CITIZENS LEAGUE BACKGROUND REPORT

A MORE RATIONAL DISCUSSION OF TAXES AND THE ECONOMY

Prepared by

Tax/Economy Committee

Charles S. Neerland, Chairman

Approved by
Citizens League Board of Directors
October 31, 1979

Citizens League
84 South Sixth Street
Minneapolis, Minnesota 55402
338-0791

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NOTE TO THE READER

This Background Report was prepared to supplement the League's policy report, "A More Rational Discussion of Taxes and the Economy." It was prepared by the League's 1978-1979 Tax/Economy Committee and approved by the Citizens League Board of Directors on October 31, 1979.

In preparing this background document, the committee relied extensively on several existing studies of Minnesota's tax system and the Twin Cities' economy. Of particular importance were the following:

Hatfield, Rolland F. "Report to Governor's Minnesota Property Tax Study Advisory Committee," Minnesota State Planning Agency, Saint Paul, Minnesota, November, 1970.

Knaff, Gene. "The Structure of the Twin Cities' Economy: An Input-Output Perspective," Metropolitan Council of the Twin Cities Area, Saint Paul, Minnesota, March, 1976.

Maki, Wibur R. et al. "Employment Trends and Projections for Minnesota and Its Substate Development Regions," Department of Agricultural and Applied Economics, University of Minnesota, Saint Paul, Minnesota, February, 1979.

Minnesota Tax Study Commission, State of Minnesota, "History of Taxation in Minnesota, Staff Research Report #2," Saint Paul, Minnesota, December, 1978.

Minnesota Tax Study Commission, State of Minnesota, "Staff Progress Report: A Collection of Staff Work Papers," Saint Paul, Minnesota, January, 1973.

State of Minnesota, "Report of the Governor's Minnesota Tax Study Committee," Saint Paul, Minnesota, 1962.

State of Minnesota, "Report of the Governor's Minnesota Tax Study Committee," Saint Paul, Minnesota, 1956.

Midwest Research Inc., North Star Division, "Manufacturing and Services in Minnesota," Minnetonka, Minnesota, 1978.

"Helping the Metropolitan Economy Change," Citizens League, Minneapolis, MN, 1977.

PART I: THE DEVELOPMENT OF MINNESOTA'S TAX SYSTEM

MINNESOTANS PAY A RELATIVELY LARGE SHARE OF THEIR INCOME IN STATE AND LOCAL TAXES.

For the biennium ending in June 1979, revenues from state and local taxes and other public charges are expected to be $8.7 billion.

Together the State of Minnesota and its local governments are expected to have collected $8.7 billion during the biennium that ended in June, 1979. This includes revenues from all state and local taxes as well as revenue from other mandatory charges, excluding workers and unemployment compensation payments. Also excluded are revenues from the federal government.

$6.3 billion or about 72% of the total came from state taxes and charges. The remaining $2.4 billion (28%) was collected by local governments.

For fiscal years 1980 and 1981,[1] total revenues from taxes and charges are projected at $10.6 billion, an increase of about 22% over the current biennium. The share expected from state taxes and charges will increase slightly to about 74% ($7.8 billion) while the share from local governments is expected to decline to about 26% ($2.8 billion).

The growth in total revenues and the decline in the share raised by local governments reflect established trends. Graphs 1 and 2 show that total revenues have been growing quite rapidly since the early 1960s. The increase has been particularly dramatic since 1972. Similarly, since the early 1960s, the share of total revenues raised directly by local governments has been declining, going from 52% in 1962 to 31% in 1977. (See Graph 3.)

State and local government absorb a relatively large share of the state's personal income. The share has been increasing at a relatively constant rate since the mid-1960's.

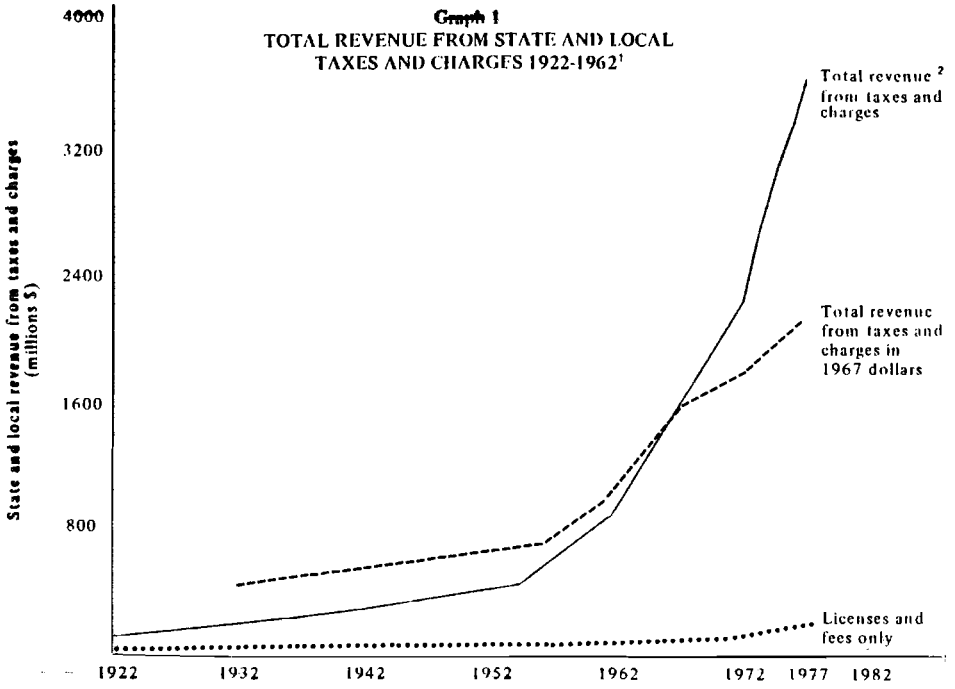
By comparison with other states, state and local taxes absorb a relatively large share of Minnesota's total personal income. Table 1 shows that as far back as 1942, state and local tax revenues per $1,000 of personal income were high by comparison with most other states.

TABLE 1

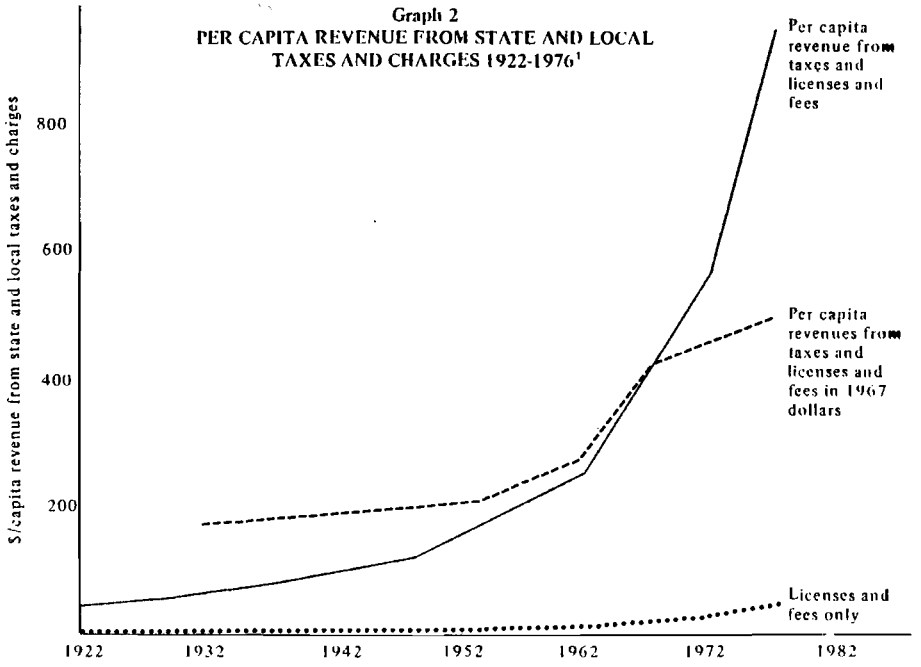
YEAR	STATE AND LOCAL TAX COLLECTIONS PER $1,000 PERSONAL INCOME	RANK (1=HIGHEST)
1942	$ 91.90	9
1953	90.80	6
1959	101.20	7
1970	132.48	10
1973	151.15	4
1974	136.15	8
1975	139.44	6
1976	143.11	8
1977	146.92	7

SOURCE: *Facts and Figures on Government Finance,* Tax Foundation Inc., NY, NY.

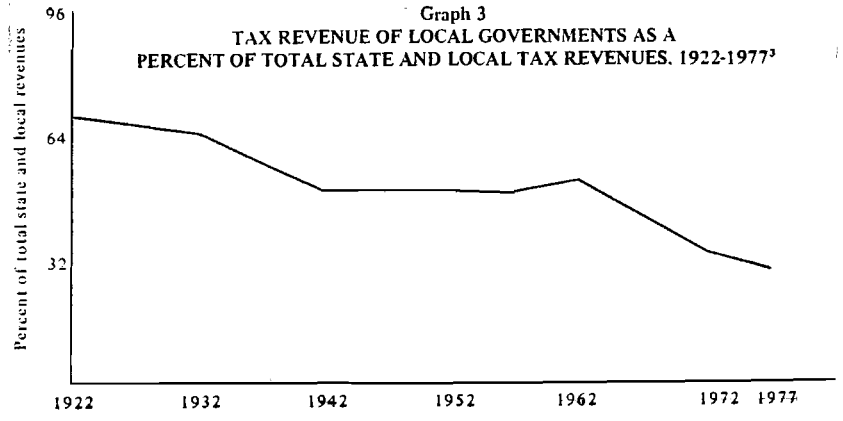
Graph 1
TOTAL REVENUE FROM STATE AND LOCAL TAXES AND CHARGES 1922-1962[1]



Graph 2
PER CAPITA REVENUE FROM STATE AND LOCAL TAXES AND CHARGES 1922-1976[1]



Graph 3
TAX REVENUE OF LOCAL GOVERNMENTS AS A PERCENT OF TOTAL STATE AND LOCAL TAX REVENUES, 1922-1977[3]



[1]SOURCE: Report of the Governor's Tax Study Committee, 1954, Table III. 1; for subsequent years. *Report of the State Auditor on the Revenues, Expenditure and Debts of State and Local Governments in Minnesota.*

[2]Total revenue includes all revenue from tax sources as well as revenue from special assessments, licenses and fees.

[3]Local property tax revenues are used to estimate total tax revenue raised by local governments.

SOURCE: Report of the Governor's Tax Study Committee, 1954, Table III. 1; for subsequent years. *Report of the Auditor on the Revenues, Expenditures and Debts of State and Local Governments in Minnesota.*

In the early 1940s, Minnesota shared its 'high tax' status with three of its neighbors--Wisconsin, North and South Dakota. This comparability continued through the early 1960s. By 1975, however, both of the Dakotas had brought their expenditures in line with the other four states that make up the north central region of the country. (See Table 2.)

Tax burdens in Minnesota and Wisconsin have, by contrast, continued to be higher. The burden in both states has increased at a relatively constant rate. (See Graph 4A.) Both the level of tax burden and the rate at which it is changing in Minnesota and Wisconsin are more similar to western and eastern states than to the other six north central states. (See Graphs 4B and 4C.)

SOURCES OF TAX REVENUE HAVE CHANGED SINCE STATEHOOD.

Sources of tax revenues have changed, going from a tax system based almost exclusively on property taxes to one that now includes income and sales as well as property taxes.

Between 1858 (statehood) and 1933, property taxes were the major sources of revenue for both state and local government. A gross earnings tax was added in 1871 and an inheritance tax in 1905. Both required constitutional amendments. The amendment proposed in 1905 and ratified in 1906 fundamentally changed the state's system.

Prior to the ratification of the "wide open" amendment in 1906, the state's constitution required that *all* taxes be "as nearly equal as may be,"[2] and that all property be assessed uniformly at its market value. The effect of this provision was to make unconstitutional all taxes other than a general and unclassified property tax and, in lieu of this, the gross earnings tax. A graduated inheritance tax, such as that passed in 1905, would have been unconstitutional without the amendment. The current classified property tax system would also have been unconstitutional because different classes of property are taxed at different rates.

TABLE 2

RANKING OF NORTH CENTRAL STATE (1=HIGHEST) STATE AND LOCAL TAXES AS A PERCENT OF PERSONAL INCOME: 1942, 1959, 1970, 1975, 1977*

	1942	1959	1970	1975	1977
Illinois	40th	46th	29th	23rd	33rd
Iowa	25th	9th	19th	18th	25th
Minnesota	9th	7th	10th	6th	7th
Missouri	42nd	49th	48th	44th	48th
Nebraska	36th	29th	26th	32nd	18th
North Dakota	1st	2nd	4th	34th	30th
South Dakota	2nd	1st	7th	28th	23rd
Wisconsin	7th	6th	2nd	6th	9th

SOURCE: *Facts and Figures on Government Finance,* Tax Foundation Inc., NY, NY.

The "wide open" amendment lifted the requirement that taxes be equal. Instead it said, "Taxes shall be uniform upon the same class of subjects..."[3]

Even with the "wide open" amendment, the Legislature continued to rely on the property tax. However, with its new authority, the Legislature restructured the tax in 1913 by adopting a classification system. Initially the classification system called for four classes of property. The classes and the rates of assessment were:

- **Class I:** Property with iron ore deposits or mines–to be assessed at 50% of its full market value.

- **Class II:** Household goods and personal effects–assessed at 25% of market value.

- **Class III:** Unplatted real estate, livestock, farm produce; inventories and manufacturers tools–assessed at 33-1/3% of market value.

- **Class IV:** All other property–assessed at 40% of full market value.

Since its creation, the classification system has been amended several times (See Appendix A) shows the current classifications. The first significant changes came in 1933 when the Legislature created three new classes. In order to provide property tax relief for homesteaded property and agricultural equipment.

The 1933 changes also established a precedent for treating homesteaded property (i.e., owner occupied residential property) differently from non-homesteaded property (including commercial/industial property). Under the new system commercial/ industrial property was still assessed at 40% of full market value. However, homesteaded property was to be assessed at 25% of full market value on the first $4,000 in value and at 40% on all value in excess of $4,000.

In addition to major changes in the classification system, the Legislature also added both the personal and corporate income taxes to the state's tax system. A graduated structure was adopted in both cases. However, in 1937, the graduated corporate income tax was replaced with a flat rate. Table 3 shows the effect of those new additions to the system. Property tax revenues accounted for almost 70% of state and local revenues in 1932. In 1966, they were the source for about 48% of revenues.

The last major addition to the tax system came in 1967 when the Legislature added a 3% general sales tax. The rate was increased to 4% in 1971. From the start, a number of items have been exempt from the sales tax. Exempt items include:

- Food and clothing products.

- Drugs and medication.

- Cigarettes and gasoline (both taxed through separate taxes).

- All materials used or consumed in agricultural and industrial production of personal property, including materials used in research, development and design.

- Rolling stock used by railroad and other freight companies, including aircraft used for commercial purposes.

- Grinding equipment used in the production of taconite.

- Tools and equipment used in agricultural or industrial production which has a useful life of 12 months or less.

- Textbooks which are used in a course of study in a public or private school, college, university, business or trade school.

Table 3 summarizes the effect of the addition of income taxes and the sales tax on the distribution by source of state and local revenues.

While we will not present data back to 1922, changes similar to those in Minnesota have occurred in the tax systems of the other seven north central states. (See Table 4.) The property tax has declined as a source of revenue in all states except South Dakota. Income and sales taxes have been introduced to provide additional revenue.

There are differences among the north central states in the degree of change in their tax systems. More so than any of the other states, Minnesota has moved away from the property tax, shifting burden mainly to the personal income tax and using the sales tax, relatively speaking, sparingly. By contrast, Illinois, Missouri, North Dakota, and South Dakota collect almost 25% of their total revenues from the sales tax.

BUSINESS TAXES: INCREASING DOLLARS, DECREASING SHARE OF TOTAL COLLECTIONS.

Minnesota businesses pay more now in taxes than ever; however, their share of the total state and local tax bill has declined slightly since the mid-1950s.

In 1957, Minnesota businesses paid about $238 million in state and local taxes, or about 40% of all tax revenues

collected in that year. In 1977, business' share was about $1.14 billion, or about 30% of the total. (See Graph 5.)

Businesses in Minnesota are taxed directly through property tax on non-homestead property, corporate income tax, severance taxes, and sales and 'use' taxes.

Since the mid-1950s, business taxes in Minnesota have shifted away from property taxes and toward the sales and income taxes. In 1957, property taxes accounted for about 59% of all state and local taxes paid by business. In 1977, property taxes accounted for about 45%. Taxes that were originally levied in place of property taxes (i.e., gross earnings tax, tax on insurance premiums) have also declined as a percent of the whole. In 1957, corporate income tax revenues accounted for about 15% of all revenue from business. In 1977, 23% of the total came from this source. In 1957, there was no sales tax. In 1977, it accounted for 15% of business' total state and local tax bill. (See Graph 6.)

CLASSIFICATION OF BUSINESS PROPERTY FOR TAX PURPOSES IS NOT UNIFORM.

Through the classified property tax, the Legislature has been able to distribute and redistribute property tax burden between different classes of property.

Property owned by business was taxed the same as all other property until the Legislature adopted a classified property tax. With the classified system, the Legislature could not only make distinctions between homestead and non-homestead property but also it could subdivide non-homestead property for tax purposes. For example:

TABLE 3

DISTRIBUTION OF STATE AND LOCAL REVENUE: 1922, 1932, 1941, 1953, 1962, 1967, 1972, 1977

SOURCE OF REVENUE	1922	1932	1941	1953	1962	1967	1972	1977
Real property	66.1%	61.8%	50.7%	38.9%	44.5%	40.1%	34.8%	31.0%
Personal property	10.8	8.0	8.0	11.2	10.6	3.3	3.1	1.1
Individual income	--	--	4.3	10.2	14.0	18.7	21.5	25.2
Corporate income★	--	--	2.9	3.5	4.0	4.5	5.0	6.8
Gross earnings	6.3	3.7	3.3	3.8	2.5	2.0	2.1	2.9
Iron ore (occupation and royalties)	--	1.2	4.1	5.1	1.9	1.2	.9	1.6
Motor vehicles	6.7	6.4	5.9	5.8	4.9	4.1	3.1	2.7
Sales	--	--	--	--	--	7.8	12.0	14.2
Licenses and fees●	8.3	8.0	5.5	4.9	4.3	4.2	3.6	3.1
Other■	1.8	9.9	15.2	16.6	13.3	14.1	13.9	11.4
Total	100%◆	100%	100%	100%	100%	100%	100%	100%

★ Includes Bank excise tax.

● Includes special assessments.

■ Includes taxes on motor vehicle fuels, insurance premiums, alcoholic beverages.

◆ May not total due to rounding.

SOURCES: Table III. 1, *Report of the Governor's Minnesota Tax Study Committee,* 1956; Table 2.1, *Report of the Governor's Minnesota Tax Study Committee,* 1962; *The Minnesota State and Local Tax System,* Minnesota Department of Revenue, Bulletin # 1, page 55; *Minnesota Tax Guide, 1978,* Minnesota Department of Revenue, pages 59-60.

