

The Governor's Study
of the
Tax Structure of the State of Iowa

Research Memoranda

No.		Page
I.	On Financing Governments in Iowa: The Outlook	1
II.	The Iowa State-Local Tax Structure--Equity Considerations	23
III.	The Iowa Property Tax	38
IV.	State-Local Financial Relations in Iowa	85
V.	The Iowa Retail Sales Tax	179
VI.	Business Taxation in Iowa	245
VII.	Other Sources of State Tax Revenue	289
VIII.	The Individual Income Tax	326

IOWA STATE LAW LIBRARY
State House
Des Moines, Iowa 50319

130148

IOWA STATE
LAW LIBRARY

OCT-4-1966

ON FINANCING GOVERNMENTS IN IOWA: THE OUTLOOK

Note: This memorandum brings together the results of the staff research done to date on the adequacy or capacity of the existing revenue structure to finance prospective levels of expenditures. The main findings are summarized at the outset and expanded in supporting sections. The next report, due on or about 4/15/66, will deal with the question of the equity (or fairness) of the Iowa state-local tax system. In combination, the adequacy and equity studies provide the case for tax revision and reform.

I. THE OBJECTIVES OF THE ADEQUACY STUDY AND ITS
MAIN FINDINGS

The primary objective of the study of the adequacy of Iowa's state and local revenue structure was to determine the ability of Iowa state and local governments to finance the prospective increases in their expenditures over the next decade from their own sources, without changes in the existing tax system. A secondary objective was to examine the kinds of tax increases, assuming they were indicated, which are conceivable and likely to occur in the absence of a positive, forward-looking fiscal policy.

A. The Main Findings

1. If state-local expenditures in Iowa continue to increase as rapidly as they have in recent years, expenditures in 1975 will be more than double the level of 1964/65. In certain important functional areas, however, this past trend is not likely to continue. Educational outlays, for example, should

experience some tapering off due to reductions in the rate of enrollment increases. On balance, a somewhat slower rate of growth is anticipated for Iowa state-local expenditures in total. The "most likely" projection, given in Table 1, provides for an increase over the next ten years of \$850 million, or 74 percent above the 1964/65 levels.

2. It is estimated that the existing tax structure will produce \$173 million of additional revenue over the next decade without any increases in tax rates, new taxes, or broadened coverage of old taxes (Table 2).

3. The "natural" increases in tax revenues at constant rates plus anticipated increases in federal aid and user charges will, however, not be sufficient to finance expenditures, in spite of the slowing down in the growth rate of the latter. Table 3 shows a 1975 gap of \$266 million, or about \$27 million annually on the average, to be filled by increasing the rates or adjusting the bases of existing taxes and/or adopting new forms of taxation.

4. Because of its residual character and its susceptibility to small changes over time, local property tax rate increases will provide some of the required revenue. However, this is far from an optimal solution to the fiscal problem. The best interests of the State of Iowa would seem to be served by implementing a policy of de-emphasizing the local property tax, via modification or roll-back, and relying more heavily on alternative sources of tax revenue whose yields are comparatively responsive to economic growth.

5. Depending on the extent of property tax "de-emphasis" and the yet-to-be indicated need for structural reform in other areas of the state-local tax structure, prospective revenue requirements could exceed yields under existing

fiscal arrangements by as much as \$100 million annually on the average over the next decade. Repeal of the personal property tax, for example, would "cost" other sources of revenue about \$70 million per year. The livestock component alone would require additional replacement revenues amounting to approximately \$15 million annually.

6. Table 4 lists several tax changes which might be considered as "gap fillers" singly or in combination.

II. THE PROSPECTS FOR STATE-LOCAL FISCAL REQUIREMENTS IN IOWA

A. Introduction

This section summarizes the results of a projective survey of public expenditures in the State of Iowa designed to furnish guidelines for appraising future expenditure-revenue balances.¹ The projections are to be used in the planning and development of a tax program in order that emerging needs can be met in a timely and efficient manner. They constitute a basic building block in the Governor's comprehensive tax study, for they measure the extent of the "need for revising and equalizing the tax structure of the state of Iowa."² In addition, the expenditure projections in relation to the revenue estimates establish quantitative benchmarks for the series of detailed studies of individual components of the Iowa state and local fiscal structure which are to follow and complement the adequacy study.³

At the outset it should be stated that it is not the purpose here to question or judge the level or quality of public services that were, are, and will likely be provided in such areas as welfare, public and mental health, higher education, and the like, nor the extent to which the legislature has and may expand aid to local schools, counties and cities. Expenditure projections provide a view of the future based primarily on present knowledge of foreseeable developments and of relationships of the past. A projection is not a prediction or a prophesy of the future, but _____

¹See the Staff Paper on expenditure projections by Thomas Pogue, Larry Sgontz, and Arthur Welsh.

