	13379603.758
* CHANHASSEN	13158996.498	297000	12861996.498
* CHASKA	15408097.146	190000	15218097.146
* CHISHOLM	7649809.866	0	7649809.866
* CIRCLE PINES	5286191.184	0	5286191.184
* CLOQUET	19521405.720	0	19521405.720
* COLUMBIA HEIGHTS	42610059.288	2100000	40510059.288
* COON RAPIDS	62513913.510	1955000	60558913.510
* COTTAGE GROVE	33916869.180	995000	32921869.180
* CROOKSTON	10082963.610	900000	9182963.610
* CRYSTAL	54884749.644	560000	54324749.644
* DAYTON	6424638.264	8000	6416638.264
* DEEPHAVEN	13020676.290	700000	12320676.290
* DETROIT LAKES	10425041.190	949000	9476041.190
* DULUTH	131092391.718	12250000	118842391.718
* EAGAN	55060606.278	1526000	53534606.278
* EAST BETHEL	8075614.968	0	8075614.968
* EAST GRAND FORKS	10538419.698	1785000	8753419.698
* EDEN PRAIRIE	45655480.818	660000	44995480.818
* EDINA	247620563.568	3400000	244220563.568
* ELK RIVER	4050153.126	350000	3700153.126
* ELY	3887430.678	0	3887430.678
* EVELETH	3747831.750	35000	3712831.750
** EXCELSIOR	7073995.590		
* FAIRMONT	19558080.342	831214	18726866.342
* FALCON HEIGHTS	10617411.960	95000	10522411.960
* FARIBAULT	21417054.840	515000	20902054.840
* FARMINGTON	7892632.134	1178000	6714632.134

PREPARED BY SPA--FISCAL STUDIES DJD

(Appendix F Continued)

PROXIMITY OF CITIES TO DEBT LIMITS 2
78/05/24.

CITY	DEBT LIMIT	DEBT SUBJECT TO LIMIT	REMAINING BONDING AUTHORITY
***			
* FERGUS FALLS	23150090.070	682000	22468090.070
* FOREST LAKE	7170420.402	421000	6749420.402
* FRIDLEY	86735882.628	310000	86425882.628
* GILBERT	1608653.070	50000	1558653.070
* GLENCOE	6899153.940	48000	6851153.940
* GOLDEN VALLEY	96374336.526	2312600	94061736.526
* GRAND RAPIDS	15950628.072	2612000	13338628.072
* GRANITE FALLS	6000959.700	380000	5620959.700
* HAM LAKE	9377116.164	0	9377116.164
* HASTINGS	19530565.218	1880000	17650565.218
* HIBBING	20026154.466	1200000	18826154.466
* HOPKINS	48664330.956	120000	48544330.956
* HOYT LAKES	6396561.702	325000	6071561.702
* HUGO	6098459.436	51000	6047459.436
* HUTCHINSON	16471900.278	0	16471900.278
* INTERNATIONAL FALLS	12511958.850	235000	12276958.850
* INVER GROVE HEIGHTS	35076073.482	576000	34500073.482
* JACKSON	5060632.302	425000	4635632.302
* LA CRESCENT	4422026.214	141000	4281026.214
* LAKE CITY	6164750.412	50000	6114750.412
* LAKE ELMO	10132884.306	730000	9402884.306
* LAKEVILLE	23210035.398	295000	22915035.398
* LE SUEUR	5505159.996	1490000	4015159.996
* LINO LAKES	6713640.972	60000	6653640.972
* LITCHFIELD	7519846.626	439675	7080171.626
* LITTLE CANADA	14167517.634	80000	14087517.634
* LITTLE FALLS	8353627.344	0	8353627.344
* LONG PRAIRIE	2844279.540	188000	2656279.540
* LUVERNE	6995878.452	385000	6610878.452
* MAHTOMEDI	6468826.698	10500	6458326.698
* MANKATO	53213884.848	7917000	45296884.848
* MAPLE GROVE	24291297.720	965000	23326297.720
* MAPLEWOOD	84669374.538	115000	84554374.538
* MARSHALL	18385993.602	2540000	15845993.602
* MEDINA	7962123.240	190000	7772123.240
* MENDOTA HEIGHTS	22739335.902	450000	22289335.902
* MINNEAPOLIS	937696484.880	115101000	822595484.880
* MINNETONKA	110299405.518	3700000	106599405.518
* MINNETRISTA	9022199.436	88000	8934199.436
* MONTEVIDEO	6857384.418	275000	6582384.418
* MONTICELLO	26974462.536	1225000	25749462.536
* MOORHEAD	38122905.600	1755000	36367905.600
* MORA	4358116.188	363000	3995116.188
* MORRIS	6194118.348	220000	5974118.348
* MOUND	18514602.198	0	18514602.198
* MOUNDS VIEW	16761401.820	0	16761401.820
* MOUNTAIN IRON	4342647.006	0	4342647.006
* NEW BRIGHTON	43739152.398	1075000	42664152.398
* NEW HOPE	59189641.110	1130000	58059641.110
* NEW PRAGUE	4395609.324	0	4395609.324
* NEW ULM	25485589.566	0	25485589.566
* NEWPORT	8028206.424	110000	7918206.424

PREPARED BY SPA--FISCAL STUDIES DJD

PROXIMITY OF CITIES TO DEBT LIMITS 3
78/05/24.