TABLE 4

PER CENT DISTRIBUTION OF TAX REVENUES OF STATE AND LOCAL GOVERNMENTS, EIGHT STATES, 1953 and 1975[1]
(Rank Order Appears in Parentheses)

Source of Revenue[2]		Illinois	Wisconsin	Minnesota	Iowa	Missouri	Nebraska	North Dakota	South Dakota	Average 8 States[3]	U.S. Average[4]
General Property Tax:	1953	47.2% (4)	47.9% (2)	42.1% (6)	46.3% (5)	37.8% (7)	59.1% (1)	36.4% (8)	47.9% (2)	45.6%	37.5%
	1975	40.1% (4)	38.1% (5)	31.9% (8)	41.6% (3)	35.9% (6)	49.5% (2)	32.1% (7)	51.0% (1)	40.1%	37.6%
Individual Income Tax:	1953	--	10.0% (1)	8.4% (2)	4.0% (4)	5.5% (3)	--	3.0% (5)	--	6.2%	4.9%
	1975	14.6% (6)	26.7% (2)	28.3% (1)	19.8% (3)	15.6% (5)	8.9% (7)	17.1% (4)	--	18.7%	15.7%
Corporate Income Tax:	1953	--	8.0% (1)	2.9% (2)	.5% (4)	--	--	.8% (3)	.1% (5)	2.5%	3.2%
	1975	3.9% (4)	4.7% (3)	6.9% (1)	3.5% (5)	2.3% (7)	3.0% (6)	5.3% (2)	.6% (8)	3.8%	4.9%
General Sales Tax:	1953	15.3% (2)	--	--	13.2% (3)	18.9% (1)	--	10.6% (5)	11.4% (4)	13.8%	9.7%
	1975	23.3% (4)	15.5% (7)	13.6% (8)	15.7% (6)	23.6% (3)	18.3% (5)	24.7% (2)	26.1% (1)	20.1%	21.3%
Inheritance and Gift Tax:	1953	.9% (3)	1.2% (1)	.6% (4)	1.0% (2)	.6% (4)	.1% (7)	.1% (7)	.6% (4)	.6%	.8%
	1975	.9% (5)	1.4% (3)	1.5% (2)	1.6% (1)	.7% (6)	.2% (8)	.5% (7)	1.4% (3)	1.0%	1.0%
Severance Tax:	1953	--	.02% (3)	4.2% (1)	--	--	--	--	.5% (2)	1.6%	1.1%
	1975	--	.04% (4)	1.3% (2)	--	--	.1% (3)	1.8% (1)	--	.8%	1.3%
Gasoline & Motor Vehicles:	1953	12.2% (3)	10.4% (8)	11.9% (6)	14.2% (1)	11.9% (6)	13.1% (2)	12.0% (4)	12.0% (4)	12.2%	8.1%
	1975	9.4% (6)	7.2% (8)	8.1% (7)	12.3% (4)	11.4% (5)	13.3% (2)	12.4% (3)	13.4% (1)	10.9%	9.0%
Other Fees & Licenses:	1953	8.3% (8)	12.5% (6)	16.7% (2)	13.8% (5)	10.4% (7)	16.0% (3)	24.4% (1)	14.3% (4)	14.6%	15.5%
	1975	.6% (7)	.8% (4)	.5% (8)	.9% (3)	1.5% (1)	.7% (6)	.8% (4)	1.4% (2)	.9%	1.3%
Other Taxes:	1953	15.8% (1)	10.0% (7)	13.2% (3)	71.8% (8)	14.9% (2)	11.8% (6)	12.8% (5)	13.2% (3)	12.4%	19.2%
	1975	7.2% (3)	5.6% (6)	7.9% (2)	4.6% (8)	9.1% (1)	6.0% (5)	5.3% (7)	6.1% (4)	5.2%	7.9%

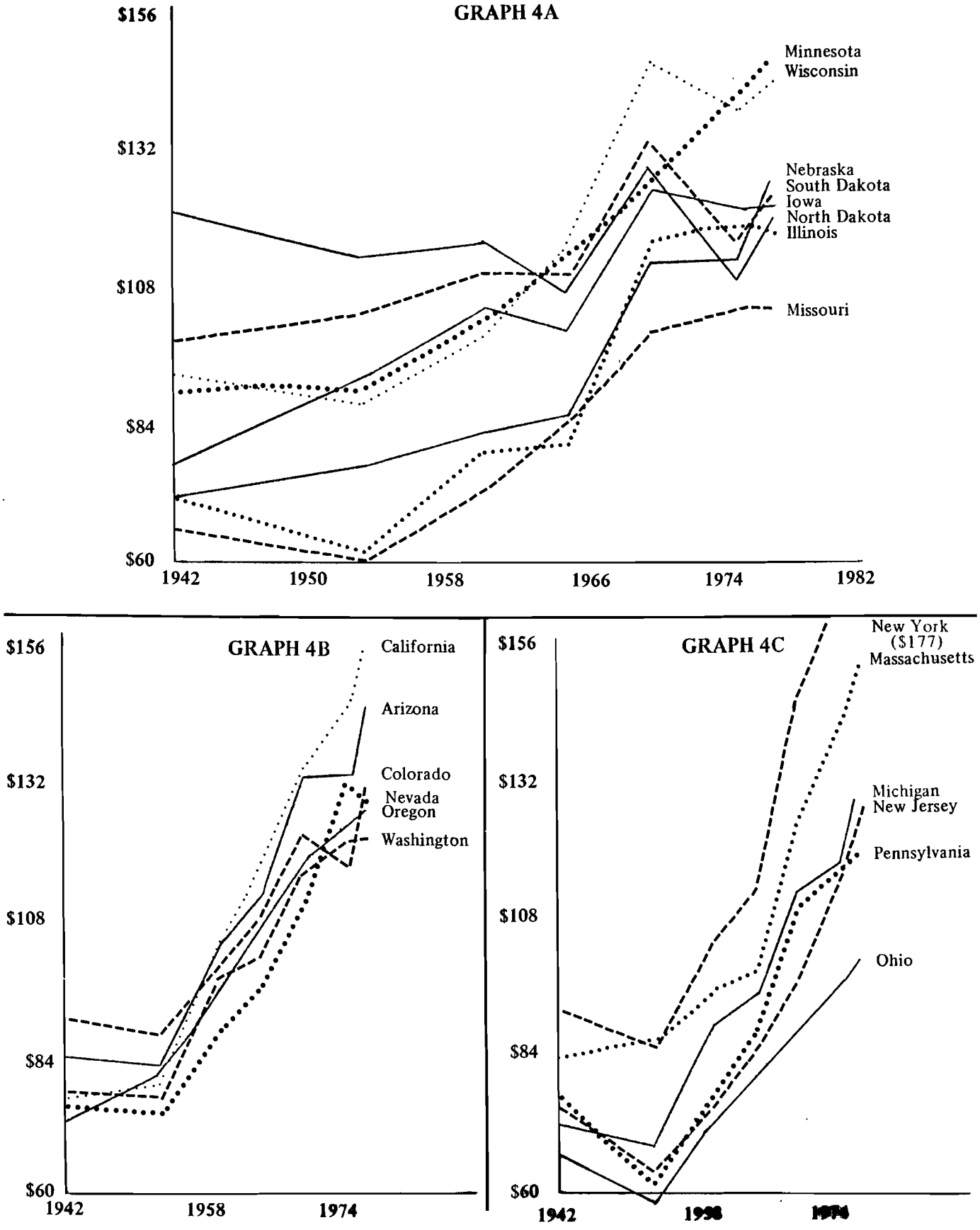
[1]SOURCE: *Report of the Governor's Minnesota Tax Study Committee*, 1956, Table III.9, and *Tax Wealth Fifty States*, The National Institute of Education, 1978, Table 9.

[2]Data includes revenue from fees, service charges, interest earnings, and rent. As such, the data is not directly comparable with Table 3.

[3]If fewer than 8 states impose a tax, the average represents the average for the number of states imposing the tax.

[4]1953 share for "Other Fees & Licenses" is an estimate.

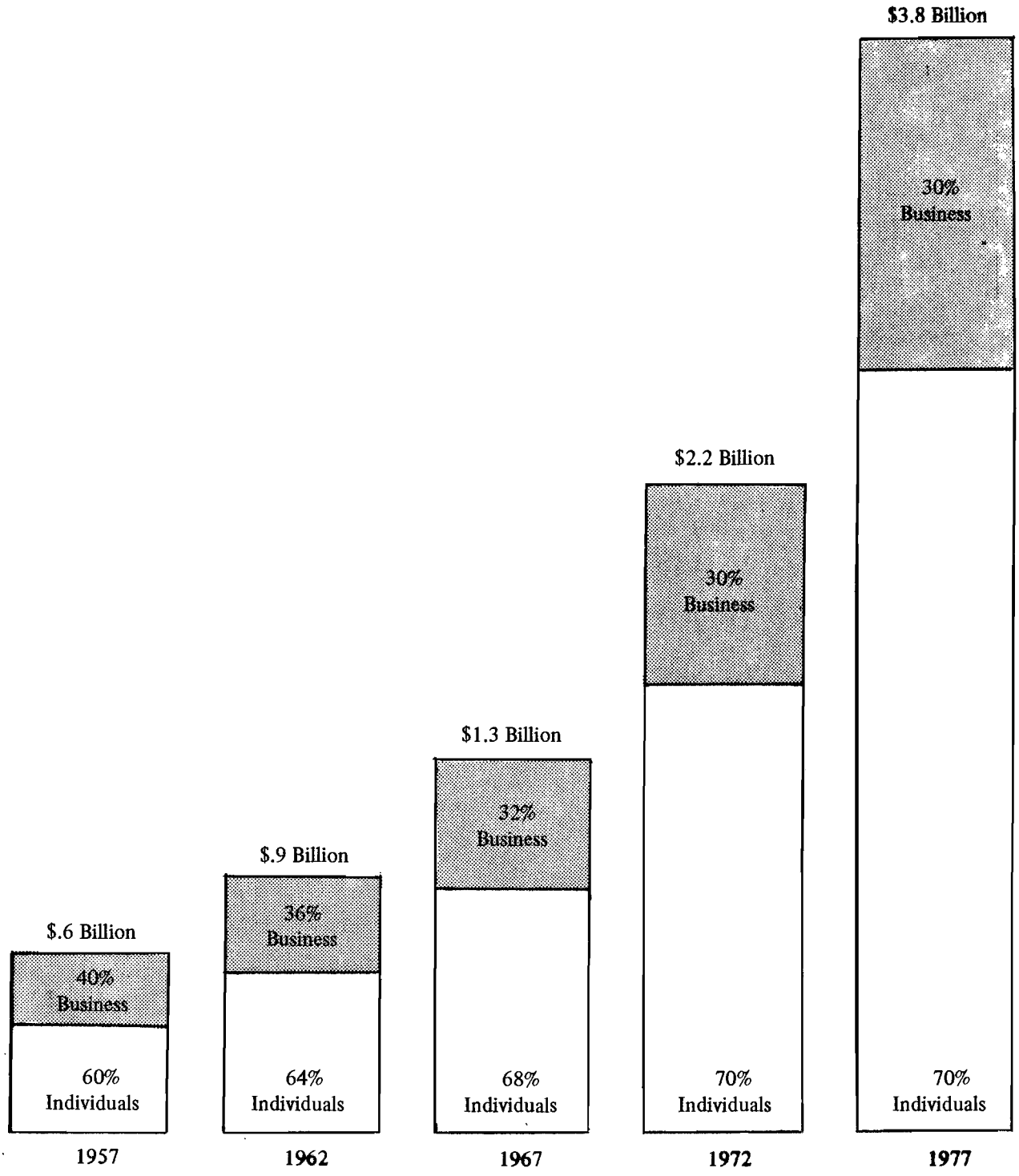
STATE AND LOCAL REVENUES PER $1,000 PERSONAL INCOME, 1942-1975 FOR THE UPPER MIDWEST AND SELECTED STATES



SOURCE: *Facts and Figures on Government Finance,* Tax Foundation, Inc. New York, NY

GRAPH 5

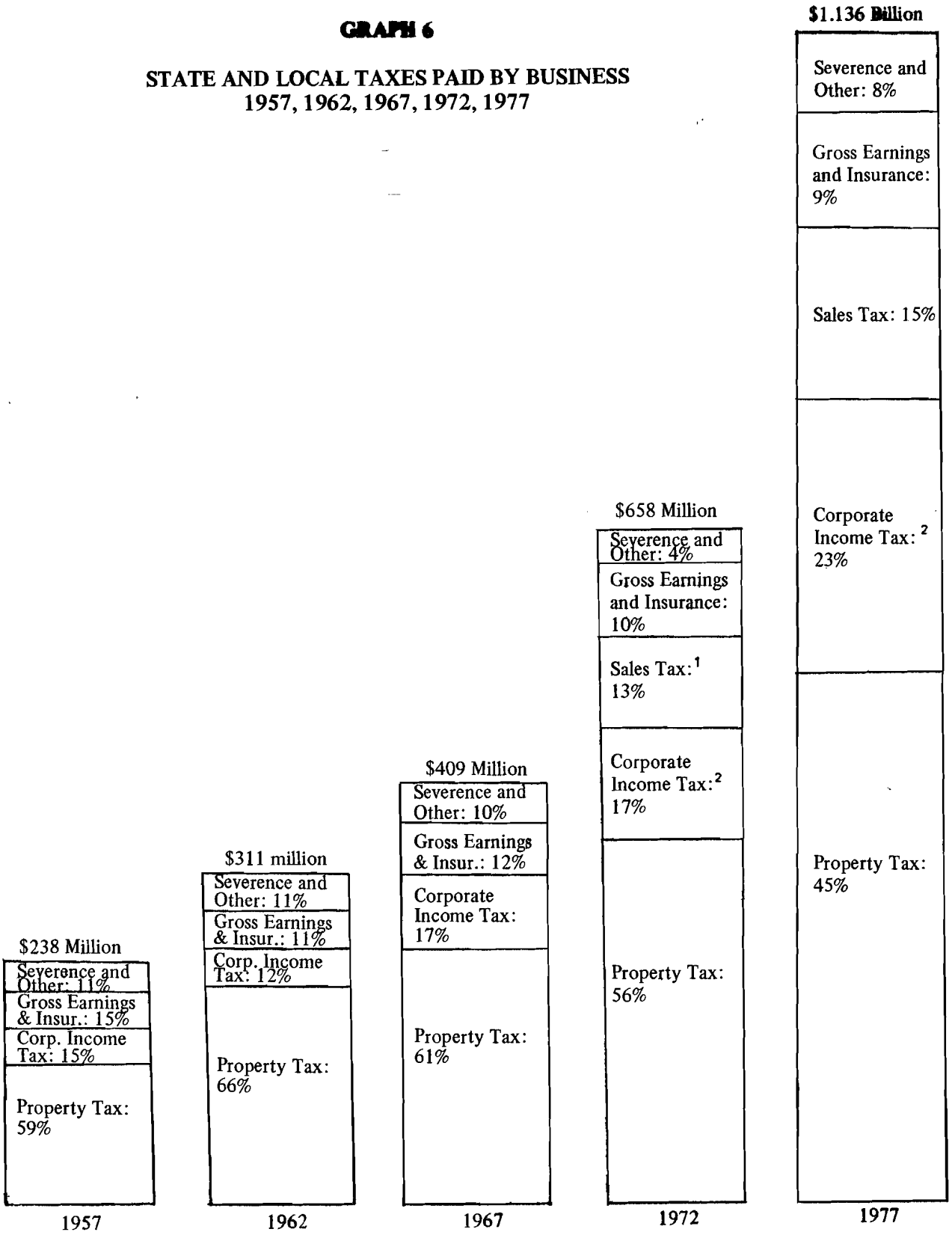
BUSINESS' SHARE OF TOTAL STATE AND LOCAL TAX REVENUES 1957, 1962, 1967, 1972 AND 1977



SOURCE: Minnesota Department of Revenue and Table 1-14 in *Report to Governor's Minnesota Property Tax Study Advisory Committee,* Minnesota State Planning Agency, 1970.

GRAPH 6

STATE AND LOCAL TAXES PAID BY BUSINESS
1957, 1962, 1967, 1972, 1977



SOURCE: Minnesota Department of Revenue and TABLE 1-13 in *Report to Governor's Minnesota Property Tax Study Advisory Committee,* Minnesota State Planning Agency, 1970.

[1] For 1972, it is assumed that 30% of the sales tax was paid by business. Subsequent years reflect the impact of specific law changes on this proportion. Includes motor vehicle excise tax.

[2] Includes personal income tax receipts from farms and proprietorships.

- In 1933, a separate class was created for agricultural machinery and horses.

- In 1937, a separate class was established for bank stock.

- In 1941, a class was created including all livestock and agricultural tools.

- In 1945, a special class was created for the products of blast furnaces.

- In 1951, a new class was created for oil refineries.

- In 1955, a separate class was created for rural property used for growing trees for lumber and wood products.

- In 1957, a special class was created for parking ramps. The classification only applied in cities of the first class with a population under 450,000 (Duluth and St. Paul).

- In 1959, the Legislature altered the definition of an existing class to include stockpiled iron ore in the same class as unmined ore.

- In 1967, the Legislature altered the definition of the class applying to rural land so that the class only included agricultural land and bona fide farmers.

- In 1973, a separate subclass was created for apartment buildings of 5 stories or more.

- In 1974, oil refineries were reclassified at 43%.

- In 1979, the Governor proposed reducing the classification rate for non-homesteaded agricultural property from 30% to 24%. Members of the Senate and House proposed reducing the rate on commercial/industrial property from 43% to 33-1/3% on the first $100,000 value and 43% for all value in excess of $100,000. These proposals were not adopted.

Particularly in recent years, classification changes have also been designed to benefit homesteaded property, that is, owner occupied residential and agricultural property. For example:

- In 1975, the Legislature adopted a "flexible" homestead base value. The homestead base value is a specific part of the value of an owner occupied residential property. All value up to the base (e.g., the first $17,000 value in 1979) has a classification rate which is lower than that for value in excess of it. The 1975 law allowed the base value to increase at a rate of $500 for each 3½% increase in the cost of homestead property.

- In 1977, the Legislature changed the classification rate on homestead property from 25% on the first $13,000 value and 40% on all value in excess of $13,000 to 22% on the first $15,000 value and 36% on all value in excess of $15,000 for taxes payable in 1978. For taxes payable in 1979, the rate would be 20% on the first $17,000 value and 33-1/3% on all value in excess of $17,000.

- The 1979 tax bill further reduced the classification rate on homesteaded property. (See Table 5.)

TABLE 5

1979 CHANGES IN THE CLASSIFICATION RATES FOR HOMESTEAD PROPERTY

	OLD LAW (TAXES PAYABLE 1980)	1979 TAX BILL (TAXES PAYABLE 1980)
agricultural homestead		
-base:	16%	12%
-excess:	31% (1980) 30% (1981)	29% (1980) 22% (1981)
non-agricultural homestead		
-base:	20%	18%
-excess:	33-1/3% (1980)	30% (1980) 28% (1981)

Most of the changes in classification have shifted property tax burden between classes of property. Lowering the classification rate for one class has the effect of raising the burden on classes that remain the same. For example, the 1951 change with respect to oil refineries provided that their real property would be assessed at 27% of market value and their personal property at 17% of market value. For communities with oil refineries, these changes meant that their total tax base was decreased. And, in order to raise the same amount of money as before the change in classification, a higher mill rate was necessary. The additional burden caused by the higher taxes fell on all the community's non-oil refinery property.

The 1970 Report to the Governor's Minnesota Property Tax Study Advisory Committee found that the classification system, in effect, exempted two-thirds of the value of all property in the state from property taxation. As a result, tax rates are roughly twice as high as they would be if the full market value of taxable property was taxed. (See Table 6.)

Some classes of property are subject to special taxes in lieu of property tax while others are completely exempt.

The special taxes in lieu of property taxes fall into two categories: gross earnings taxes and others. The gross earnings taxes are levied as a percent of a company's total revenues in Minnesota. The other special taxes vary in the way they work.

From a practical point-of-view, the special taxes are an extention of the classification system. Like the classification system, they identify specific types of property and makes special provisions for its taxation. The major difference is that these types of property are treated separately in the statutes.

The gross earnings tax is the oldest and most common tax in lieu of property tax. The tax dates back to before statehood. Originally, it was applied only to railroads built on land granted to the railroads by the federal government. This was changed in 1887 to require that all railroads come under the gross earnings tax. In later years, the gross earnings tax was also applied to insurance, telephone and telegraph companies.

In earlier years, companies paying the gross earnings tax were usually exempt from all other forms of state and local taxation. However, this is no longer the case. Com-

TABLE 6

INCREASES IN MINNESOTA STATEWIDE AVERAGE PROPERTY TAX RATE RESULTING FROM CLASSIFICATION

Year of Levy	Market Value *	Taxable Value	Total Taxes Levied	Average ** Mill Rate	Mill Rate Without Classification (Col. 4 divided by Col. 2)	Mill Rate Owing To Classification (Col. 5 minus Col. 6)
1	2	3	4	5	6	7
1957	$6617	$2041	$372.16	58.41	18.75	39.66
1962	$7259	$2322	$545.93	74.70	25.07	49.63
1967	$14719	$2349	$669.66	89.95	15.17	74.78
1972	$26724	$10432	$1037.22	94.19	12.94	81.25
1977	$45234	$14632	$1612.00	105.16	35.63	69.53

* All $$$ in millions. Market values for 1957, 1962, 1967 and 1972 were estimated by the Citizens League.