²HJR 28.

³The series is detailed in Interim Report under date of 30 December 1965.

rather a forecast of what will likely occur if a number of specific assumptions regarding the composition and behavior of the Iowa economy and the underlying forces affecting expenditure levels were, in fact, to materialize. Once the strategic assumptions are made and accepted, the projections follow logically.

B. Major Determinants of State-local Expenditures

There are basically four forces continually at work influencing the trend in Iowa state-local expenditures. They are:

1. Needs
2. Prices
3. Quality
4. Productivity

Based on the evidence of the past, probably the most obvious factor shaping the magnitude of public expenditures in Iowa is the underlying workload or need for public services - school and university enrollments, the proportion of persons living in urban areas, the number of indigent families, and the like. It is possible, for example, to arrive at a first approximation of the fiscal requirement for public elementary and secondary school education over the next decade by applying published projections of the number of children of the age group 5 to 18 to the current level of cost per pupil. The same technique can be applied to each of the major categories of public services; that is, quantify the principal indicator of the underlying needs of a specific function, project its future level, and apply the current expenditure data.⁴

⁴This procedure is followed in arriving at the 1970 and 1975 projections in the "Constant cost" model. For these figures, see Table 1.

The rate of increase in needs stemming from population and enrollment changes should be manageable in the next decade. Over the period, Iowa's total population is expected to increase by only about 5 percent and the State's school age population is projected to rise by just over 3 percent.⁵ Moreover, in a generally prosperous economy, a continuation of the past trends in the needs for other special type services, such as welfare programs, seems unlikely. Rather, the increase is expected to be at a moderate rate. Partially offsetting these manageable increases, however, is the substantial rise anticipated in college and university enrollments, both in absolute numbers and as a proportion of the total college-age population. The latter ratio is estimated to increase by 30 percent over the next decade.

In addition to the forces of demographic trends influencing the rate of growth of Iowa state-local expenditures, there is another variable of considerable importance, namely the prices of the goods and services purchased by the State of Iowa and its local units. Government purchases of manpower (i.e., personal services) are particularly sensitive to price increases. They also constitute the bulk of governmental budgets. In order to attract the necessary resources into teaching, for example, teachers' salaries will at least have to keep pace with wage and salary and pension and fringe benefit increases in the Iowa economy at large. Similarly, the cost of providing public hospital and welfare care will have to mirror the corresponding private cost structure.

⁵U.S. Bureau of the Census, Illustrative Projections of the Populations of the States, 1970-1985, Series I-B, Series P-25, February, 1966.

It should be emphasized that the rapid rise in governmental costs cannot be attributed to inflation in the general price level. Nationwide consumer and wholesale price indices have recorded overall price level stability in the last decade for the simple reason that productivity gains in the private sector have more or less kept pace with rising wage and salary levels. In the past ten years, the average annual wage and salary payment per employee in private nonagricultural industries rose 43 percent, or about 3.6 percent per year. Over this same period, average annual output per employee also rose by 44 percent, again approximately 3.6 percent per year. Thus, in terms of their impact on prices, the gains were offsetting.

Because wage and salary levels in private industry will likely continue to increase in the next decade, Iowa's governmental units will be confronted with steadily rising personnel costs. Unfortunately, governments, like private service occupations (e.g., legal, medical, and the like) cannot offset rising salary costs with offsetting productivity improvements. The fact of the matter is that automation and mechanization can have only a relatively limited impact on personnel costs of government. Consequently, if the state and local governments in Iowa are to attract and retain personnel, and to acquire additional resources as well, they will have to at least match the increases in the private sector.

A third factor accounting for growth in the level of expenditures is changes in the quality of public services. Again, experience suggests that governments in Iowa can be expected to do more things and do them better in the future than in the present and recent past. To illustrate the point, the quality of the public educational offering is constantly being improved through better trained teachers and new programs. Similarly, many other functional fields are adopting higher professional standards

for personnel who practice welfare, health, planning, law enforcement, and recreation.

There is strong evidence to support the view that with rising incomes, citizens expect and demand a higher standard of performance from the public sector.⁶ Also, levels of state-local expenditures are influenced by the quality and scope of services adopted by other states. New school programs initiated elsewhere, for example, create expectations and subsequent pressures for competitive emulation in Iowa. Thus, while future quality changes in the performance of public services are difficult to quantify, there is every indication they will be positive and substantial.

Finally, productivity and/or management improvements in the performance of public services will work to influence the rate of growth in expenditures. The further application and more effective utilization of computer technology to data processing of local and state governmental operations will serve to provide the same or an improved level of certain public services at lower costs. But although additional efforts to improve productivity and realize economies are expected to be made, there is a limit to the extent of mechanizing governmental operations.