CITY	DEBT LIMIT	DEBT SUBJECT TO LIMIT	REMAINING BONDING AUTHORITY
***			
* NORTH MANKATO	12161674.152	370000	11791674.152
* NORTH ST. PAUL	16999630.020	0	16999630.020
* NORTHFIELD	12252260.808	737250	11515010.808
* OAKDALE	16595256.132	627000	15968256.132
* OLIVIA	4141820.700	1255000	2886820.700
* ORONO	26189666.118	0	26189666.118
* ORTONVILLE	3651777.900		
* OSSEO	6441462.090	90000	6351462.090
* OWATONNA	29622328.686	350000	29272328.686
* PARK RAPIDS	3412346.238	164000	3248346.238
* PIPESTONE	6644137.878	374000	6270137.878
* PLYMOUTH	84197716.668	70000	84127716.668
* PRINCETON	4311131.886	180000	4131131.886
* PRIOR LAKE	10613882.826	610000	10003882.826
* PROCTOR	3015353.628	0	3015353.628
* RAMSEY	12754784.448	0	12754784.448
* RED WING	105309197.388	75000	105234197.388
* REDWOOD FALLS	8279646.066	620000	7659646.066
* RICHFIELD	96309296.964	1523000	94786296.964
* ROBBINSDALE	35048634.282	45000	35003634.282
* ROCHESTER	142650687.186	1300000	141350687.186
* ROSEMOUNT	12630510.846	600000	12030510.846
* ROSEVILLE	109268408.214	1130000	108138408.214
* SARTELL	4482682.164	0	4482682.164
* SAUK CENTRE	4406667.588	760000	3646667.588
* SAUK RAPIDS	6090077.160		
* SAVAGE	11172183.966	135000	11037183.966
* SHAKOPEE	27854703.414	1225000	26629703.414
* SHOREVIEW	28372381.218	545000	27827381.218
* SHOREWOOD	12846272.868	42000	12804272.868
* SILVER BAY	3263617.782	300000	2963617.782
* SLEEPY EYE	3583789.290	105000	3478789.290
* SOUTH ST. PAUL	43396729.830	6905000	36491729.830
* SPRING LAKE PARK	11453544.990	314000	11139544.990
* SPRING VALLEY	2820902.940	1120000	1700902.940
* STAPLES	2409693.228	568500	1841193.228
* STEWARTVILLE	4325630.706	1025000	3300630.706
* STILLWATER	18610281.090	1470000	17140281.090
* ST. ANTHONY	24996002.976	20000	24976002.976
* ST. CLOUD	67752828.684	1650000	66102828.684
* ST. JAMES	5379413.202	0	5379413.202
* ST. JOSEPH	1728329.274	95848	1632481.274
* ST. LOUIS PARK	143234782.506	10827348	132407434.506
* ST. PAUL	541298985.840	111005000	430293985.840
* ST. PAUL PARK	7597227.834	342000	7255227.834
* ST. PETER	9441464.418	0	9441464.418
* THIEF RIVER FALLS	[illegible]	[illegible]	[illegible]
* TWO HARBORS	4514267.880	465000	4049267.880
* VADNAIS HEIGHTS	5135932.926	0	5135932.926
* VIRGINIA	18936512.532	0	18936512.532
* WADENA	5668357.968	115000	5553357.968
* WAITE PARK	4126673.862	998000	3128673.862

PREPARED BY SPA--FISCAL STUDIES DJD

PROXIMITY OF CITIES TO DEBT LIMITS 4
78/05/24.

CITY	DEBT LIMIT	DEBT SUBJECT TO LIMIT	REMAINING BONDING AUTHORITY
***			
* WASECA	12198242.214	530000	11668242.214
* WAYZATA	17833637.178	146000	17687637.178
* WELLS	3176499.654	15000	3161499.654
* WEST ST. PAUL	43107331.518	450000	42657331.518
* WHITE BEAR LAKE	36019477.800	835000	35184477.800
* WILLMAR	22850492.634	0	22850492.634
* WINDOM	6718923.684	2040000	4678923.684
* WINONA	40849500.942	0	40849500.942
* WOODBURY	21241972.098	1537000	19704972.098
* WORTHINGTON	14544443.664	2940000	11604443.664

PREPARED BY SPA--FISCAL STUDIES DJD

?