** All mill rates in "new mills".

SOURCE: Updated from Table 11-3 in *Report to Governor's Minnesota Property Tax Study Advisory Committee,* Minnesota State Planning Agency, 1970. 1974 and 1977 data from Minnesota Department of Revenue, *Property Tax Bulletin, # 7,* Tables 1 and 7.

panies now paying the gross earnings tax are subject to all other state and local taxes on business except the property tax.

The rate varied with the type of company. For example, in the late nineteenth century, the rate for telephone and telegraph companies was 2% of gross earnings. For railroads, it was 3% of gross earnings. In the late 1930s, the gross earnings tax rates were as follows:

- railroad companies:	5%	
- freight companies:	7%	
- sleeping car companies:	6%	
- express companies:	9%	
- trust companies:	6%	
- telephone companies:	4%	- for companies serving communities with *less* than 10,000
	7%	- for companies serving communities with *more* than 10,000
- telegraph companies:	7%	

With the exception of the rate for railroad companies, all could be changed directly by the Legislature. Increases in the gross earnings tax on railroads have to be ratified by the voters.

Between the late 1930s and 1979, there were no major changes in the gross earnings tax. No additional groups of businesses were placed under the tax. And, with few exceptions the rate remained unchanged. At the same time, the use of other taxes increased. As a result, the share of state revenue collected through the gross earnings tax has declined significantly, going from 6.3% of the total in 1922 to 2.9% in 1977. (See Table 3.)

Looking to the future, the gross earnings tax is likely to continue declining as a source of revenue. The federal Railroad Revitalization and Rehabilitation Act of 1976 prohibits states from taxing railroads in a discriminatory fashion relative to other businesses. As a result, the Legislature is now acting on Legislation that would place the operating property of railroads under a statewide property tax.

In addition to the gross earnings tax, the Legislature has, over the years, adopted some special taxes in lieu of property taxes. Each one applied to specific types of businesses. For example:

- A 1927 law exempted forest land from the property tax except for a $.08/acre charge. In 1957 a similar provision was adopted for tree farms.

- In 1945 a special law provided that airflight property could be assessed for tax purposes at 40% of market value.

- Grain was taxed under the Grain Tax Law and not under the general property tax until 1971.

- The distribution lines for rural electric cooperatives outside of incorporated areas are separately taxed at a rate based on the number of members and not on market value.

Some types of property are totally exempt from property taxes or taxes levied in lieu of property taxes. Historically, the property of non-profit and government organizations has been exempt. Since 1960, the Legislature has also exempted:

- Household goods (in 1959 the Legislature authorized county boards to exempt personal property).

- Indian lands (1961).

- Livestock and machinery used in agriculture (1967).

- Tools or inventories of manufacturers (since 1967, manufactures could choose one or the other).

- Inventories, tools, *and* machinery for all taxpayers (1971).

- Attached machinery for all property taxpayers (1973).

Some cities have replaced the traditional property tax with a land value (site value) tax.

The property tax can be divided into two parts: a tax on land or site value and a tax on improvements. For example, for any piece of commercial property, a value can be determined for the land and a separate value can be determined for the building or any other improvements. With the traditional property tax, both values are determined and a single tax rate is levied against them. With a land value tax, the levy would only be applied against the land value. In effect, any jurisdiction using a land value tax would be exempting all improvements from property taxation. And, in order for the jurisdiction to raise the same amount of revenue as when both land and improvement values were taxed, a higher tax rate would be necessary. (See Table 7.)

The concept of land value taxation is not new. It was used as early as the 13th century in Denmark. During the 19th century, Henry George, an American journalist, advocated a tax on land values as a replacement for all other forms of taxation. Pittsburgh and Scranton, Pennsylvania have had

forms of land value taxation since 1901. More recently Harrisburg started using a form of land value taxation as have some communities in Western Canada. Land value taxation has been adopted at the national level in both Australia and New Zealand.

Land value taxation is attractive for several reasons:

- Since the burden of taxation falls on land value more heavily, land value tax is more equitable than the traditional land/improvement tax. Proponents point out that land or site value usually increases as a result of factors beyond the control or even without the presence of any individual landowner. So, some, if not all, of the benefit from increasing land values should accrue to the public and not to individual landowners. For example, a decision to locate a freeway increases the value of the land adjacent to the right-of-way. People fortunate enough to own the adjacent land benefit substantially. Proponents of site value taxation argue that the public should receive for public purposes the benefits that it creates rather than give most of them to individual landowners.

- Land value taxation encourages the most efficient use of land as the free market dictates. It provides incentive to use and maintain sites for their highest value use. It is also disincentive for premature or excessive urban sprawl. With a site value tax, the landowner's property tax bill is not adversely affected by the way the site is developed. For example, if one of two adjacent parcels of property of the same size is used as a parking lot and the other for an office building the tax bills would be the same under site value taxation. Under traditional property tax, the parking lot owner's bill would be substantially lower, and since his taxes will increase if he improves his property, the traditional property tax acts as a disincentive for improvements. A similar situation exists with residential property; if a home owner faces higher property taxes after making an improvement, he is less likely to make it.

  Taxes on land located at the fringe of the metropolitan area are likely to decrease under a site value system. By comparison with the traditional property tax system, there would be less pressure on landowners to develop such land prematurely. Furthermore, because of high taxes on central city sites, the greatest demand for investment capital would probably be in the central city.

- Unlike the traditional property tax, the burden of a land value tax cannot be shifted from the landowner to a tenant. Theoretically, the rent that a landowner charges is based on the real market value of his property—the landowner is charging as much as the market will allow.

TABLE 7

TRADITIONAL PROPERTY TAX COMPARED WITH LAND OR SITE VALUE TAXATION

TAX METHOD	MARKET VALUES			TAX RATES			TAXES ASSESSED		
	Land	Improv.	Total	Land	Improv.	Overall Rate	Land	Improv.	Total
Traditional Property Tax	$8,000	$20,000	$28,000	3%	3%	3%	$240	$600	$840
Land Value Tax	$8,000	$20,000	$28,000	10.5%	----	10.5%	$840	----	$840
Pittsburgh "Graded" Property Tax	$8,000	$20,000	$28,000	8.7%	.7%	3%	$699	$141	$840
"Minnesota" Property Tax	$8,000	$20,000	$28,000	3%	3%	3%	$240	$600	$840

If a tax is imposed on the value of his land, then he must pay the tax with his own resources because his rent is already as high as his land value will allow. With a traditional property tax, the tax burden can be shifted onto the tenant by increasing the "rent" on the improvements.

There are three major arguments in opposition to land value taxation:

- A land value tax will encourage over building. In general, the density of development will increase in both commercial and residential areas. For example, the taxes on lakefront property will preclude all development except high-rise apartments. Proponents respond by suggesting that site value taxation be used only for non-residential property.
- There are public costs associated with land improvements. Based on a "benefits received" principle of taxation, the improvements should be taxed.
- The site or land value cannot be accurately determined separately from the improvement value.

Some advocates of site value taxation recommend that it be used in combination with a tax on improvement value. For example, the 1973 report of the Minnesota Tax Study Commission recommended that, "Some tax on improvements should be retained to reflect the cost of public services to those improvements. Complete abolition of taxation on improvements would encourage over-development."[4] Pennsylvania, for example, permits a tax to be levied against both land and improvement value. (In January 1979, the Pittsburgh City Council voted to increase the

TABLE 8

CORPORATION INCOME TAX RATES, CREDITS, AND FILING REQUIREMENTS SINCE 1933

Calendar Years	Normal Rate	Additional Tax	Surtax	Total Rate	Specific Credit Against Taxable Income
1933-1936	Tax Table*	-%	-%	-%	$1,000
1937-1938	7%	-	-	7	1,000
1939-1945	6	-	-	6	1,000
1946-1948	6	-	-	6	500
1949-1954	6	-	5	6.3	500
1955-1956	6	1	5	7.35	500
1957-1958	6	1	-	7.35	500
1959-1960	7.5	1.8	10	9.3	500
1961-1967	7.5	1.8	10	10.23	500
1968-6/30/71	8.5	1.8	-	11.33	500
7/1/71-12/31/76	12	-	-	12	500

The filing requirement for a corporation was $5,000 gross income or taxable income of $500. The minimum tax for a corporation filing a return was $10 for taxable years beginning on or before December 31, 1972, and $100 for taxable years beginning after that date.

From 1937 through 1956 there was a property-payroll credit against the tax.

* Personal income tax table used from 1933 through 1936.

SOURCE: Minnesota Department of Revenue.

tax on land value to 115 mills while leaving the tax on improvements at 23 mills. Thus, 83% of the city's overall levy is against land value while only 17% is against improvement value.) (See Table 7.)

THE STRUCTURES OF THE STATE'S CORPORATE INCOME AND GENERAL SALES TAXES SIGNIFICANTLY REDUCE THEIR BURDEN ON CERTAIN KINDS OF COMPANIES AND PURCHASES.

Nominally, Minnesota's corporate income tax is the highest in the country, but because of the way it is structured, many businesses do not feel that the tax is onerous.

The Legislature adopted the corporate income tax in 1933. At the same time, it established the personal income tax. Initially, the corporate and personal income taxes used the same graduated rates. (The rate ranged from 1% on the first $1,000 of net income to 5% on net income in excess of $10,000.) However, starting in 1937, the graduated rate on corporate income was replaced with a flat rate. (See Table 8.) The current rate is 12% on all Minnesota net taxable income. Corporations are required to file a return if their gross income exceeds $5,000 or their taxable net income exceeds $500. There is a minimum tax of $100.

Excluding the rate changes described in Table 8, there have been five major changes in the state's corporate income tax:

- In 1937, the state adopted a "property-payroll credit," allowing corporations a credit of up to 10% based on the amount of property and payroll in Minnesota. (The credit was eliminated in 1957.)

- In 1939, the adoption for use by manufacturers in computing their Minnesota taxable income of a weighted three factor formula.

- In 1953, non-manufacturers were given the option of using the weighted three factor formula.

- In 1971, corporations were prohibited from deducting federal income taxes paid in computing their Minnesota taxable income.

- In 1973, the basis for determining a sale attributable to Minnesota was changed to a "destination sales" definition.

The "property-payroll" credit allowed corporate taxpayers to reduce their tax liability by a fraction equal to one-tenth of the average of two ratios:

- Tangible property in Minnesota to the corporation's total tangible property.

- Minnesota payroll to the corporation's total payroll.

For example, a company with 20% of its property and 40% of its payroll in Minnesota would qualify for a credit equal to: [(.2+.4)/2] .1=3%. The purpose of the credit was to encourage companies to locate facilities in Minnesota. The 1956 Report of the Governor's Tax Study Committee was critical of the credit because it did not take into consideration market and other real limits that might prevent a company from expanding in Minnesota. The Report observed that in many cases it might be unrealistic for a

TABLE 9

PERCENT OF CORPORATE INCOME SUBJECT TO MINNESOTA CORPORATE INCOME TAX USING EQUAL WEIGHTS

FACTORS	PERCENT OF ACTIVITY IN MINNESOTA	WEIGHT	PERCENT SUBJECT TO MINNESOTA CORPORATE INCOME TAX
sales	20%	33-1/3%	6.6%
property	80%	33-1/3%	26.4%
payroll	90%	33-1/3%	29.7%
		total percent of company's income subject to Minnesota tax=	62.7%

"national" manufacturing firm to have more than a small portion of its production in the state. Furthermore, the committee felt that the credit was inequitable because it resulted in different tax rates for corporations with similar Minnesota incomes. The committee recommended that the credit be eliminated. The Legislature did so in 1957.

In 1939, Minnesota adopted a three factor formula for use in determining the portion of a manufacturing corporation's income subject to Minnesota corporate income tax. The three factors are:

- *Sales* in Minnesota as a percent of the company's total sales.
- *Payroll* in Minnesota as percent of the company's total payroll.
- *Property* in Minnesota as a percent of the company's total property.

Companies are given an option in weighting the factors: They can weight them equally (i.e. 33-1/3% each). Or, they can weight them as follows: 15% for property, 15% for payroll, and 70% for sales. For example, assume that a company has 20% of its sales, 80% of its property, and 90% of its payroll in Minnesota. Table 9 shows the percent of the company's income that would be subject to Minnesota's corporate income tax using the formula with equal weights and with the optional weights.

In the example, the effect of using the optional weights is a substantial reduction (39.5% as opposed to 62.7%) in the percent of corporate income subject to the Minnesota tax.

The use of a three factor formula significantly reduces the percent of total corporate revenues paid in Minnesota corporate tax for many businesses. Using the example in Tables 9 and 10, assume that the company in that example has total revenues of $1,000,000.

- With no formula for separating Minnesota revenue from that from outside Minnesota, the *tax would be $120,000* (12% X $1,000,000).
- With the three factor formula and equal weights, the *tax would be $75,240* (62.9% X $1,000,000 X 12%) or 7.5% of total revenues.
- With the three factor formula and using the optional weights, the *tax would be $47,400* (39.5% X $1,000,000 X 12%) or 4.7% of total revenues.

The optional formula is most beneficial to corporations having a large share of their sales outside of Minnesota (e.g. corporate headquarters). Like the property-payroll credit, it is an incentive for corporations to expand their facilities in Minnesota while, at the same time, it encourages them to expand their sales outside of Minnesota.

Originally, the 70%-15%-15% formula could only be used by manufacturers. In 1953, non-manufacturers were given the same option. However, because Minnesota defined a "Minnesota sale" according to where the sale originated, the number of companies benefiting from the optional formula remained limited.

In 1973, the Legislature replaced the "origination" definition with one based on "destination". Under the old law, a sale to an out-of-state customer made through a sales

TABLE 10

PERCENT OF CORPORATE INCOME SUBJECT TO MINNESOTA CORPORATE INCOME TAX USING OPTIONAL WEIGHTS

FACTORS	PERCENT OF ACTIVITY IN MINNESOTA	WEIGHT	PERCENT SUBJECT TO MINNESOTA CORPORATE INCOME TAX
sales	20%	70%	14%
property	80%	15%	12%
payroll	90%	15%	13.5%
		total percent of company's income subject to Minnesota tax =	39.5%

office in Minnesota had to be counted as part of the corporation's Minnesota taxable income. Under the new law, only those sales with a Minnesota destination must be counted.

The alternative weighted formula (i.e. the 70%-15%-15% formula) has been criticized as inequitable. Under the formula, companies with equal profits and using equal public services can pay different amounts of corporate income tax, depending on the portion of their sales in Minnesota. This criticism is similar to that made against the property-payroll credit. Some companies are more limited than others with respect to locating facilities and sales territory. As such, they will never benefit from the weighted formula. Furthermore, increased use of the weighted formula may cause the Legislature to increase the corporate income tax rate. Any such increase would be felt most by companies not using the weighted formula.

In 1971, the Legislature eliminated federal deductibility from the state's corporate income tax law. As a result, companies filing corporate income tax returns in Minnesota could no longer use the federal income taxes they paid as a deduction. According to former Commissioner of Revenue, Arthur Roemer, the 1971 change almost doubled the effective rate of Minnesota's corporate income tax. In other words, if the state still had federal deductibility, Minnesota corporate income taxes paid as a percent of total Minnesota income (i.e. the effective tax rate) would be about 6% instead of 12%.

With the exception of the property-payroll credit, all other major changes in the state's corporate income tax have been designed to change the size of the "base" for the tax; that is, to increase or decrease the portion of a company's total income that was subject to the state's income tax. (The effect of these changes is not unlike that of changing the classification rate on a type of property.) Two changes, the weighted three factor formula and the "destination" based definition for sales, reduced the share of corporate income subject to the Minnesota tax. The third, eliminating federal deductibility, increased the state's corporate income tax base.

Despite provisions to exclude income from the corporate tax base, Minnesota's corporate income tax burden is among the highest in the nation. (See Table 11 and 12.)

A "value added tax" is an alternative to the corporate income tax.

"The value added tax (VAT) is a levy on the value a busi-

TABLE 11

1977 CORPORATE INCOME TAX PER $1,000 PERSONAL INCOME, MINNESOTA AND SELECTED STATES

STATE	COLLECTIONS PER $1,000 PERSONAL INCOME	RANK (1=HIGHEST)
Minnesota	$10.53	3rd
Illinois	4.66	30th
Iowa	5.13	27th
Missouri	3.71	43rd
Nebraska	4.44	35th
North Dakota	5.80	26th
South Dakota	.71	46%
Wisconsin	8.93	7th
California	10.67	2nd
Arizona	3.93	40th
Massachusetts	10.38	4th
Texas	no tax	no tax

SOURCE: Minnesota Taxpayers Association, *How Does Minnesota Compare?*

ness firms adds to goods and services it purchases from other firms. The firm adds this value by handling or processing these purchases with its labor force, machinery, buildings and capital. Value added is the difference between a firm's sales and its purchases during an accounting period or, alternatively, the sum of its wages, profits, rent, interest, and royalties."[5] For example, the value added by an computer manufacturer would be the difference between the cost of raw materials (including any tools or machinery necessary to make computers) and the selling price of the company's "finished product." For a computer company, the value added per unit of "finished product" is substantial. By contrast, for a warehouse, the value added per unit of "finished product" is quite small.

The basic difference between the corporate income tax and the value added tax is that the former works on an "ability to pay" concept while the VAT works on a "benefits received" principle. Businesses only pay corporate income tax when they have income. As their income (or ability to pay) increases, their tax bill also increases. With a VAT, tax is paid regardless of income or profits. The rationale is that all businesses, regardless of their profitability, benefit from public services. As such, the cost of public services should be included in their cost of doing business.

Supporters of value added taxation usually make their case on the following points:

- As a revenue source, the VAT is more stable than a tax on profits (i.e. the corporate income tax.) Revenues do not fluctuate as much with changes in the economy because the tax base is business activity and not profits or income.

- The VAT encourages capital investment and efficient use of labor. Value added is usually defined as the sum of a company's wages, profits, rent, interest paid, and royalties received. As such, companies with high wage bills are likely to have higher tax bills. Investment in new plant and equipment is not counted in the base for tax purposes. Companies wishing to minimize their VAT have a direct incentive to reduce labor costs by automating. And, when they use labor, the incentive is to use it efficiently.

- A tax on profits or income,"...acts as a disincentive to the efficient use of resources because efficiency increases profits which in turn increase the tax liability...A related argument is that a heavy profits tax could discourage capital investment because profits are a major source of investment funds. The VAT would reduce the tax on profits, thereby freeing more funds for job creating capital investment."[6]

Opponents of value added taxation build their case around the following arguments:

- Labor intensive businesses are discouraged from developing because their tax liability increases. (See Table 13.) A state adopting a VAT may loose opportunities for developing its service and other labor intensive businesses.

- Since the tax is not based on "ability to pay," it may discourage the start-up of new businesses and place an unnecessarily heavy burden on existing small companies.

- The VAT is inflationary. Most value added taxes work like a sales tax. They are applied as a percent of the tax base, which, in this case, is roughly equal to the selling price of a goods or service. As such, the tax is easily passed onto the consumer in the form of higher prices.

The VAT is used extensively by European countries. Unlike the corporate income tax, it is relatively easy for a company to determine the VAT on each item sold. In fact, many counties apply the VAT in the same way that we use the sales tax–as a fixed percent of the price of an item. This makes it easy for the tax to be deducted when an item is exported. In Europe, where commerce is more international, this deduction gave the countries that were early users of the VAT a competitive advantage over those which had some other form of corporate tax. However, the early user's advantage has been largely reduced as more and more countries have adopted VATs.

Michigan is the only state using a VAT. The state first adopted a form of VAT in 1953. In 1967, it replaced the "business activities tax" (as the VAT was known) with a

TABLE 12

MINNESOTA CORPORATE INCOME TAX COLLECTIONS PER $1,000 PERSONAL INCOME

YEAR	COLLECTIONS PER $1,000 PERSONAL INCOME
1957	3.54
1962	4.45
1967	6.24
1972	6.44
1977	$10.53

SOURCE: Minnesota Taxpayers Association, *How Does Minnesota Compare?*

conventional corporate income tax. There were two major reasons for the change:

- Michigan was about to adopt a personal income tax. It was thought that a corporate income tax was necessary to gain labor support for the personal income tax.

- Small and service businesses were opposed to the VAT. It was not based on ability to pay. Businesses, large and small, resented the idea of paying taxes in loss years.

The VAT was reintroduced and enacted in Michigan in 1975 as the "single business tax." The VAT was designed to replace a number of separate business taxes including the corporate income tax, property taxes on intangibles and inventories, and a number of franchise taxes.