In sum, Iowa state and local government expenditures are going to continue to increase in the decade ahead: by a comparatively modest amount to accomodate population and school enrollment changes; by a larger amount to improve the services provided by governments; and by a relatively substantial amount to match the increases in the costs of the goods and services the various governmental units buy. The likely magnitudes of Iowa state-local expenditures in 1970 and 1975 are discussed in the next section.

⁶ A ten-year increase of 33 percent in income per person in Iowa is projected.

C. The Projections

Table 1 presents four series or "models" of projections of state-local expenditures in Iowa for 1970 and 1975. All four series are based on the same assumptions regarding overall prosperity in the national economy, general price level stability and rate of economic growth. They differ only as to the relative importance attached to the various determinants of expenditure levels.

The first series, designated the "Constant cost" model, indicates the 1970 and 1975 levels of Iowa state-local expenditures required to accomodate population and school enrollment increases only. No account is made for improvements in the standards and extension of the scope of existing programs or for price changes. In the environment of an expanding economy, however, experience shows that constant costs can be maintained only by reducing the quality and/or quantity of existing programs. Because of the unlikelihood of the citizens of Iowa desiring or permitting this to occur, the "Constant cost" figures are highly unrealistic. It is interesting to note, nevertheless, that even under these highly unrealistic assumptions, the level of state-local expenditures will increase over the decade by 16 percent, or \$172 million.

The "Competitive" model or second series gives the probable magnitudes of outlays on public programs of constant quality, but adjusted to reflect both population and enrollment changes and rising costs resulting from the need to compete for resources with an expanding private sector. As a minimum, government salaries will rise along with the wages and salaries in private industry. The rate of increase will very probably be even greater than in the economy generally. For example, the U.S. Office of Education estimates that the demand for new teachers will equal 10 percent

of the total number of teachers in the average year in the decade ahead.⁷ Yet, net additions to the ranks of the teaching profession are estimated at between 2 and 2 1/2 percent per year. Thus, even if all other educational expenses remain fixed, because of the importance of personnel requirements, per pupil costs are likely to rise substantially by 1975. The terminal levels for this series, therefore, represent a realistic lower limit of projected expenditures.

The "Improvement" model allows for changes in underlying needs or workload, price increases, and some modest improvements in the quality of public services. The quality improvements, however, are projected at a much lower rate than the experience of the past indicates. Since the "Improvement" series takes into account most of the factors likely to influence the level of public expenditures in Iowa, its results are rated "most likely."

Finally, the "Continuation" model indicates the level of expenditures which would result if outlays increased as rapidly between now and 1975 as they did between 1958 and 1964. It is considered highly unlikely that this rate will persist over the next decade. The terminal levels, therefore, constitute the upper limit to the projections.

III. THE PROSPECTS FOR STATE-LOCAL FISCAL RESOURCES IN IOWA

A. Introduction

The productivity of the Iowa state and local tax system in combination with funds acquired by borrowing, federal aid, and user charges determines

⁷Projections of Educational Statistics to 1973-74 (1964 edition).

TABLE 1
PROJECTIONS OF IOWA STATE-LOCAL GOVERNMENT EXPENDITURES, 1970 AND 1975^a

(In millions of current dollars)

Fiscal Year and "Model"	Local Schools	Higher Education	Health and Welfare	Highways ^b	All Other	Total
1964/65 (actual)	334	107	141	230	200	1,012
1969/70 (est.):						
Constant cost ^c	365	180	152	272	215	1,184
Competitive ^d	462	228	193	272	272	1,427
Improvement ^e	475	247	204	272	282	1,480
Continuation ^f	499	279	214	272	328	1,592
1974/75 (est.):						
Constant Cost ^c	373	201	159	309	224	1,266
Competitive ^d	574	309	244	309	345	1,781
Improvement ^e	611	323	265	309	354	1,862
Continuation ^f	647	395	286	309	474	2,111

^aAll projections assume overall prosperity in the national economy, general price level stability, and a normal rate of economic growth.

^bHighway expenditures are projected under only one "model" because of the importance and rigidity of federal matching programs. These figures reflect the findings of the 1960 highway fiscal study report to the Iowa Roads Study Committee.

^cIncrease in expenditures reflects only increase in population or (for education) enrollments.

^dIncrease in expenditures reflects population and enrollment increases and the fact that Iowa governments must match wage and salary increases (i.e., personnel costs) and the like which take place in the private sector, with few if any offsetting productivity gains.

^eIncrease in expenditures is the "competitive model," but with an allowance for modest improvements in the standards of public services.