The positive features of the VAT were particularly persuasive in Michigan. The state had growing budget problems due to fluctuating revenues, a continued dependence on the auto industry for economic growth and increasing concern about the structure of the state's tax system and its effects on the overall business climate. With a corporate income tax, revenues fluctuated with the rise and fall of the auto industry profits. For example, between 1970 and 1971, revenues from the state's corporate income tax fell by about $150 million (44%). In addition, Michigan's share of new investment by the auto industry had been declining. A VAT might provide some incentive for the auto manufacturers to increase their investment in plant and equipment located in Michigan. Finally, the state was being criticized regularly because of the number of taxes levied against businesses. The VAT was seen as an opportunity to "clean up" the tax system.

Michigan does not have a "pure" VAT. Small businesses and labor intensive businesses are eligible for some special credits. These adjustments were necessary to make the tax acceptable to these business interests.

TABLE 13

PERCENTAGE CHANGE IN TAX LIABILITY AS A RESULT OF REPLACING THE CORPORATE INCOME TAX WITH A VALUE ADDED TAX

INDUSTRY	CHANGE IN TAX LIABILITY AS A PERCENTAGE OF INITIAL TAX LIABILITY
Agriculture	1,524.1%
Transport	135.1
Oil and Gas	222.4
Services	330.8
Construction	346.3
Trade	74.9
Auto Repair	394.8
Rubber Manufacturing	-3.3
Miscellaneous Manufacturing	-19.5
Printing	-13.1
Paper Products	-41.4
Machinery Manufacturing	-36.5
Finance	-47.3
Chemicals	-60.3
Automobile Manufacturing	-65.2
Communications	-59.0
Utilities	-72.0

SOURCE: Henry Aaron, *Differential Price Effects of a Value Added Tax,* National Tax Journal, Vol. XXI, No. 2, June 1968, p. 162-175.

Minnesota businesses also pay a sales and use tax; however, the tax is not of major concern for most companies. Business often cites the sales tax as preferable to other types of taxation.

In 1967, the Legislature enacted a 3% general sales tax. The rate was increased to 4% in 1971. By comparison with other states, Minnesota was late to institute a sales tax. For example, all of our neighboring states except Wisconsin and Nebraska had a general sales tax by 1954. (See Table 4.)

More resistance to the general sales tax has come from consumers than from the business community. Consumer opposition has been based on two arguments:

- **The tax is easily passed on to consumers. It may be levied** on purchases by business, but a firm can build the tax into **the final price of its product.**

- **The tax is not based on "ability to pay." Everyone regard**less of income pays the same rate. Furthermore, upper income people have a better chance of avoiding the tax by purchasing goods outside of Minnesota.

Those who favor the general sales tax question the validity of each of these concerns. Regarding the first, they agree that the tax is added to the cost of finished goods and services. But they also point out that the higher prices which result may lower demand for the product. As a result, business absorbs part of the impact of the tax through reduced sales (i.e., demand). As to the second argument, they contend that by adjusting the tax rate as well as credits and exemptions, the sales tax (or any tax) can work, at least to a certain extent, on an ability to pay basis.

The Minnesota sales and use tax has been influenced significantly by the second argument. A number of items (including food, clothing and all purchases by "tax exempt" organizations) are totally exempt from the tax. Others are exempt when they are used for "exempt purposes." These include:

- All raw materials used in agricultural or industrial production of personal property...including raw materials used in research, development and design.

- Tangible personal property, except paper or ink products, used in producing a publication at intervals of less than three months.

- Rolling stock used by railroads, sleeping car or express companies.

- Equipment used in the production of taconite.

- Aircraft for which a commercial use permit has been issued.

- All equipment and other materials used in industrial and agricultural production having a useful life of less than twelve months.

- Textbooks used in conjunction with a course of study in a public or private school.

- Materials designed to advertise the sale of merchandise or services if purchased for the purpose of being transferred outside the states (e.g., commercials).

- **Build**ing materials used in construction or remodeling of a residence for disabled veterans. Construction must be financed by the United States.

The exemptions have dramatically reduced the size of Minnesota's sales and use tax base. For example, the Department of Revenue estimates that the total value of all "sales" in Minnesota in 1977 was $44.9 billion. Of that, only $12.3 billion (27.3%) was subject to sales and use tax. Action taken by the Legislature in 1979 to exempt purchases of farm machinery from the sales tax will reduce the size of the base by approximately $350 million...to about $11.9 billion.

Since its inception in 1967, revenues from the sales tax have grown from approximately $283 million (7.8%) of total state and local revenues to about $493 million or 14.2% of total state and local revenues in 1977.

MINNESOTA TAXES MINING SEPARATELY FROM ALL OTHER BUSINESS ACTIVITY.

Like other states, Minnesota taxes mining separately from other business activity.

Separate taxation of minerals stems mainly from the special nature of mineral wealth. Mineral wealth is thought of as a "gift of nature." The value of which greatly exceeds the human costs of mining and processing. In addition, once mined, the wealth is lost. On this basis, it is thought that there should be some special means for recovering some portion of the wealth. This approach to mineral taxation is usually referred to as the "natural heritage principle."

Most mineral taxes are levied by the state as opposed to local government. While there may be some special costs to persons living near mineral deposits, this the state argues

does not give them the exclusive right to tax mineral deposits.

Iron mining has been taxed separately since 1881. In that year, the Legislature substituted a tax of 1¢ per ton of mined iron ore for the property tax. The favorable rate was granted to protect and stimulate what was then an "infant" industry in Minnesota. This form of special treatment was declared unconstitutional in 1897.

Since the early 1900s, mining has been subject to four major taxes:

- **Property Tax:** Between 1897 and 1913, unmined iron ore was taxed at 100% of value, at least in theory. Since 1913, 50% of the full market value has been subject to property taxation. Mineral rights owned separately from surface real estate may be taxed separately from surface interests. Currently, mineral rights are taxed at an annual rate of 25¢ per acre, with a minimum tax of 10¢ per parcel.

  Some mineral deposits and mining equipment are totally exempt from the property tax. The exempt deposits and equipment include taconite, semi-taconite, copper-nickel ore, and iron sulphides.

- **Occupation Taxes:** Anyone engaged in the business of mining or producing iron ore or other ores in Minnesota is subject to an occupation tax on the value of all ores mined or produced. The tax is paid in lieu of corporate income tax. The gross tax is currently 15.5% for iron ore, 1% for copper-nickel ore and 15% for taconite, semi-taconite, and iron sulphides. Credits may be applied against the gross tax for certain labor expenses, low grade research, experimentation, and exploration.

- **Royalty Taxes:** The occupation taxes are supplemented with taxes on royalties received by landowners for permission to permit exploration and mining. The royalty tax is 15.5% on iron ore royalties, 15% on royalties from taconite, semi-taconite, and iron sulphides, and, 1% on copper-nickel and other ores.

- **Production Taxes:** A production tax has been levied on processors of taconite, semi-taconite, copper-nickel, and iron sulphides. The production tax is paid in lieu of property taxes. In 1977, the production tax was set at $1.25 per gross ton of merchantable iron ore concentrate. The rate is indexed so that it will increase or decrease at the same rate as the Wholesale Price Index for steel mill products. An additional tax is imposed on ore of particularly high iron content.

The special taxes that Minnesota levies against mineral deposits and production are slightly different from that used by other states. Most states tax mineral through a severance tax—that is, a tax based on the amount of ore that is mined or produced. If there is no production, then no tax is paid. Minnesota has two such taxes. These production taxes apply only to the processing of taconite and iron sulphides. On the other hand, the state's occupation taxes apply to all mineral deposits.

Unlike some states, Minnesota exempts some mineral lands and production facilities from the property tax. Currently, the taconite industry is the principle beneficary of this exemption. In future years, the copper-nickel industry may also benefit. The rationale for the exemption is best explained by this 1956 statement:

"The exemption of taconite processing from the ad valorem property tax is a conscious and direct effort to encourage the development of this new industry. The property tax would be particularly burdensome because this levy is a fixed charge against the firm regardless of the current level of production or profitability. Taconite operations are subject to the occupation tax but no appreciable burden is currently involved because no liability is incurred until production has begun and a substantial margin over operating costs has been achieved."[7]

Despite the separate system of taxation and the state's large mineral deposits, the severance and royalty taxes accounted for only about 2% of total state and local revenues in 1977. As a share of the whole, receipts from special mining taxes peaked in the early 1950s, reaching just over 5% of total state and local revenues.

Unlike any other business activity, the structure for taxation of taconite is set in the state's constitution.

Special tax consideration for the taconite industry goes beyond exemption from the property tax. In 1963, the state's constitution was amended such that the structure for taxation of taconite and semi-taconite can not be changed until 1989. The so-called "taconite amendment" provided that existing laws, "...relating to the taxation of taconite and semi-taconite, and facilities for the mining, production, and benefication thereof shall not be repealed, modified or amended, nor shall any laws in conflict therewith be valid until November 4, 1989."[8] The amendment does not prohibit increases in the occupation or royalty taxes as long as the increases apply to all other forms of mining in the states. The production tax or any other tax which is imposed in lieu of property tax is not considered (for the purposes of the amendement) to be an occupation or royalty tax. As such, it may be increased or decreased or even restructured without violating the amendment.

DIFFERENCES IN TOTAL TAX BILLS BETWEEN MINNESOTA AND NEIGHBORING STATES HAVE BEEN RELATIVELY SMALL AND ARE GETTING SMALLER.

By comparison with other states, a company's Minnesota tax bill is high. This has been the case for at least the last twenty years.

Table 14 compares the total tax bill for a business located in Minnesota with the bill for a similar company located in other midwestern states. The table was constructed from two different studies the 1956 *Report of the Governor's Tax Study Commission* and a 1975 study by Price Waterhouse for the State of Missouri. [9] Both studies compute the taxes for a hypothetical manufacturing firm located in each of several states. Index numbers were computed by taking the tax bill in each state as a percent of the bill for Minnesota.

Because the manufacturing firms used in each study were not "identical," the comparisons should be considered approximate.

Comparing only state and local taxes, the table illustrates two important points:

- Minnesota's business taxes have been significantly higher than those in surrounding states since at least 1954. Wisconsin is the only exception.

- The difference between the business's Minnesota tax bill and the bill in the other states has decreased substantially, except in Wisconsin where the disparity has increased.

When total tax bills are compared, differences are rather small.

The comparisons for 1954 change dramatically when the company's total tax bills are compared--that is, when federal taxes are added to the state and local bill. In 1954, there was little disparity between total bills. The index number for Minnesota was 100. For Wisconsin it was also 100. For Illinois it was 95. For Iowa it was 97. For Missouri it was 95. For Nebraska it was 94. For South Dakota it was 95. And, for North Dakota it was 97. (North Dakota was deleted from the Table because it was not included in the Price Waterhouse study.)

The gap in total tax bills decreases because the companies can deduct the state and local taxes they pay from their income in computing their federal corporate income tax. The greater the state and local tax bill, the greater the federal deduction, and the lower the federal income tax bill.

Unfortunately, most recent comparisons of business tax bills (including the Price Waterhouse study) do not compute and compare "total bills." Instead, they compare only state and local taxes. (See Table 14.)

However, using data from a table developed by the Minnesota Business Partnership and the current federal corporate income tax brackets and rates, estimates can be made of the total tax bill for a hypothetical "average" company when it is located in different states. Table 15 compares the total bill in Minnesota with that in neighboring states. Comparing the results in 1978 with 1954 shows that the difference in total tax bills (at least in these examples) was not that significant in 1954 and appears to be even less significant in 1978. In addition, the comparisons show that with the exception of Wisconsin there is less difference between the total bill in Minnesota and that for each of the other states in 1978.

In addition to taxes, businesses in Minnesota and other states face some additional mandatory public charges. For example, businesses must make payments for unemployment and disability insurance for their employees. Minnesota requires that most employers also provide their full-time employees with health insurance. While these 'charges' are not taxes in the traditional sense, they are publicly determined costs that every business must pay in order to do business in Minnesota. If mandatory public charges were included in the total tax bill for our hypothetical companies, it is likely that the differences between Minnesota and neighboring states would increase. The magnitude of the increase would depend on which mandatory public charges were included. For example, the workers compensation rates in Minnesota are significantly higher than those in neighboring states. (See Table 17.) By contrast, the employer's contribution for unemployment insurance is lower than that for all neighboring states except Nebraska. (See Table 16.)

BUSINESSES MAY ALSO BE 'TAXED' INDIRECTLY THROUGH TAXES PAID DIRECTLY BY INDIVIDUALS.

The largest share of state and local revenues is collected from individual taxpayers.

Currently about 70% of all revenue from state and local

TABLE 14

COMPARISON OF MAJOR BUSINESS TAXES FOR A HYPOTHETICAL CORPORATION

LOCATED IN MINNESOTA AND NEIGHBORING STATES

	Minnesota		Wisconsin		Illinois		Iowa		Missouri		Nebraska		South Dakota	
Taxes	**1954**	**1974**	**1954**	**1974**	**1954**	**1974**	**1954**	**1974**	**1954**	**1974**	**1954**	**1974**	**1954**	**1974**
Property Taxes as a % of Minnesota:	100	100	77	101	50	95	72	90	42	73	46	123	51	138
State corporate income taxes as a % of Minnesota:	100	100	359	94	0	54	13	61	51	21	0	45	0	--
State and federal corporate income tax as a % of Minnesota	100	100	106	--	105	--	102	--	106	--	105	--	105	--
Total state, and local as a % of Minnesota total:	100	100	101	80	47	83	67	76	45	50	42	74	46	89
Total state, local and federal as a % of Minnesota	100	100	100	--	95	--	97	--	95	--	94	--	95	--

SOURCE: *Report of the Governor's Tax Study Commission, 1956*, Table IV 6, and *State Tax Comparison Study*, Price Waterhouse and Company, 1975. Both studies computed the corporate taxes in each listed state for a hypothetical manufacturing firm. The Price Waterhouse study was commissioned by the State of Missouri.

taxes is paid by individuals. In 1957 they paid only 60%. (See Table 18 and Graph 5.)

Personal taxes are of concern to business because they may affect wage rates–especially when an employee is transferred from one state to another. Table 19 shows the variance in tax load for family of four at 19 locations. It can be substantial. Within any income grouping, tax bills differ by more than 100%. Looking at the cities by region, family tax bills are generally higher in the north than in the

TABLE 15

TOTAL TAX BILL FOR A COMPANY IN MINNESOTA COMPARED WITH THE TOTAL BILL IN SEVEN SURROUNDING STATES*

	Minnesota	Illinois	Iowa	Missouri	Nebraska	North Dakota	South Dakota	Wisconsin
Federal Income After All Deductions, Except State and Local Taxes	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
State and Local Taxes Per $100 Investment ■	1.40	1.50	1.42	1.15	.91	.65	.45	1.23
State and Local Taxes •	280,000	300,000	284,000	230,000	182,000	130,000	90,000	246,000
Federal Adjusted Income	4,720,000	4,700,000	4,716,000	4,770,000	4,818,000	4,870,000	4,910,000	4,754,000
Federal Income Tax*	2,151,950	2,142,750	2,150,110	2,174,950	2,197,030	2,220,950	2,239,350	2,167,590
Total Tax Bill	2,431,950	2,442,750	2,434,110	2,404,950	2,379,030	2,350,950	2,329,350	2,413,590
Total Tax Bill as a Percent of Minnesota	100%	100.4%	100.1%	98.9%	97.8%	96.7%	95.8%	99.2%

*Total tax bill includes federal corporate income tax; state corporate income tax and all property taxes.

•Total investment is assumed to $20,000,000. State and local taxes=(taxes/$100 investment) (200,000).

*Federal income tax rates:

First $25,000:	17%
Next $25,000:	20%
Next $25,000:	30%
Next $25,000:	40%
All Income Greater Than $100,000:	46%

■SOURCE: *The Minnesota Economy: How Does it Compare?* Minnesota Business Partnership, March 1979, p. 57. The Partnership arrived at this statistic by having 14 companies compute the tax expense for one of their Minnesota manufacturing plants assuming it was "relocated" in each of 25 states. The plants involved covered a wide range of product lines. Investment ranged from $1.1 million to $25.6 million. The statistic is a weight average.

TABLE 16

1976 UNEMPLOYMENT INSURANCE RATES FOR EIGHT MIDWESTERN STATES

STATE	AVERAGE EMPLOYER CONTRIBUTION RATE (%)
Minnesota	1.9%
Illinois	2.0
Iowa	2.2
Missouri	2.7
Nebraska	2.8
North Dakota	2.0
South Dakota	.9
Wisconsin	2.3
U.S. Average	2.6

SOURCE: Table 537, *Statistical Abstracts of the United States,* 1977 Edition, United States Department of Commerce, p. 340.

south. This is particularly true for upper income families living in larger cities. For example, using a slightly larger sample of cities, the average tax bill for a family of four with an income of $50,000 living in a large northern city was $4,814 (9.6% of income). The average for large southern cities was $2,199 (4.4% of income). By comparison, the same family living in a medium size city would pay an average of $4,888 (9.8%) in the north and $3,090 (6.2%) in the south. Similar differences are found for small cities; however, the differences are slightly more pronounced than in the medium sized cities. As incomes decrease the difference in tax bills between north and south also decrease... but for each income group the average bill in the south is lower than that for the north.

The precise affect of personal taxes on the cost of doing business is debatable. There are two major sides to the debate. One side says that personal taxes have no effect on wage rates. Those who take this point-of-view argue that the demand for services remains whether they are provided by state and local government or purchased directly by each individual. Table 20 supports this point-of-view. There is considerable difference in the tax bill for each location. But, there is not as much difference in the total family budget between locations. The other side says that personal taxes affect wages directly—as taxes go up so do wages. Unlike other parts of the family budget, taxes are not optional. As a result, tax increases generate demands for additional wages. Taxes may also force wages up because they require all taxpayers to pay for virtually all public services...whether they use them or not. If taxes were lowered or if there were none at all, some families would undoubtedly have more disposable income then they now have. And, since families would be purchasing services individually, there might be more competition and better cost control among providers.

The effect of taxes on wages may be particularly significant for employees being transferred to this community from outside of Minnesota. The employee expects to have at least as much and perhaps more disposable (or after-tax) income after the move. Most will not be entirely satisfied by the claim that Minnesota provides more public services. They will still want their after-tax income to be equal or higher.

Minnesota's personal income tax is among the highest in the nation.

Minnesota has had a personal income tax since 1933. The tax was adopted to supplement the property tax revenues. With the depression, a growing number of property owners were unable to pay their taxes. Any increase in the property tax would only result in more land forfeitures. Yet, the

TABLE 17

1977 WORKERS' COMPENSATION RATES FOR EIGHT MIDWESTERN STATES

STATE	AVERAGE PREMIUM PER $100 PAYROLL
Minnesota	$2.83
Illinois	2.17
Iowa	2.72
Missouri	1.88
Nebraska	1.40
North Dakota	1.80
South Dakota	1.43
Wisconsin	1.44
U.S. Average	2.57

SOURCE: *Report to the Minnesota Legislature and the Governor,* Minnesota Worker's Compensation Study Commission, St. Paul, MN, 1979, p. 165.

state needed additional revenue. The income tax was chosen as an alternative source mainly because it could easily be structured such that citizens paid on an "ability to pay" basis. Persons with no or little income would pay little or no personal income tax. By comparison, property taxes were computed strictly on the basis of property value. A person with no income might have a substantial tax bill.

The Minnesota Legislature began debating personal income tax proposals in the late 19th century. The Senate enacted an income tax in 1891. The House passed a proposal in 1907. However, the poor performance of the tax in the five states which had the tax kept the two houses from reaching agreement on the need for an income tax.

The major problem was administration. The states using the tax were administering it through local assessors. As a result, administrative costs were high and the quality of administration was uneven. In 1911 Wisconsin introduced an income tax that was centrally administered. With its success, several other states enacted income taxes. Eleven states had the tax by 1922. Encouraged by Wisconsin's success and the impact of the Depression, 18 other states added income taxes between 1929 and 1937, bringing the total to 29 states. Between 1937 and 1968, nine more states adopted income taxes. Since 1968, there has been another wave of support with six states adopting the income taxes, bringing the total to 42 states.

Table 21 shows how the structure of the personal income tax has changed since its enactment in 1933. Between 1937 and 1960, there was very little change in the tax. A surtax was added in 1949 and renewed regularly until 1964. In 1964, the rates were changed permanently and the concept of "temporary" increases (via the surtax) was dropped. Since 1964, however, the rate schedule has been changed several times.

With the exception of the addition of brackets for higher and very low incomes, the tax brackets used to compute personal income tax have not been changed significantly since 1937. (See Table 22.) However, until the high inflation rates of the last decade, the brackets worked as they were intended. After a taxpayer's income increased significantly (i.e., $1,000 in 1937), the tax rate on his last dollars of income would be greater than the rate on his last dollars of income before the increase. There was no need to overhaul the structure.

These rates and brackets make Minnesota's personal income tax burden one of the highest in the nation. In 1977 personal income tax collections per $1,000 of personal income were $39.03. The 4th highest in the nation. In 1957 collections per $1,000 of personal income were $10.50...the fifth highest in the nation. Focusing on the eight states in our region, we see that five states (including Minnesota) had personal income taxes in 1957. Only Wisconsin's collection per $1,000 personal income was higher than Minnesota's. In 1977, all of the states except South Dakota had personal income taxes. Minnesota's collections per $1,000 personal income were higher than that in any of the other states, except Wisconsin. (See Table 23.)

Minnesota's personal income tax was designed from the start to be progressive. That is, the tax rate on the last dollars of taxable income was greater than the rate on the first dollars of taxable income. With this kind of structure, the burden of the tax was greatest for persons with higher taxable incomes. For example, in 1954, persons with taxable incomes greater than $40,000 accounted for .2% of

TABLE 18

PERCENT OF STATE AND LOCAL REVENUES PAID DIRECTLY BY INDIVIDUALS

YEAR	AMOUNT (IN BILLIONS)	PERCENT OF TOTAL STATE AND LOCAL TAX REVENUES
1957	$ .36	60%
1962	.58	64%
1967	.88	68%
1972	1.54	70%
1977	2.66	70%

SOURCE: See Graph 5, Page 8.

TABLE 19

1977 PER FAMILY STATE AND LOCAL TAX LOAD FOR SELECTED CITIES

	$7,500		$15,000		$25,000		$50,000	
	TAXES	PERCENT INCOME	TAXES	PERCENT INCOME	TAXES	PERCENT INCOME	TAXES	PERCENT INCOME
POPULATION OVER 500,000								
Atlanta	$ 713	9.5%	$1,121	7.5%	$1,884	7.5%	$3817	7.6%
Boston	1,313	17.5	2,129	14.2	3,185	12.7	5,676	11.4
Chicago	802	8.7	1,260	8.4	1,804	7.2	3,074	6.2
Denver	718	9.6	1,078	7.2	1,836	7.3	3,555	7.1
Houston	542	7.2	726	4.9	927	3.7	1,348	2.7
Indianapolis	862	11.5	1,316	8.8	1,856	7.4	3,089	6.2
Milwaukee	947	12.6	1,923	12.8	3,289	13.2	6,665	13.3
Pittsburgh	1,049	14.0	1,683	11.2	2,463	9.9	4,275	8.6
Phoenix	798	10.6	1,155	7.7	1,845	7.4	3,537	7.1
Seattle	609	8.1	797	5.3	996	4.0	1,420	2.8
San Francisco	596	8.0	996	6.6	1,714	6.9	4,422	8.8
POPULATION 500,000-200,000								
Birmingham, AL	$ 694	9.3%	$1,055	7.0%	$1,668	6.7%	$3,000	6.0%
Des Moines, IA	867	11.6	1,352	9.0	2,194	8.8	4,301	8.6
Minneapolis, MN	475	6.3	1,282	8.6	2,534	10.1	5,688	11.4
Nashville, TN	563	7.5	782	5.2	1,007	4.0	1,483	3.0
Omaha, NE	766	10.2	1,315	8.8	1,969	7.9	4,055	8.1
POPULATION UNDER 200,000								
Fargo, ND	$ 597	8.0%	$ 955	6.4%	$1,820	7.3%	$3,758	7.5%
Little Rock, AR	633	8.4	986	6.6	1,640	6.6	3,556	7.1
Sioux Falls, SD	780	10.4	1,110	7.4	1,472	5.9	2,257	4.5
AVERAGES								
62 City Average	$ 757	10.1%	$1,220	8.1%	$1,939	7.8	$3,889	7.8%
Over 500,000	785	10.5	1,262	8.4	1,963	7.9	3,823	7.7
200,000-50,000	747	10.0	1,242	8.3	2,025	8.1	4,135	8.3
Under 200,000	734	9.8	1,147	7.7	1,816	7.3	3,693	7.4

SOURCE: *Changing Times,* November 1978, p. 27. All data for 1977. All income from one wage earner. Each family owns a standard 1975 Chevrolet that it drives 12,000 miles per year. Each family owns a home, the value is consistant with its income....Taxes include all income, sales, property, and special excise taxes. 62 cities were sampled...the results for 19 are included here.

all income tax returns but 11.5% of the total tax liability. Persons with taxable incomes between $15,000 and $40,000 accounted for 1.2% of the returns but 21.1% of the tax liability.

The high inflation rates of the last decade have dramatically changed the workings of the personal income tax. Incomes have increased so much that more and more people are being pushed into higher tax brackets. (See Table 24.) In 1954 about 59% of returns filed were for gross incomes of $6,000 or less. In 1967, the share of filers with gross incomes of $6,000 or less decreased slightly to 55%. However, in 1977, only 33% of the filers had gross incomes of $6,000 or less. In 1954, 1.5% of the filers had gross incomes of between $10,000 and $15,000. In 1967, about 8% of the filers were in this income range. And, by 1977, 16% were represented in this range. Not only does the rise in income mean that more people are paying at rates that were originally designed for people who were considered financially well off, but it also means that the income tax has become less progressive. Once a person's taxable income reaches $15,000 there are only two higher brackets. If the current rate of inflation persists, that $15,000 income will soon be $20,000, putting a large portion of the state's taxpayer in the second highest bracket.

TABLE 20

1977 PER FAMILY STATE AND LOCAL TAX BILL COMPARED WITH TOTAL FAMILY BUDGET FOR LOWER INTERMEDIATE, AND HIGHER BUDGET FAMILIES

LOCATION*	LOWER BUDGET FAMILY		INTERMEDIATE BUDGET FAMILY		HIGHER BUDGET FAMILY	
	Tax Bill as Percent of Minneapolis	Cost of Living as Percent of Minneapolis	Tax Bill as Percent of Minneapolis	Cost of Living as Percent of Minneapolis	Tax Bill as Percent of Minneapolis	Cost of Living as Percent of Minneapolis
Minneapolis	100	100	100	100	100	100
Atlanta	150	92	87	87	74	86
Boston	276	110	166	116	126	119
Chicago	169	103	98	97	71	96
Denver	151	97	84	94	72	93
Houston	114	95	57	87	37	86
Indianapolis	181	97	103	94	73	91
Milwaukee	199	101	150	102	130	102
Pittsburgh	221	98	131	93	97	92
Seattle	128	109	62	97	39	94
San Francisco	125	111	78	104	68	105
Des Moines	183	97	105	94	87	93
Nashville	119	90	61	86	40	85

SOURCE: Bureau of Labor Statistics, "Annual Costs of a Lower, Intermediate, and Higher Budget for a Four-Person Family, Autumn, 1977," and *Changing Times*, November, 1978, p. 27.

Comparisons of the total tax bill have not been done using identical data bases. However, a comparison can be pieced together using the Bureau of Labor Statistics' data for family budgets and the data from Table 19 for the tax bill. (Keep in mind that the data in the Table does not include any federal taxes. As such, it is not the "total tax bill.") Table 20 shows the results, using the budget and tax bill for Minneapolis as the basis for comparison.

*The Bureau of Labor Statistics does not sample family budgets in all cities. As a result, the sample of cities is smaller in this Table than in Table 20. For Des Moines, cost of living was assumed to be equal to the BLS estimate for Cedar Rapids.

TABLE 21

INDIVIDUAL INCOME TAX RATES, CREDITS, AND FILING REQUIREMENTS SINCE 1933

CALENDAR YEARS	NORMAL RATES LOWEST	NORMAL RATES HIGHEST	SURTAX	FILING REQUIREMENTS MARRIED	FILING REQUIREMENTS SINGLE	PERSONAL EXEMPTIONS MARRIED	PERSONAL EXEMPTIONS SINGLE	PERSONAL EXEMPTIONS DEPENDENT
1933-1936	1%		-	$5,000	$5,000	$2,000	$1,200	$250
						PERSONAL CREDITS MARRIED	PERSONAL CREDITS SINGLE	PERSONAL CREDITS DEPENDENT
1937-1942	1	10	-	5,000	5,000	30	10	$5
1943-1948	1	10	-	2,000	1,000	30	10	10
1949-1954*	1	10	5% before credits	2,000	2,000	30	10	10
1955-1956*	1	10	5% before credits 5% after credits	2,000	1,000	30	10	10
1957-1958	1	10	10% after credits	2,000	1,000	30	10	10
1959-1960	1	10.5	10% after credits	1,500	750	30	10	14
1961-1964	1**	10.5	15% after credits	1,500	750	30	10	15
1965-1970	1.5**	12	-	1,500	750	38	19	10
1971	1.55	13.5	-	1,800	1,000	40	20	20
1972-1977	1.6	15	-	1,800	1,000	42	21	21
1978	1.6	17	-	2,700	1,700	80	40	40
1979	1.6	16	-	2,700	1,700	110	55	55

* From 1949-1956 there was an annual filing fee of $5.00.

** 1961 and 1962 - Minimum tax was computed by a special step based on 1% of adjusted gross income as defined by the 1961 Legislature.

1963, 1964, 1965, and 1966 - Minimum tax computation base was revised from adjusted gross income to gross income by the 1963 Legislature.

SOURCE: Minnesota Department of Revenue.

TABLE 22

TAX BRACKETS AND RATES FOR MINNESOTA'S PERSONAL INCOME TAX 1937 AND 1979

	1937 TAX RATES	TAXABLE INCOME	1979 TAX RATES
First $1,000	1%	First $500	1.6%
Next 1,000	2	Second 500	2.2
Next 1,000	3	Next 1,000	3.5
Next 1,000	4	Next 1,000	5.8
Next 1,000	5	Next 1,000	7.3
Next 2,000	6	Next 1,000	8.8
Next 2,000	7	Next 2,000	10.2
Next 3,500	8	Next 2,000	11.5
Next 7,500	9	Next 3,500	12.8
More than 20,000	10	Next 7,500	14.0
		Next 7,500	15.0
		Next 12,500	16.0
		More than $40,000	17.0*

*The 1979 Legislature eliminated the 17% bracket making the 16% rate apply to all income in excess of $27,500.

SOURCE: Minnesota Department of Revenue.

The combined effect of inflation and the structure of the income tax has been twofold.

- First, the state's revenue from the personal income tax has grown faster than the cost of living. For each 1% increase in the cost of living, income tax collections have increased at an average rate of 1.3%. Between 1970 and 1976, real income in Minnesota increased by 19.4%; however, personal income tax collections grew by 146%.

- Second, taxpayers have found that their real income decreases when they receive a pay raise which is equal to or slightly greater than the rise in the cost of living. The pay raise increases their income. As a result, their taxes go up—even though the pay raise may have been nothing more than a cost of living adjustment. The problem is compounded when, as a result of the raise, a person's income moves into a higher tax bracket. This has been fairly common in Minnesota because most of the brackets are fairly close together, changing after $1,000 or less in many cases.

Indexing is the solution most frequently suggested for the problems described in the previous paragraphs. In-

TABLE 23

PERSONAL INCOME TAX COLLECTIONS PER $1,000 PERSONAL INCOME FOR EIGHT MIDWESTERN [redacted], 1957 AND 1977

Minnesota	$10.50	$39.03
Iowa	5.39	24.96
Illinois	-	17.13
Missouri	4.66*	13.67
Nebraska	-	18.05
North Dakota	3.81	14.63
South Dakota	-	-
Wisconsin	14.61	40.58

*Includes revenue from both corporate and personal income tax.

SOURCE: Tax Foundation, *Facts and Figures on Government Finance,* 10th and 19th Editions.

dexing is an adjustment to the structure of a tax designed to prevent taxpayers from paying more of their real income in taxes unless 1) policy makers consciously decide that taxpayers should pay more, or 2) the taxpayer's *real income* increases enough to put him into a higher tax bracket.

The adjustment may be automatic (e.g., done annually) or may be done on an ad hoc basis.

Another approach would be to restructure the tax. For example, a whole new set of brackets and/or rates could be adopted from time-to-time.

Those who favor indexing generally do so for one or all of the following reasons:

- An indexed system is fairer. Taxpayers will not pay more in taxes unless their real income (which reflects their standard of living) has increased.

- Indexing will require policy makers to take direct action if they wish to collect additional revenues.

- Indexing could help to slow down the overall rate of inflation. The loss of real income that may result from a salary increase encourages employees to demand larger wage increases and this fuels inflation.

- Indexing will help to preserve the progressivity of our income tax. Without it, most taxpayers will end up in the highest brackets.

Persons opposed to indexing argue the following:

- Indexing will, according to G. William Miller, former Chairman of the Federal Reserve Board, "create a psychological climate in which there would be little incentive to combat the causes of inflation. Indexing would remove much of the pain of inflation and thereby reduce the pressure on political leaders to deal with it.[10] Basically, indexing treats the symptoms but not the causes of inflation.

- An indexed tax would limit flexibility with respect to fiscal policy. If the tax is not indexed, then the public is

TABLE 24

DISTRIBUTION OF PERSONAL INCOME TAX RETURNS AND TAX LIABILITY BY INCOME: 1954, 1967, 1977

	1954		1967		1977	
GROSS INCOME OF FILERS	PERCENT OF FILERS	PERCENT OF TAX LIABILITY	PERCENT OF FILERS	PERCENT OF TAX LIABILITY	PERCENT OF FILERS	PERCENT OF TAX LIABILITY
0-$6,000	58.9	35.9	54.8	15.4	33.2	5.0
6,0001-10,000	8.2	20.8	24.2	31.7	16.6	11.8
10,001-15,000	1.5	10.6	7.7	20.0	15.5	20.2
15,001-20,000			1.6	7.7	9.8	19.7
20,001-30,000	1.2	21.1	1.0	7.9	6.7	20.7
30,001-40,000			.4	4.9	1.4	6.9
40,000 or More	.2	11.5	.5	12.4	1.4	15.7
No-Tax Returns	29.9	-------	9.7	-------	15.4	-------
Total	100%	100%	100%	100%	100%	100%

SOURCE: *Report of the Governor's Tax Study Commission,* 1956, page 276 and *The Minnesota Individual Income Tax,* 1967 and 1977.

protected against unexpected revenue shortfalls. Surpluses should be taken care of through permanent tax reductions as conditions permit.

- While indexing will lower state personal income tax payments, it could increase the amount that Minnesotans pay in federal income tax because they will have less in state taxes to deduct in computing the federal tax. No one knows if the additional federal income tax that Minnesotans pay will be spent in the state.

In general there are two approaches to indexing:

- To index each individual's taxable income relative to the rate of inflation.

- To index certain elements of the income tax (e.g., the rates, the brackets, the credits, or the deductions).

If the individual incomes were indexed, then they would be adjusted either up or down by the rate of change in the consumer price index. This adjustment would be done as a step in completing the Minnesota personal income tax form. For example, if a person's Minnesota Adjusted Gross Income for 1978 was $12,500 and if he received a 10% raised in 1979, then his income would be $13,750. If the inflation rate during 1979 is 9%, then his *real income* would have only increased by 1%, going from $12,500 to $12,625. A line could be added to the current tax form, instructing taxpayers to make this adjustment and to compute their tax on the basis of $12,625 instead of $13,750.

If elements of the tax were indexed, an adjustment similar to the one above would have to be carried out. The following elements could be adjusted.

- Either the rates or the brackets. Doing both would amount to an overadjustment. Most people appear to prefer adjusting the brackets. They argue that changing the rates on a regular basis would ultimately take the progressivity out of the tax because as inflation continued, more and more taxpayers would end up in the higher brackets.

- Index the credits and/or the deductions. This could be done regardless of whether the brackets or individual incomes are also indexed.

It would be possible to index both brackets and incomes. However, this would do more than the stated objective of indexing.

Table 25 shows the effect of indexing on the personal income tax bills, using different methods. The table is based on the following assumptions:

- Family of four, one wage earner, filing a joint return.
- Family of four, one wage earner
- No change in real income between 1978 and 1979.

- A 10% rate of inflation during 1979–the incomes of both families going up by this rate.

- 1978 taxes: *Family 1*, $866 or 6.9% of the family's $12,500 Minnesota Adjusted Gross Income.

  Family 2, $2,714 or 10.4% of the family's $26,000 Minnesota Adjusted Gross Income.

- Family 1 is assumed to take the standard deduction. Family 2 itemizes and has deductions roughly equal to 10% of its Minnesota Adjusted Gross Income.

As Table 25 shows, the 1979 Legislature adopted an indexing plan requiring that tax brackets, be adjusted annually by 85% of rate of change in the consumer price index for the Minneapolis-St. Paul metropolitan area. If we assume that the consumer price index will rise by 10% during 1979, then the tax brackets would expand by 8.5%. For example, the first bracket would apply to the *first $543 of taxable income* instead of the *first $500 of taxable income.* A similar procedure will be applied to the standard deduction, personal credits, and low income credit starting in 1981. However, instead of indexing at a rate of 85% of the CPI, they will be indexed at 100%. In other words, they will be adjusted for the full effect of inflation.

In addition to indexing, the 1979 Legislature also made the following major changes in the personal income tax:

- The personal credits were increased to $55 in 1979, and to $60 in 1980. Starting in 1981, the credits will be adjusted by the rate of change in the Minneapolis-St. Paul CPI.

- The maximum standard deduction was increased from 10% of income, maximum $1,000, to 20% of income, maximum $2,000. Starting in 1981, the deduction will be adjusted annually by the rate of change in the Minneapolis-St. Paul CPI.

- The low-income credit was increased to allow a poor family to earn up to $10,000 without paying income taxes. Starting in 1981, the credit will be adjusted by the rate of change in the Twin Cities CPI.

- The 17% tax bracket was eliminated, making 16% the highest rate.

Minnesota's sales and residential property taxes are relatively modest for most individuals.

The combination of a relatively low rate on a large number of exempt sales makes the amount of sales tax paid by individuals low, by comparison with individuals in many other states, quite tolerable from the point-of-view of most citizens. Part of the reason for acceptance of the sales tax may also be the way in which it is paid. Unlike other major taxes, the sales tax is paid in relatively small increments, so

TABLE 25

COMPARISON OF DIFFERENT METHODS OF INDEXING

METHOD OF INDEXING	1979 PERSONAL INCOME TAX (% OF REAL INCOME) FAMILY 1	FAMILY 2
NO INDEXING (NO CHANGE FROM CURRENT TAX STRUCTURE	$1,038 (8.3%)	$2,905 (11.2%)
INDEXING INCOMES ONLY	866 (6.9%)	2,714 (10.4%)
INDEXING BRACKETS ONLY*	994 (8.0%)	2,841 (10.9%)
INDEXING CREDITS AND DEDUCTIONS ONLY▪	1,000 (8.0%)	2,846 (10.9%)
INDEXING INCOMES AND CREDITS/DEDUCTIONS	837 (6.7%)	2,499 (9.6%)
INDEXING BRACKETS AND CREDITS/DEDUCTIONS	844 (6.8%)	2,680 (10.3%)
INDEXING BRACKETS, INCOMES, CREDITS/DEDUCTIONS	704 (5.6%)	2,333 (9.0%)
1978 PERSONAL INCOME TAX BILL	866 (6.9%)	2,714 (10.4%)
1979 TAX BILL AS PASSED BY THE LEGISLATURE•	800 (6.4%)	2,349 (9.1%)★ 2,778 (10.7%)★

*Proposed in House Tax Bill. Initially, brackets would be expanded by 19%...during subsequent years by the rate of increase in the consumer price index.

▪Proposed in the Senate Tax Bill.

•Brackets indexed by 85% of the rate of inflation. Personal credits increased to $55 and standard deduction to be 20% of income up to $2,000.

★The first assumes that by itemizing, the taxpayers was able to take deductions totaling 20% of his Minnesota Adjusted Gross Income. In the second deductions were only 10% of the adjusted gross income.

small that taxpayers may not even notice it. Furthermore, because the tax is based on consumption, taxpayers may, if they wish, exercise some control over the amount of tax they pay by changing their consumption habits.

Action by the Legislature since 1967 has been fairly successful in controlling increases in the residential property tax burden. In 1968, the residential tax burden was $15.07 per $1,000 personal income.[11] In 1975, the burden was about $17.55 per $1,000 of personal income.[12] The burden increased by about 16.5% while the overall cost of living increased by about 54%.

The distribution of net homestead property taxes (i.e. property taxes on owner occupied residential property less the homestead credit) for 1978 shows that residential property taxes may be more modest than is commonly believed. In 1978, 30.9% of the state's homesteads had net property tax bills of $214 or less. 21.9% of the homesteads had bills between $214 and $397. 47.2% of the homesteads had bills greater than $397. Most of the bills greater than $397 were in the Twin Cities metropolitan area. (See Appendix B.) More detailed data for Minneapolis and St. Paul shows the following:

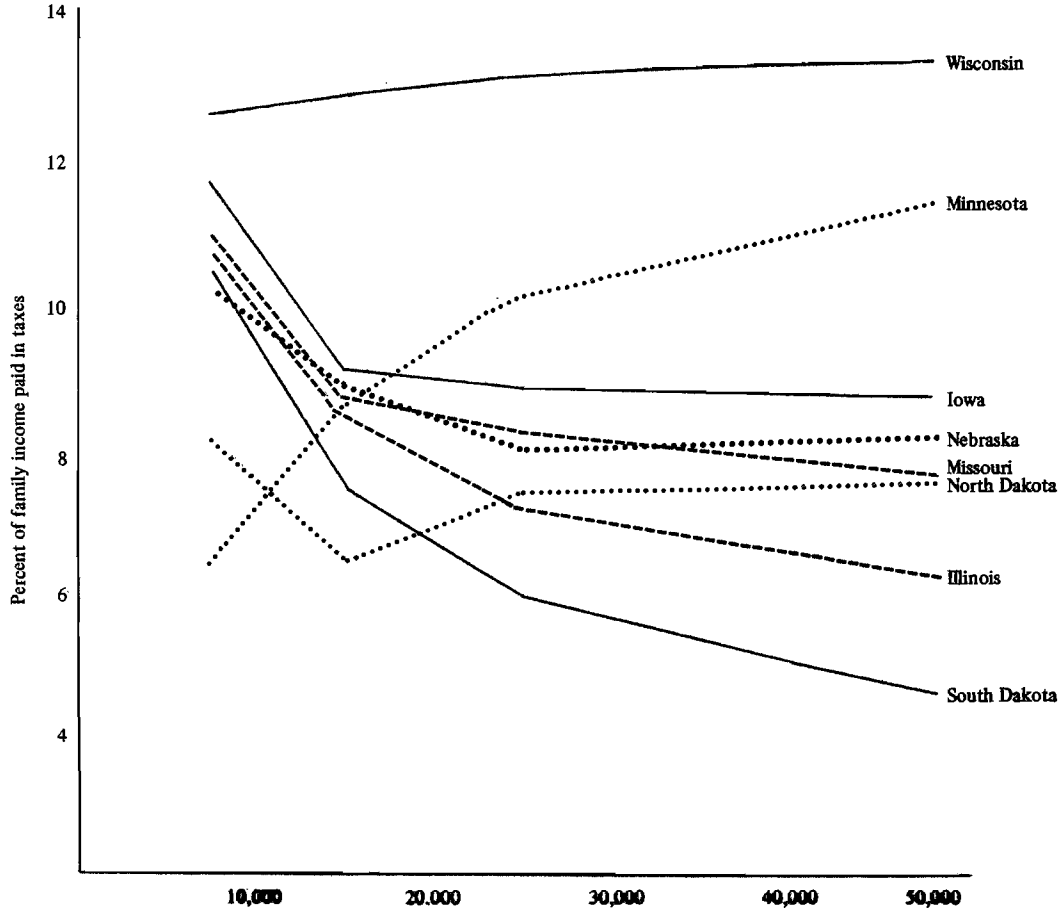
In other words, in two of the state's communities with higher property tax rates, approximately half of the homesteads had net property tax bills of less than $500. These calculations do not include the additional income adjusted property tax rebate that homeowners (and renters) may receive. The so-called circuit breaker program provides additional property tax relief based on a person's income and his property tax bill.

More so than most other states, Minnesota's system for taxing individuals works on an ability to pay basis.

A recent study[13] comparing state and local taxes in 62 cities came to the following conclusion: "...the figures suggest a general tendency toward a state and local tax system that is regressive—this is, the ratio of taxes paid to income varies inversely with ability to pay. The figures show that taxes as a percentage of family income are lower in the top three income brackets...than in the lowest income bracket."[14] Of the 62 cities sampled, state and local taxes in Minneapolis were among the most progressive. That is, as a family's income increases, the percent paid in taxes also increases. **(See Graph 7.)**

GRAPH 7

DISTRIBUTION OF MAJOR STATE-LOCAL TAX BURDENS RELATIVE TO FAMILY INCOME SIZE; COMPARISONS FOR LARGEST CITY OF EACH STATE, 1976 (TAX BURDENS AS PERCENTAGE OF INCOME)



SOURCE: Stephen E. Lile, "Family Tax Burdens and Taxpayer Unrest," *State Government*, Autumn, 1978, page 194.

PART II: THE DEVELOPMENT OF THE TWIN CITIES' ECONOMY

THERE IS EVIDENCE THAT MAJOR CHANGES ARE NOW OCCURRING IN THE TWIN CITIES' ECONOMY.

Once almost exclusively a center for processing raw materials and trade, the principal private functions of the Twin Cities' economy have become: The distribution of goods, services and information; high technology manufacturing; and, corporate management.

Table 26 describes Twin Cities employment according to the function performed by local employees. For our purposes this is more useful than a breakdown of employment by industry (e.g., construction; government; trade; services; finance, insurance, and real estate; transportation, communications, and utilities; manufacturing). A breakdown by function shows what Twin Citians "do for a living." By contrast, the breakdown by industry describes the goods and services produced by companies which employ Twin Citians. While work done in the Twin Cities may contribute to producing these products, it does not necessarily describe the role that local workers play in the process. (Appendix C provides a breakdown of employment by occupation. This kind of breakdown also shows the role that Twin Cities' workers are playing in producing the final products of their employers.)

As Table 26 shows, since at least the early 1950's, private economic growth in the Twin Cities has come primarily from the service producing functions. The services and finance, insurance, and real estate industry groups have grown from 18% of total Twin Cities employment to 26% and employment in non-production manufacturing jobs (i.e., those persons engaged in sales, legal, management, technical or clerical work) has grown from 9% to 10% of total employment. At the same time, employment in production jobs in manufacturing has decreased from 21% to 13% of total employment.

During its first century of development (roughly 1850-1950) the principal function of the Twin Cities' economy was processing raw materials. At first, the primary material was timber. When the trees were gone, the mills began grinding grain.

Wholesale and retail trade developed along with the mills. The farming and timber communities needed supplies. By locating in the Twin Cities, a merchant was in a good position to serve this market. In one trip, a farmer or logger could sell his harvest and purchase supplies.

By 1950, processing had almost disappeared, partly because of the depletion of the surrounding forests and partly because of a shift to processing raw materials at points closer to final markets or the source of raw materials. (The only exception is paper processing which is growing.)

Despite the Twin Cities' general decline as a processing center, wholesale and retail trade remains a major part of our economy (See Appendix D). Together with the transportation, communications and utility businesses, wholesale and retail trade comprise the distribution segment of the Twin Cities' economy. (See Table 26.)

Manufacturing or goods producing supplanted processing in the Twin Cities' economy. At first, local manufacturing was focused on producing agricultural equipment for local use. Eventually, Twin Cities' manufacturing became more specialized, producing what the Department of Business Development (now the Department of Economic Development) in 1950 called "preferred products–items which were so distinct or of such high quality and value that they could compete with distant markets despite the burden of higher shipping costs due to the Twin Cities northern location.

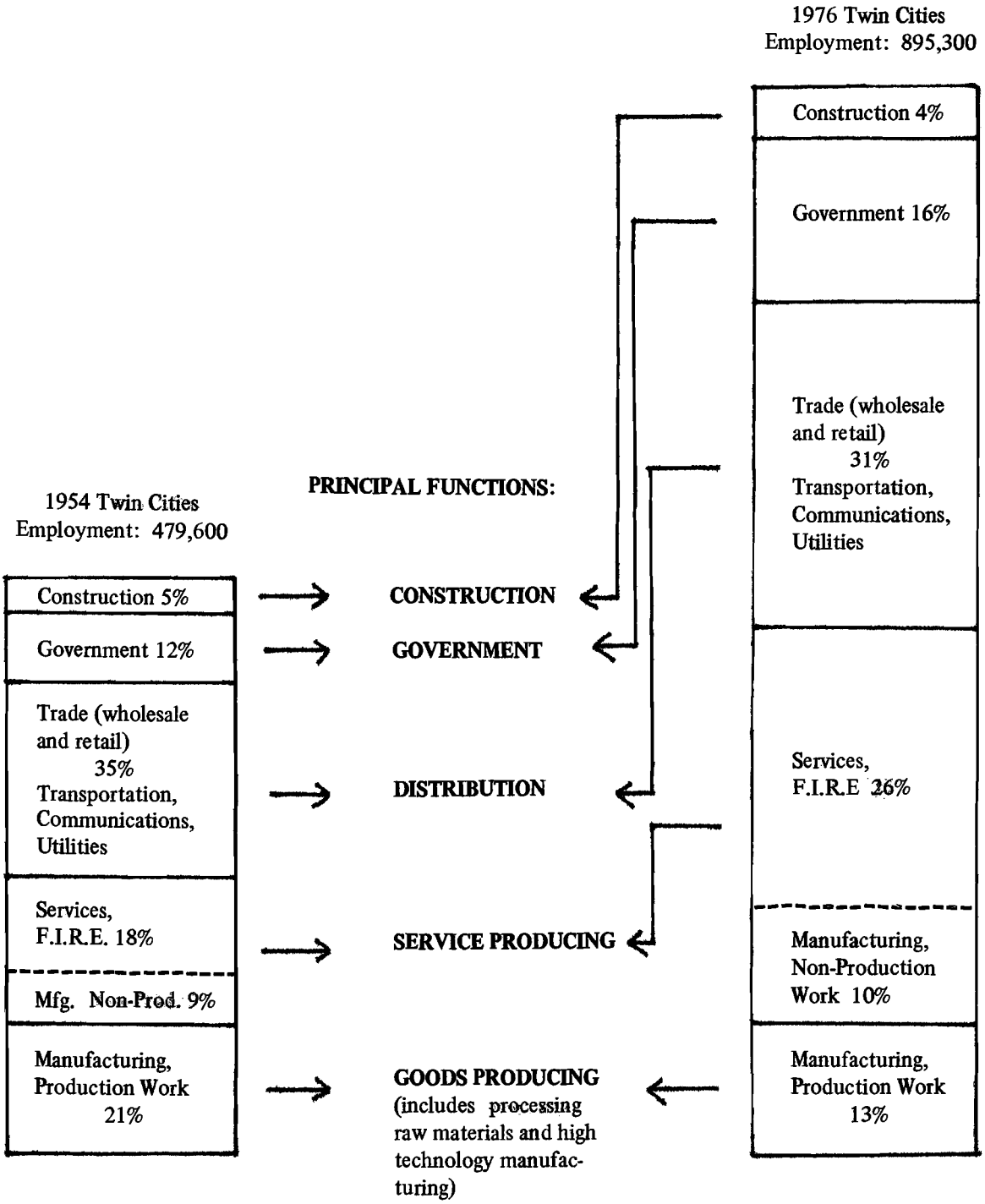
Since World War II, high-technology companies have been the region's fastest growing firms. As Table 27 shows, manufacturing employment has grown primarily in high technology. For example, employment with computer manufacturing firms grew from 4% to 5.4% of total Twin Cities employment between 1950-1978. By contrast, employment in food processing dropped from 5% in 1950 to 1.9% in 1977. Significant increases in manufacturing employment have also occurred in businesses producing scientific instruments, paper and fabricated metal products. Employment growth in these areas is not entirely inconsistent with the idea that Twin Cities' manufacturing is focused on high technology work. All three require either a labor force with special skills or specialized machinery or both.

"Producing services" is not only the largest but also the fastest growing of the region's major private functions. The function is best understood if it is divided into two parts:

- **Businesses producing management and professional services:** These include the entire finance, insurance, and real estate industry (F.I.R.E.) as well as a large part of what the Department of Commerce calls "services" in its

TABLE 26

TWIN CITIES EMPLOYMENT BY FUNCTION



SOURCE: Census of Business, US Department of Commerce.

for classifying business activity, specifically: legal, computer advertising, accounting, health, and other business services. A substantial amount of management and professional service employment also is found within manufacturing businesses. We describe this employment as "nonproduction manufacturing employment." If the nonproduction employment is not distinguished from the rest of manufacturing employment, then it is impossible to get a true picture of the work done by employees in the Twin Cities. For example, for census purposes the Department of Commerce classifies central administrative offices, "...on the basis of the primary activity of the establishment(s) served."[15] Thus, the employees at General Mills' corporate headquarters are classified as food processing employees.

- Personal services: This includes the remainder of the Department of Commerce's "services" category, specifically: restaurants, barbershops, theaters, resorts and hotels, auto repair and domestic services.

In this report our interest is in the former--businesses producing management and professional services. They are of more interest than personal services because they are more important to the development of the economy. Businesses producing management and professional services are growing faster and generally pay higher wages than those producing personal services. Furthermore, management and professional services have greater potential than personal services for bringing "new" dollars to the Twin Cities' economy by doing business with clients outside the region. Their export activity helps increase the community's overall wealth and this, helps to maintain and improve living conditions.[16]

The service producing dimension of the Twin Cities' economy started out as an offspring of the economy's distribution and manufacturing functions. Whether local businesses were processing raw materials or trading, they needed certain business services. The demand for these services increased as the companies grew.

To meet their need for business services, companies did either or both of the following:

- They hired employees to provide whatever services they needed. For companies headquartered in the Twin Cities, these service employees in many cases eventually became the company's "headquarters staff." For companies headquartered elsewhere, service employees might be organized under a regional headquarters of some kind or as a separate department attached to the local operating unit.

- Contract with an independent firm to provide specific services. For example, as the demand developed, architects and other kinds of consultants found that they could organize companies (or partnerships) to provide services that local businesses could not afford to hire employees to perform.

By comparison with most metropolitan areas, the Twin Cities has a large number of people employed in service jobs located within businesses which are principally good producing (i.e., manufacturers). In 1954, about 31% of all Twin Cities manufacturing employees (9% of total civilian employment) were working in nonproduction jobs.

In 1976, about 44% of all manufacturing employees (10% of total civilian employment) were in nonproduction jobs. In comparison with 12 other major metropolitan areas, the Twin Cities had a larger portion of its manufacturing employment doing nonproduction work than any of the metropolitan areas sampled. (See Appendix E in Policy Report).

(The U.S. Department of Commerce does a formal census of central administrative office employment as a part of its Census of Business. This includes only those employees working at the central administrative office. The most recent available data is for 1972. Results of the 1977 Census will not be available until late 1980. The 1972 results are consistent with the more current data for manufacturing. Specifically:

- In 1972, 5% (38,000) of all employed people in the Twin Cities worked in central administrative offices.

- Between 1967 and 1972, employment in administrative offices increased by 20%, while total Twin Cities employment grew by about 13% during the same period of time.

- On a per capita basis Twin Cities employment in central administrative offices ranked sixth highest among all metropolitan areas.)

Further evidence of the significance of management and professional service employment to the Twin Cities economy is the number of corporate headquarters located in the metropolitan area. The Twin Cities had more headquarters of the nation's largest corporations per capita than all metropolitan areas sampled except New York City. (See Table 27.) In 1972, the Twin Cities had more headquarters of publicly held corporations with revenues of $10 million or more per capita than all major metropolitan areas except Boston.[17]

The Twin Cities also has a relatively large number of people working for independent service businesses. That is firms organized solely to produce services for other businesses and individuals. In 1976, these businesses accounted for

about 26% of total Twin Cities' employment. (The percent is based on the number of employees working in "finance, insurance, and real estate" and "services," two of the 10 major industry groups that the Department of Commerce uses to classify all civilian employment.) By comparison with other major metropolitan areas, only Boston, New York, and Phoenix get larger shares of their total employment from independent service producing firms. Furthermore, employment in the sector of the economy made up primarily of independent service businesses grew at a faster rate than any other sector of the Twin Cities economy. (See Appendix D.)

The future vitality of the Twin Cities' economy may depend on the expansion of the region's manufacturing base, particularly with respect to high technology products.

Manufacturing along with mining and agriculture are often described as "basic" industries. Growth in these sectors is fundamental to a strong and prosperous economy. The goods that these industries produce can be sold outside the Twin Cities (i.e., exported). And, as a result, local financial resources increase. By contrast, if goods are only sold to other residents, money is transferred from one person to another but the total local supply is not changed.

As Table 28 shows, high-technology oriented manufacturing (e.g., non-electrical machinery, scientific instruments) has grown faster in the Twin Cities than most other forms of manufacturing. The Twin Cities is recognized as a center for production of certain high technology products such as large scientific computers and cardiac pacemakers. However, since 1970, the growth rate for employment in most high technology areas has slowed, in some cases, dropping below the growth rate for the region as a whole. (See Table 28.) It is difficult to say if the growth rate since 1970 signals the beginning of a long period of slow growth.

Regardless of the change in employment, manufacturing contributes more than any other single industry to the region's total export activity. In 1971 (most current available data on local exporting), manufacturing accounted for about 60% ($3.9 billion) of the region's total export activity.[18] Office and accounting machines alone accounted for 8.4% ($557.5 million) of the region's total exporting.

Another way to measure export activity is to use data on "excess employment." Excess employment is the amount of employment in any industry in excess of the share that that industry contributes to employment at the national level. For example, in 1978 employment in the manufacturing of non-electrical machinery (computers) accounted

TABLE 27

CORPORATE HEADQUARTERS PER 100,000 POPULATION, 1977

Metropolitan Area	Manufacturing	Finance, Insurance and Real Estate	Transportation and Utilities	Retail Trade	TOTAL
Minneapolis/Saint Paul	**1.19**	**.30**	**.25**	**.10**	**1.84**
Atlanta	.67	.06	.20	.06	.99
Boston	.90	.14	.03	.10	1.17
Chicago	1.28	.13	.13	.10	1.64
Dallas	1.03	.16	.08	.08	1.35
Denver	.42	--	.21	--	.63
Houston	.87	.13	.26	--	1.26
Indianapolis	.35	.09	--	--	.44
Kansas City	.39	.08	.23	--	.70
New York	1.6	.32	.13	.12	2.17
Phoenix	.41	.16	--	--	.57
Pittsburgh	1.12	.09	.09	--	1.30
San Francisco	.76	.22	.03	.03	1.4

SOURCE: *Fortune*, June, July, August 1977. For manufacturing, Fortune's list of the 1000 largest US manufacturing firms was used. For finance, insurance and real estate, Fortune's sample includes the 150 largest US financial, financial services and insurance companies. For transportation and utilities, Fortune's sample includes the 100 largest US transportation companies and utilities.

for 2.7% of United States non-agricultural employment and for 5.4% of Twin Cities employment. The excess employment for computer manufacturing would be 2.7% of total Twin Cities employment or about 27,400 employees.

Table 29 shows excess employment for different types of manufacturing. There is no excess employment for manufacturing overall. (1978, 23.7% of U.S. and 22.8% of Twin Cities non-agricultural employment was in manufacturing.) However, the excess employment is substantial for some sub-industries, specifically: non-electrical machinery, fabricated metal products, scientific instruments, printing and publishing, and paper and paper products.

Because the Twin Cities is already an established center for corporate management and services, there are also major opportunities for growth in service producing functions.

There have been some fundamental changes in the factors that have historically determined the growth in metropolitan areas. One of these changes has been described as follows:

"Manufacturing no longer dominates growth in the economic base...this is partly the result of increasing competition from abroad...it is also the result of rapid growth in demand for services both at home and in international markets, which has caused the rate of employment growth in services to greatly exceed the growth in manufacturing."[19]

This does not mean that manufacturing is no longer a "basic" industry. Rather it may mean that growth in manufacturing employment *in a metropolitan area* is not necessary in order for *that* metropolitan area's economy to grow. The linkages between manufacturing and services remain—that is, service businesses still develop and grow in response to demand generated by manufacturing and other basic industries. However, the spatial arrangement of manufacturing and services has changed. Whereas in the past the two were located in close proximity to each other. Today they may be separate. Advances in communications and transportation have made it possible for a corporation to manage and serve its operating units from afar. Similarly, it is also possible for independent service companies to serve clients located elsewhere.

TABLE 28

CHANGE IN MANUFACTURING EMPLOYMENT, 1950 - 1977
TWIN CITIES METROPOLITAN AREA

TYPE OF MANUFACTURING	% OF TOTAL TWIN CITIES EMPLOYMENT		
	1950	1970	1978
Total Employment	**461,000**	**760,000**	**1,016,000**
Lumber and Wood Products	**.6%**	**.1%**	**.5%**
Furniture and Fixtures	.5	.2	.2
Primary Metals	.6	.5	.5
Fabricated Metal Products	1.7	1.6	2.7
Non-Electric Machinery (computers)	4.0	6.0	5.4
Electrical Machinery	1.8	1.9	1.9
Transportation Equipment	**.8**	.9	.5
Scientific Instruments	**.9**	**2.1**	**2.0**
Stone and Glass Products	1.9	**1.6**	**.3**
Food and Tobacco	5.0	**2.4**	**1.9**
Textiles and Apparel	2.2	.6	.4
Printing and Publishing	2.7	2.4	2.0
Paper and Paper Products	.8	1.9	2.4
Other Manufacturing*	1.8	**2.0**	**2.1**
TOTAL	**25.3**	**24.2**	**22.8**

* Includes among other things: chemical and petroleum production; rubber and leather products.

SOURCE: Bureau of Labor Statistics, *Employment and Earnings.*

There is substantial evidence that local manufacturing is not the dominate force in the Twin Cities economy. For instance, Twin Cities employment in the "services" industry (20.8% in 1978) is greater than that for the U.S. (18.6% of employment in 1978). In addition total manufacturing employment in the Twin Cities (22.8% in 1978) is less than that for the U.S. (23.7% of employment in 1978). And, when the work force is analyzed, the Twin Cities manufacturing work force shows a larger percent of nonproduction workers than that of any other major metropolitan area sampled. Furthermore, the growth in non production employment has been greater in the Twin Cities than in most major metropolitan areas.

Changes in the product lines of local companies also suggest trends toward service production. The computer industry is one example. In a 1976 speech before a group of security analysts, William Norris, Chairman, Control Data Corporation, described a strategy of corporate development that would make the company a "computer-based service corporation." A more general view of local changes in the computer industry can be developed by looking at changes in telephone directory listings. While it is not a random sample of local activity, the changes in listing do suggest growth in the service aspects of this industry. (See Table 30.)

Regardless of the transition from a predominantly goods producing economy to one based more on services and distribution, the importance of export activity in determining economic growth has not diminished. The export sector of the Twin Cities' economy must continue to be strong if the community is to have the resources it needs to maintain and improve living conditions.

Like other industries, the service producing (and for that matter distribution) sectors of the Twin Cities' economy export by selling to customers outside of the metropolitan area. These transactions divide into two groups: Those where the service is delivered outside the region and those where the service is provided in the Twin Cities to an outsider. When a local architectural firm designs a building located in another city, that is an example of the first kind of export transaction. When a person comes to the Twin Cities to shop or receive medical care, that is an example of the second kind of export transaction. Whether the service is provided in the Twin Cities or on location, the effect is the same. The Twin Cities' total financial resources are increased by the flow of dollars from an outsider to a local business.

The Twin Cities already exports a broad range of services and is recognized as one of the nation's major service centers. In 1971 (most recent data available), non-manufacturing industries accounted for the following shares of total Twin Cities' exports:

- Service producing sector (i.e., finance, insurance, real estate and services) – 8.3% ($555 million).

TABLE 29

TWIN CITIES EXCESS EMPLOYMENT IN MANUFACTURING, 1978

Sub-industry	% of Twin Cities Employment	% of United States Non-agricultural Employment	Excess Employment (% of Total Twin Cities Employment)
Primary metals	.5%	1.4%	---
Lumber and wood products	.5	.9	---
Furniture and fixtures	.2	.6	---
Fabricated metal products	2.7	1.9	8,100 (.8%)
Non-electrical machinery	5.4	2.7	27,400 (2.7%)
Electrical machinery	1.9	2.3	---
Transportation equipment	.5	2.3	---
Scientific instruments	2.0	.8	12,200 (1.2%)
Stone and glass products	.3	.8	---
Food and tobacco	1.9	2.0	---
Textiles and apparel	.4	2.6	---
Printing and publishing	2.0	1.4	6,100 (.6%)
Paper and paper products	2.4	.8	16,300 (1.6%)
TOTAL Excess Employment for Manufacturing			**70,100 (6.9%)**

SOURCE: *Employment and Earnings,* US Department of Commerce, Bureau of Labor Statistics.

TABLE 30

DATA PROCESSING SERVICES AND EQUIPMENT
Listings in the Minneapolis Yellow Pages
1960, 1970, 1978

	Numbers Listed
1960 Categories	
Data Processing services (tabulating services)	3
Data processing systems	3
1970 Categories	
Data processing services	60
Data processing systems	45
1978 Categories	
Data processing services	145
Data processing equipment	131
Data systems consultants/designers	20

SOURCE: *Yellow Pages, Minneapolis and Surrounding Communities,* Northwestern Bell

- Distribution sector (i.e., wholesale trade, retail trade, and transportation, communications, and utilities) – 23.3% ($1.55 billion).

The total (31.6%) is a conservative estimate. It does not account for the dollar value of the services exported by a corporate headquarters to operating units located outside of the Twin Cities.

While not as large as that for manufacturing, there is also significant excess employment in the service and distribution sectors of the Twin Cities' economy. This is further evidence of export activity. (See Table 31.)

A 1978 study, "The Transformation of the Urban Economic Base," published by the National Commission on Manpower Policy, classified metropolitan economies according to their export activity. Two categories were used:

- Metropolitan areas that were, "...identifiable by a relatively high proportion of export activity in services–not in one or two particular services, but rather *in a wide range of services* for both consumers and producters..."[20]

- The second group was reserved for metropolitan areas with export activity concentrated in a narrow range of industries, including manufacturing. But also including, "...places with high concentration of export activity *in a particular services category.*"[21]

The Twin Cities metropolitan area was classified in the first category. The report concluded that those metropolitan areas which are now in the second category are likely to have difficulty transforming their economies so that they could be in the first group. And, that those metropolitan areas already in the first category (i.e., Minneapolis-St. Paul) have the best opportunities to build their export activity by developing their service and distribution sectors. The report cautions all metropolitan areas about taking a "worst first" approach to development–that is, "attempting to shore up sick industries."[22]

TABLE 31

TWIN CITIES EXCESS EMPLOYMENT IN SERVICE AND DISTRIBUTION SECTORS, 1978

Industry	% of Twin Cities Employment	% of United States Non-agricultural Employment	Excess Employment (% of Total Twin Cities Employment)
Wholesale trade	7.1%	5.7%	1.4% (14,200)
Retail trade	17.9	16.9	1% (10,200)
Transportation, communications and utilities	5.9	5.7	.2% (2,000)
Finance, insurance and real estate	6.3%	5.5%	.8% (8,100)
Services	20.8	18.6%	2.2% (22,400)
TOTAL Excess Employment for Services and Distribution Sectors	**58.0%**	**52.4%**	**5.5% (56,900)**

SOURCE: *Employment and Earnings,* Bureau of Labor Statistics, US Department of Commerce

The region's economic strength depends on the number of new business starts, regardless of whether they are manufacturers, traders, or service companies.

Much of the Twin Cities' economic strength is the result of successful homegrown companies. For example, all of the Minnesota-based firms appearing in the *Fortune* list of the nation's largest corporations were started in Minnesota.[23] In a recent paper describing entrepreneurship in Minnesota, Professor John Borchert, University of Minnesota, found that, "56% of Twin Cities manufacturing jobs, the highest proportion of any metropolitan area with over 500,000 people, in 1967 were controlled by Minnesota-based firms, which in turn were overwhelmingly homegrown. Of the 47% of Twin Cities jobs not controlled by Minnesota-based firms, more than 90% originated in plants and offices of enterprises originally developed by Minnesotans but later acquired by outsiders."[24]

More recently, a survey by Dun and Bradstreet of Minnesota's sources of employment growth showed that between 1969 and 1978 approximately 73% of the state's net job growth came from the start-up of new businesses. Slightly less than 27% came from the expansion of existing firms. And, about 0.1% came from migration by established businesses to Minnesota. New job growth was defined as the total of corporate births less deaths; expansion less contractions; and, in-migrations less out-migrations. It is important to keep the data base in mind. While Dun and Bradstreet's data base covers a large number of Minnesota firms, it is not a random sample of new business starts, deaths and expansions.[25]

The start-up rate for new businesses depends on a supportive business climate–that is, one that offers encouragement to prospective entrepreneurs. While the process of entrepreneurship is not well understood, there is consensus that the following conditions must hold:

- The business environment must show prospective entrepreneurs that success is possible.

- Risk capital must be available to finance new businesses.

- There must be a good supply of management personnel as well as research and development activity.

In the past, the local business climate met all three conditions. A record of successful homegrown companies as well as the prospect of a substantial financial reward through the sale of stock, provided the right business environment. An active local stock market made risk capital readily available. The university community provided a good base for research and development activity. Finally, existing corporate headquarters provided a good supply of experienced management personnel.

In recent years, there has been a shortage of risk capital. The 1975-1976 recession greatly reduced the supply of risk capital. Nationally and locally the over-the-counter stock markets, a major source of risk capital, have not been able to support new stock issues. From 1968 to 1972, an average of about 40 local companies per year had initial stock offerings. Since 1972, there has been a drastic decline in the number of new offerings. Only 11 local companies have had initial public offerings since 1975. The local slowdown reflects a national trend. (See Appendix E.)

While the recession was probably the major force behind the lull in the local and national over-the-counter stock markets, changes in the state and federal tax laws with respect to personal long-term capital gains may have also contributed. Prior to 1970, the state and federal government exempted 50% of the amount of a long-term capital gain from income taxes. For example, if stock was purchased for $50 per share and sold at $100 per share (a profit of $50), then only $25 was subject to taxation. In addition, there was alternate tax rate that the taxpayer could use for the taxable portion of the gain if it was to his advantage. (For most higher income taxpayers it was.) The 50% exemption and the alternative tax rate made long-term capital investments (including the stock market) extremely attractive, especially to persons with high incomes. Income that would otherwise be taxed at the rate of 50% or more was taxed at half that rate or less if it was from a long-term capital gain.

In 1970, the federal and state tax laws were changed such that income from long-term capital gains was taxed at a higher rate than before. The higher rate significantly reduced the tax incentive for capital investments. Without the special incentives, a company had to offer a rate of return that was competitive with other kinds of investments (e.g., government bonds) to attract investors. Before the change, the rate of return could be lower because the tax savings made the return on investment after taxes competitive. This attracted investors to not only established companies but also to high risk ones.

In 1978, the federal government reduced its tax rate on long-term capital gains to approximately the pre-1970 rate. The intent was to provide an incentive for long-term capital investments. The Minnesota Legislature has not made a similar change. The state continues to tax long-term capital gains at the same rate as regular income.

Most people agree that it is too soon to tell how the reduction in the federal tax on long-term capital gains will affect the ability of new companies to raise capital. It will take a while for persons interested in new ventures to unlock their assets–that is, to liquidate investments that were more attractive to them because of the way in which capital gains were taxed.

In addition to the sluggish economy and the shortage of risk capital, there may be other factors slowing down the rate of entrepreneurship. Some people say that new federal limitations on stock option plans have discouraged individuals from starting companies. Stock option plans allow certain corporate executives to purchase stock at reduced rates. The new limitations make this more difficult to do. And, as a result, the limitations could discourage persons from starting new companies. State and federal regulations regarding job safety and working conditions are also cited as disincentives to new business starts. Since these factors are not related to taxes, we do not consider them further in this report.

Within Minnesota, the state's corporate income tax may also be a deterrent to the start-up of new companies. As a rule, small and new companies do most of their business in Minnesota. As such, the weighted three factor formula will not significantly lower their tax liability. Many pay a full 12% of their income for state income tax. Several proposals were made during the 1979 session of the Legislature to reduce the corporate income tax liability on small businesses. Among them were:

- Governor Quie proposed to reduce the tax rate to 6% on the first $20,000 of taxable income. (The Governor also proposed setting 10% of corporate income as the maximum corporate income tax bill.)

- The proposal of the Minnesota Advisory Task Force on Small Business, a group made up of legislators and private citizens, to reduce the corporate income tax to 6% on the first $20,000 of taxable income.

- The recommendation of a study of small businesses commissioned by the State Planning Agency, to reduce from 12% to 6% on the first $100,000 of taxable income and to eliminate the minimum state tax for unprofitable companies.

- Late in the 1979 session, a proposal by members of the state Senate, to reduce property taxes on commercial property. The proposal was to lower the classification rate on the first $100,000 market value to 33%. Any value in excess of $100,000 was to be classified at the current rate for commercial and industrial property, that is, 43%.

- A proposal by a member of the House of Representatives to have the state adopt a graduated corporate income tax. The following rates were proposed: 8% on the first $25,000 taxable income; 9% on the next $25,000 taxable income; 10% on the next $25,000 taxable income; 11% on the next $25,000 taxable income; and 12% on all taxable income in excess of $100,000.

The 1979 tax bill did not include any of these proposals. The House had voted to reduce the corporate income tax rate from 12% to 10% on the first $20,000 of taxable income. The Senate's tax bill did not contain any reduction in the corporate income tax. The conference committee on the tax bill replaced the House's corporate income tax reduction with a special 5% tax credit (up to $75,000) for the installation of pollution control equipment. While this credit will help companies meet the cost of installing required equipment, it will not necessarily reduce the tax burden for small and new companies, particularly non-manufacturing firms.

FOOTNOTES

[1]Fiscal year 1980 begins on July 1, 1979 and ends on June 30, 1980. Fiscal year 1981 begins on July 1, 1980 and ends on June 30, 1980.

[2]Article IX of the *Constitution of the State of Minnesota* prior to amendment in 1906.

[3]Article X, Section 1, *Constitution of the State of Minnesota.*

[4]"Staff Progress Report," Tax Study Commission, State of Minnesota, January, 1973, p. 159.

[5] Robert J. Kleine, "The Michigan Single Business Tax: A Different Approach to State Business Taxation," Advisory Commission on Intergovernmental Relations, Washington, DC, March, 1978, p. 1.

[6]Ibid., p. 12-13.

[7] "Report of the Governor's Minnesota Tax Study Committee, "State of Minnesota, 1956, p. 346.

[8]Article X, Section 6, *Constitution of the State of Minnesota.*

[9]*State Tax Comparison Study,* Price Waterhouse and Company, 1975. The study was commissioned by the State of Missouri.

[10]"Federal Reserve Chief Assails 'Indexing' of Taxes to Inflation," Findlay Lewis, *Minneapolis Tribune,* January 30, 1979, 1B.

[11]Rolland F. Hatfield, *Report to Governor's Minnesota Property Tax Study Advisory Committee,* Minnesota State Planning Agency, St. Paul, MN, November, 1970, Table 1-7, p. 38.

[12]D. Kent Halstead, *Tax Wealth in Fifty States,* The National Institute of Education, US Department of Health, Education and Welfare, Washington, DC, 1978, Table 9, p. 97.

[13]"State and Local Tax Bills: A Report on 62 Cities," *Changing Times,* November, 1978, p. 25-29.

[14]Ibid., p. 28.

[15] United States Bureau of the Budget, Office of Statistical Standards, *Standard Industrial Classification Manual,* 1967, Appendix A.

[16]David J. Ashton and Branch K. Sternal, *Business Services and New England's Export Base,"* March, 1978. The paper can be obtained from Professor Ashton who is Professor of International Business, Boston University, Boston, MA.

[17] See Table 1 in the policy report.

[18]Gene Knaff, *The Structure of the Twin Cities' Economy: An Input-Output Perspective,"* Metropolitan Council, St. Paul, MN, 1976, Table 2 and Table 10.

[19]Gail Garfield Schwartz, *Bridges to the Future: Forces Impacting Urban Economies,* Office of Economic Research, Economic Development Administration, U.S. Department of Commerce, Washington, DC, May 1978, p. 3.

[20]Thomas Stanback, Jr. and Matthew Drennan, *The Transformation of the Urban Economic Base,* Special Report No. 19, National Commission for Manpower Policy, Washington, DC, February, 1978, p. 12.

[21]Ibid.

[22]Ibid., p. 58.

[23]The Bemis Company is somewhat of an exception. The company started almost simultaneously in three locations: St. Louis, Boston and Minneapolis.

[24]John R. Borchert, *Entrepreneurship and Future Employment in Minnesota,* Commission on Minnesota's Future, St. Paul, MN, October, 1975.

[25] , *Components of Minnesota Employment Change, 1969-1976: A Preliminary Analysis of Dun and Bradstreet Data,* Minnesota State Planning Agency, February, 1979.

APPENDIX A

MINNESOTA'S PROPERTY TAX CLASSIFICATION SYSTEM
(for taxes payable 1980)

REAL PROPERTY

Class	Description	Percent of Market Value
1	Unmined Iron Ore	50%
1a	"Low Recovery" Iron Ore	30 to 48½%
1b	Severed mineral interests tax	*
3	Agricultural non-homestead	25%
3	Seasonal residential for recreational purposes:	
	a. Commercial, but not used for more than 200 days per year (Example: resort). See also Class 3a.	25%
	b. Non-commercial (Example: cabin)	25
3	Tools, implements and machinery of an electric generating, transmission or distribution system or a pipeline system transporting or distributing water, gas, or petroleum products which are fixtures to real property	33 1/3%
3a	Commercial seasonal recreational residential not used for more than 200 days per year which includes a portion used as a homestead by the owner	18%
3b	a. Agricultural homestead**	
	First $21,000 market value	12%
	Excess of market value over $21,000	25%
3c	All other homesteads	
	First $21,000 market value	18%
	Excess of market value over $21,000	30%
3cc	Paraplegic veterans, homesteads of blind and permanently and totally disabled persons	
	First $28,000 market value	5%
	Excess of market value over $28,000 agricultural	25%
	Excess of market value over $28,000 all other	30%
3d	Non-homestead residential. (Examples:	
	a. Non-homestead single family dwellings, duplexes, triplexes and apartments with four or more units that do not qualify as Title II National Housing	40%
	b. Land of Title II National Housing)	40%
3dd	1-3 units of non-homestead residential	32%
3e	Timberland	20%
4	All other real property. (Examples:	
	a. Commercial, including parking ramps, industrial including petroleum refineries and public utility land and buildings	43%
	b. Vacant land, not used for agricultural, commercial, industrial or public utility)	43%
None	Type I and II Apartments	
	Five or more stories (structures only)	25%
	Four or less stories (structures only)	33 1/3%
None	Housing for elderly or for low and moderate income families financed by direct federal loan or federally insured loan pursuant to Title II of the National Housing Act or the Minnesota Housing Act	
	Municipalities of 10,000 or over population (structures only)	20%
	Municipalities under 10,000 population (structures only)	5%

PERSONAL PROPERTY

Class	Description	Percent of Market Value
2a	**Mobile homes**	
	Homestead	
	First $21,000 market value	12%
	Excess of market value over $21,000	25%
	Non-homestead	40%
3	Structures on leased public lands in rural areas	31%
3	Tools, implements and machinery of an electric generating, transmission or distribution system or a pipeline system transporting or distributing water, gas, or petroleum products which are fixtures	33 1/3%
3	Leased agricultural real estate of exempt land (MS 272.01, Subd. 2)	31%
3f	Owner occupied residences on leased public or railroad lands	***
4	Structures on leased public lands in urban areas	43%
4	Structures on railroad operating right-of-ways	43%
4	Leased all other (non-agricultural) real estate of exempt land (MS 272.01, Subd. 2)	43%
4	Systems of electric, gas and water utilities	43%
4	Billboards, advertising signs and devices	43%

* 25 cents per acre annually (tax effective January 1, 1975). Each parcel is subject to minimum annual tax of $2.00.

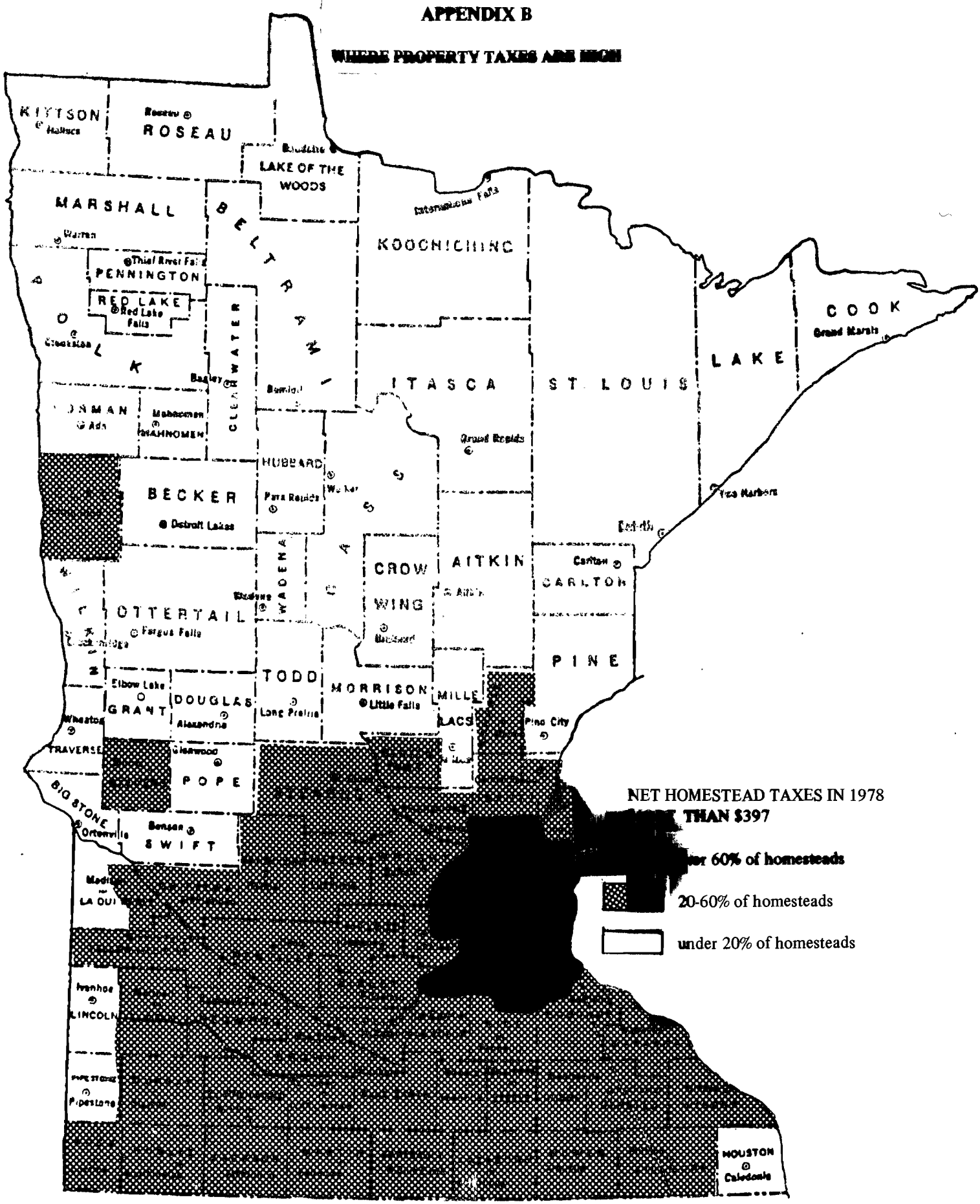
** Townhouse property will be classified and valued as all other homestead real estate. Value will be added for each unit's share of the development's common areas.

*** Buildings receive the classification rate as if they were homestead real property within the scope of Class 3b, 3c, or 3cc, whichever is applicable.

SOURCE: Minnesota Department of Revenue.

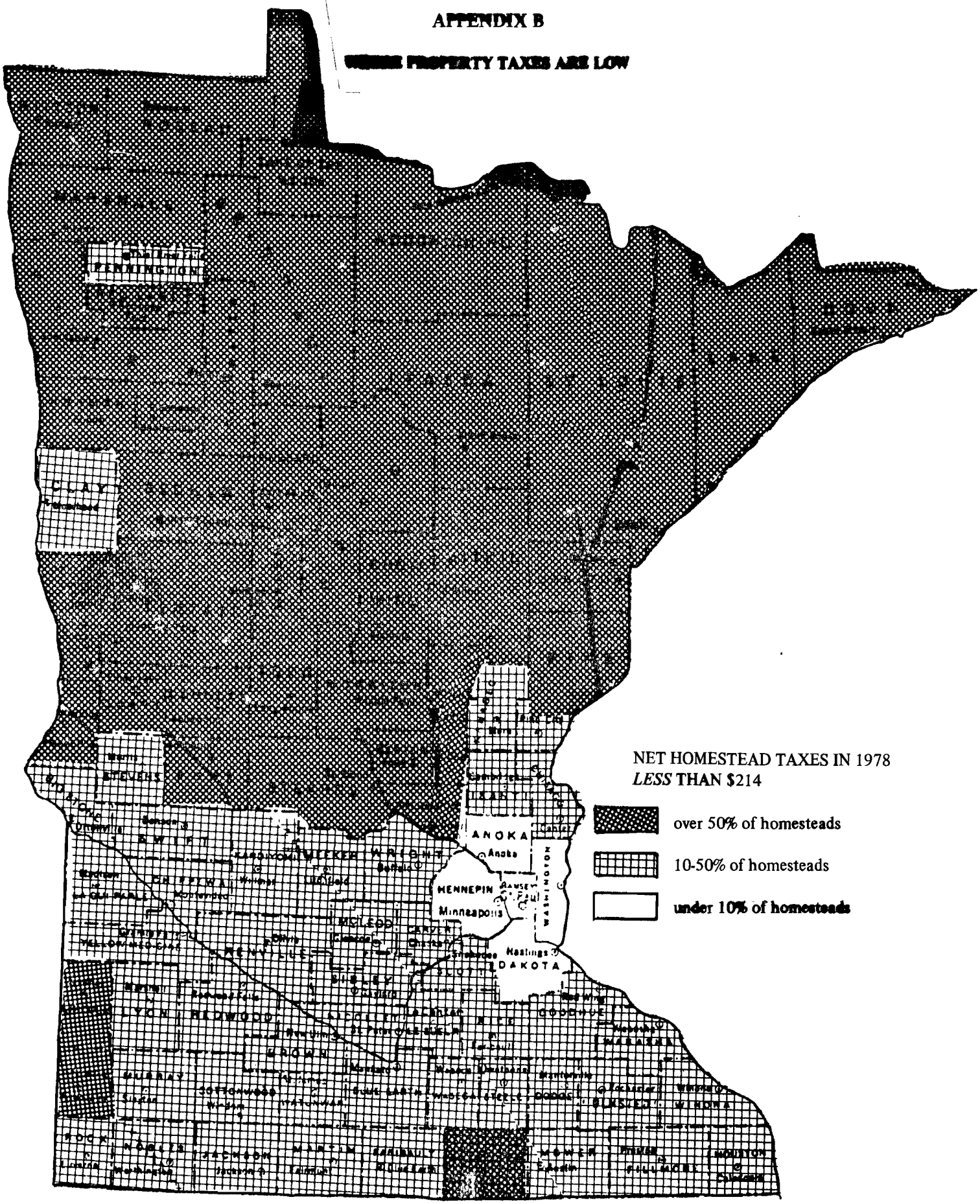
APPENDIX B

WHERE PROPERTY TAXES ARE HIGH



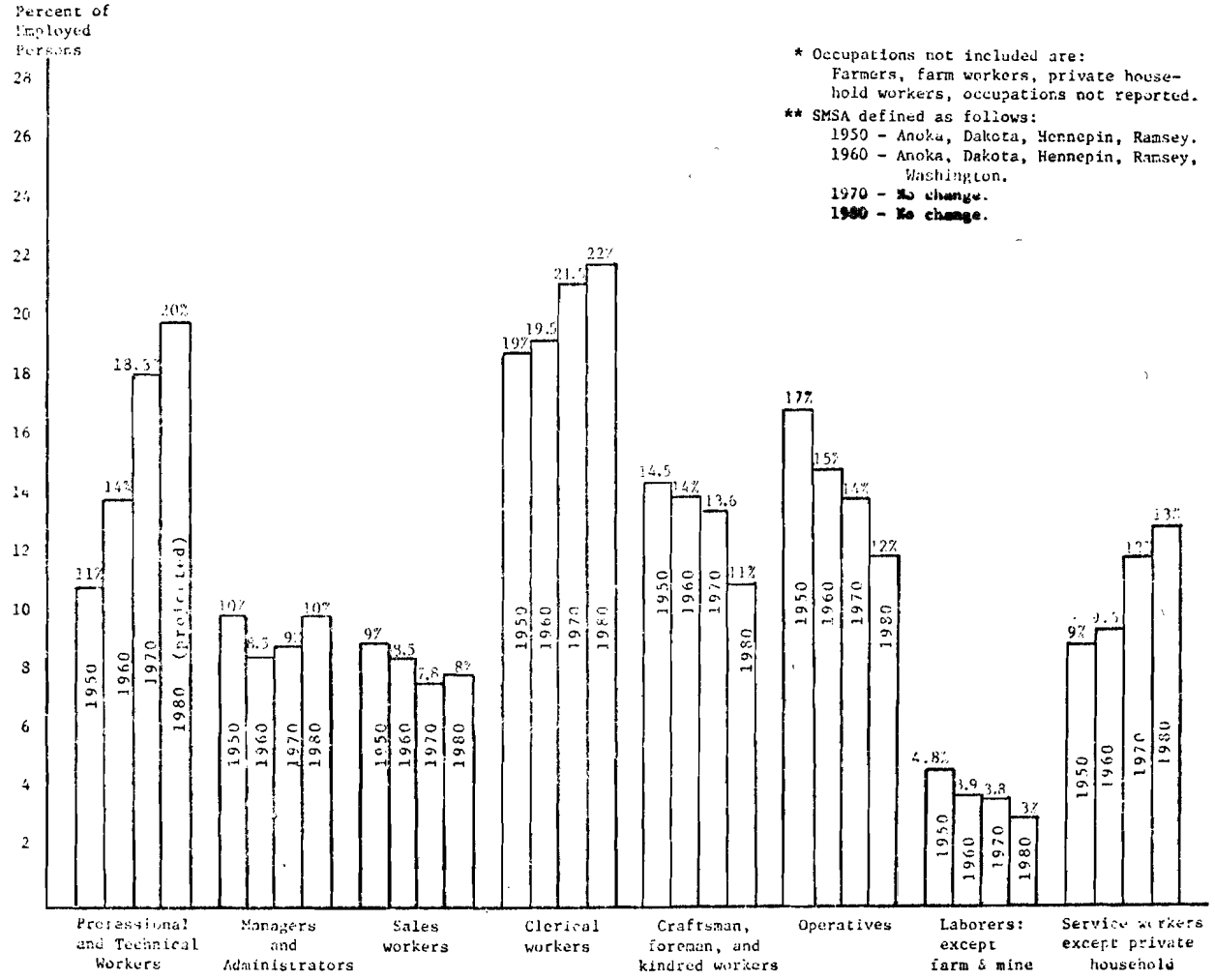
APPENDIX B

WHERE PROPERTY TAXES ARE LOW



APPENDIX C

DISTRIBUTION OF EMPLOYED PERSONS FOR SELECTED* OCCUPATIONS: The Minneapolis-Saint Paul SMSA**



SOURCE: United States Census of Population, Detailed, Characteristics, Minnesota, and Minnesota Employment, 1970, revised, 1975.

APPENDIX D

CHANGE IN TWIN CITIES' EMPLOYMENT FOR ALL INDUSTRIES' EXCLUDING AGRICULTURE

The Bureau of Census of the Department of Commerce classifies employment by using a classification system built around ten major "industries." The major industries are: agriculture; mining; contract construction; manufacturing; transportation, communications, and utilities (TCU); wholesale trade; retail trade; finance, insurance, and real estate (FIRE); services; government.

Table 1: Total employment has grown fastest in metropolitan areas to the south and west. Minneapolis/St. Paul is among the faster growing areas, particularly when compared with other midwestern metropolitan areas.

Metropolitan Area	Total Non-Agricultural Employment, in Thousands 1963[1]	1975	% Change
Minneapolis/St. Paul	598.1	895.3	+49.7%
Atlanta	424.3	733.7	+72.9
Boston	1098.3	1262.0	+14.9
Chicago[2]	2759.4	3219.1	+16.7
Dallas[3]		1077.4	
Denver[4]	359.4	615.5	+71.3
Houston	510.2	996.6	+95.3
Indianapolis	343.5	448.3	+30.5
Kansas City	420.1	540.0	+28.5
New York City	3824.8	3665.7	-4.2
Phoenix	212.1	429.4	+102.5
Pittsburgh	743.0	880.2	+18.5
San F./Oakland	1020.4	1322.8	+29.6

[1] Other tables in this appendix start with 1954. Because data was not collected in 1954 for many of the sample metropolitan areas, this summary table only compares 1963 and 1975.

[2] Data for 1964 and 1974.

[3] BLS Data was not available for Dallas for 1963.

[4] Data for 1964 and 1975.

SOURCE: Bureau of Labor Statistics, *Employment and Earnings.* NOTE: All metropolitan areas are defined as U.S. Census Standard Metropolitan Statistical Areas (SMSAs). The boundaries of SMSAs changed during the period due to population growth. Boundary changes may explain some of the change in employment...since boundary changes are based on criteria determined by the Census Bureau, it is assumed that the bias that resulted is uniform and applies to all metropolitan areas.

Table 2: Metropolitan areas where the total growth rate has been relatively slow have also had the largest declines in manufacturing as a percent of total employment.

In the Twin Cities: -The decline in manufacturing as a percent of total employment has been relatively small.
-Services, and FIRE account for a growing share, but the increase has not been as great as in seven other metropolitan areas.
-The share of employment from wholesale/retail trade and TCU has decreased. If wholesale/retail trade is considered by itself, then there is only a slight change in the Twin Cities and other metropolitan areas, suggesting that conventional trading patterns have remained relatively constant.

Percent Employment in Manufacturing and Mining

Metropolitan Area	1954	1963[2]	1976[3]	Change 1963-1976
Mpls./St. Paul	30.0%	26.8%	22.6%	-4.2%
Atlanta	26.3	22.7	15.9	-6.8
Boston	29.5	25.9	20.0	-5.9
Chicago	--	35.3	28.4	-6.9
Dallas	--	--	23.1	-.9
Denver	--	20.2	17.5	-2.7
Houston	--	25.7	21.9	-3.8
Indianapolis	36.5	33.7	26.3	-7.4
Kansas City	27.0	26.1	19.8	-6.3
New York City	29.5	25.1	16.5	-8.6
Phoenix	16.5	19.5	16.7	-2.8
Pittsburgh	43.8	37.2	29.7	-7.5
San F./Oakland	21.7	19.2	14.3	-4.9

Percent Employment in Fire and Services[1]

Metropolitan Area	1954	1963[2]	1976[3]	Change 1963-1976
Mpls./St. Paul	18.3%	21.9%	26.1%	+4.2%
Atlanta	19.6	21.3	25.6	+4.3
Boston	22.0	27.7	32.5	+4.8
Chicago	--	21.1	24.7	+3.6
Dallas	--	--	25.4	--
Denver	--	23.1	26.0	+2.9
Houston	--	20.9	25.3	+4.4
Indianapolis	14.8	17.6	22.4	+4.8
Kansas City	19.2	20.7	25.5	+4.8
New York City	25.0	28.9	35.6	+6.7
Phoenix	19.5	22.7	26.9	+4.2
Pittsburgh	15.7	20.8	24.4	+3.6
San F./Oakland	19.1	22.8	28.6	+5.8

Percent Employment in Wholesale/Retail Trade and TCU[4]

Metropolitan Area	1954	1963[2]	1976[3]	Change 1963-1976
Mpls./St. Paul	34.9%	32.9%	31.5%	-3.4%
Atlanta	36.9	35.5	36.9	--
Boston	31.1	28.3	38.4	-2.7
Chicago	--	28.9	29.3	-.4
Dallas	--	--	34.6	--
Denver	--	33.2	31.9	-1.3
Houston	--	34.5	31.5	-3.0
Indianapolis	30.9	29.2	29.6	-1.3
Kansas City	36.5	35.5	35.0	-1.5
New York City	30.4	29.3	27.7	-2.7
Phoenix	36.9	32.2	31.7	-5.2
Pittsburgh	27.9	27.1	27.9	--
San F./Oakland	34.7	31.9	31.1	-3.6

Percent Public Employment

Metropolitan Area	1954	1963[2]	1976[3]	Change 1963-1976
Mpls./St. Paul	11.7%	13.0%	15.9%	+2.9%
Atlanta	11.7	14.4	17.1	+2.7
Boston	13.2	13.7	15.3	+1.6
Chicago	--	11.2	13.5	+2.3
Dallas	--	--	13.2	+.7
Denver	--	18.6	17.8	-.8
Houston	--	11.0	12.1	+1.1
Indianapolis	13.7	15.3	18.1	+2.8
Kansas City	11.1	12.0	15.3	+3.3
New York City	11.6	12.7	17.6	+4.9
Phoenix	18.0	17.9	19.3	+1.4
Pittsburgh	8.0	10.7	13.6	+2.9
San F./Oakland	18.0	19.8	21.6	+1.8

[1] **FIRE**: Finance, Insurance, Real Estate. Services include the following types of activity: medical and health, business services, membership organizations, social services, hotels and lodging, personal services, amusements, auto repair services, motion pictures, legal services, museums, and miscellaneous services.

[2] 1964 for Chicago.

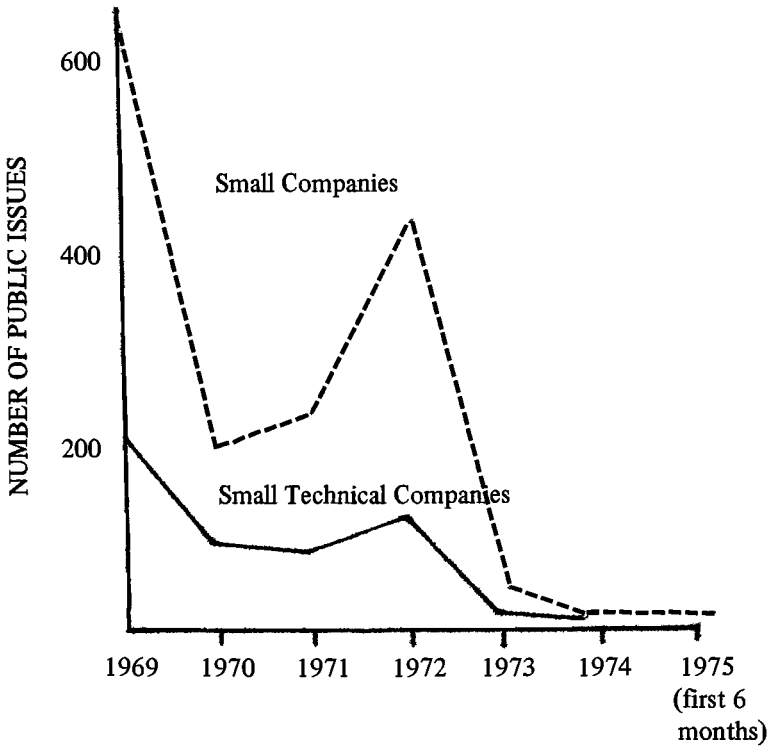
[3] Atlanta and Chicago data for 1975. Denver data for 1974.

[4] TCU: Transportations, Communications, Utilities.

SOURCE: Bureau of Labor Statistics, *Employment and Earnings.*

APPENDIX E

NUMBER OF SMALL COMPANY PUBLIC STOCK ISSUES IN THE UNITED STATES, 1969-1975



SOURCE: *Venture Capital,* S. M. Rubel & Co., Chicago, Ill.