^fLevels reflect continuation of 1958/64 annual rate of increase.

the capacity of the present revenue structure to support the projected level of public expenditures. This section summarizes the projections of revenues expected to be realized from the existing structure without any further changes in tax rates, the imposition of new taxes, or the coverage of present levies.⁸ In short, it indicates the extent to which the present structure will generate additional revenues automatically from the normal expansion in Iowa's economy.

In general, the approach to the derivation of tax revenue projections involves the development of relationships between the changes in the bases of each of the major state-local levies and the assumed rates of economic growth. For example, over the next decade the retail sales tax collections, which are based on the dollar value of taxable purchases, will reflect the combined impact of population and income increases. Similarly, the individual income tax will generate increased revenues due to the anticipated expansion of economic activity. The property tax levy will reflect, among other things, rises in the market value of taxable property and new construction. For the comparatively minor sources of state and local tax revenue, the cigarette tax, inheritance tax, and the like, the projections reflect primarily historical rates of growth, abstracted from rate and base adjustments.

The single major source of non-tax revenue is federal aid associated with specific programs (e.g., highways, education, housing, renewal, and water pollution control). It presently accounts for over 10 percent

⁸The projections include the full effect of the 1965 tax provisions. See the Staff Paper on revenue projections by Mary Faden, James Prescott, and Charles Meyer.

of the total revenue. The projections of this component of the Iowa revenue structure are based on the expectation that over the next decade recent trends will continue without new and radical departures. Federal aid for health and education is likely to expand as a result of recent and pending legislation, but aid for highways will remain relatively stable.⁹ An important distinction to consider with regard to federal aid and other so-called "program-associated receipts" is that expenditures and revenues are inextricably interwoven. The expansion of the public service or program is financed in whole or in part by earmarked receipts. The demands on general revenue sources, therefore, are less than the program expenditure projections would indicate.

B. Fiscal Resources: 1970 and 1975

Table 2 summarizes the projections of Iowa state-local revenue by major source for 1970 and 1975. As indicated, an increase in total tax revenue of 46 percent (or \$173 million) between 1964-65 and 1974-75 is expected as a result of the interacting forces of economic growth.

If the present tax structure remains as it is in all respects, the absolute and relative importance of the individual income tax will increase significantly over the next decade. In dollar amounts, its yield will more than double; as a percentage of total tax revenues, a 63 percent gain is anticipated. These developments follow from the additional income generated by the State's economy and the application of the statutory graduated rate structure. The latter provides the only substantial element of responsiveness of revenue yields to economic growth in the tax structure.

⁹The fiscal impact of Medicare, for example, will take the form of federal payments for hospital care on behalf of some formerly indigent patients.

TABLE 2

PROJECTED REVENUE FROM IOWA STATE - LOCAL REVENUE STRUCTURE,
1970 and 1975, ASSUMING NO CHANGE IN TAX RATES OR OTHER PROVISIONS^a
(in millions of dollars)

Source	Actual 1964/65	Projected	
		1970	1975
Property ^b	413	493	572
Income ^c	63	99	144
Individual	57	88	130
Corporate	6	11	14
Sales and Use ^d	95	108	122
Other taxes ^e	189	235	270
Total taxes	760	935	1,108
Charges and misc. ^f	165	218	272
Federal aid	141	179	216
Total, all sources	1,066	1,332	1,596

^aProjections reflect only growth in Iowa economy.

^bProperty tax rate held constant at levels recorded for 1965-66. Increases reflect expected expansion of taxable values.

^cProjections include the impact of 1965 changes regarding withholding and rate adjustments.

^dProjections allow for 1965 base changes.

^eIncludes cigarette tax, inheritance tax, insurance premium tax, motor fuel and liquor levies.

^fIncludes license fees, tuition, hospital charges and the like.

Given no rate changes in the property tax, tax payments will, nevertheless, rise by \$159 million or 38 percent between now and 1975. The property tax is and for some time will apparently continue to be the mainstay of the state-local revenue system in Iowa. In 1964, the property tax revenue of local governmental units accounted for 54 percent of total state-local tax revenue. For 1975, the comparable projected percentage is 52 percent.

Comparison of 1964/65 actual tax receipts with those projected for 1975 for the retail sales and complementary use tax indicates some increase over the next decade. For the rate of increase, however, is considerably below that expected for the income taxes. Because of the limited scope of the sales tax (i.e., largely exempting consumer services), the percentage increments in collections over time are normally less than the corresponding increments in the leading measures of economic growth.

Total state-local taxes in Iowa in 1964/65 amounted to \$276 per capita. If the Census' estimates of population in 1970 and 1975 are realized, the projection of total tax revenue for fiscal 1970 and 1975 indicates that per capita payments will be \$333 and \$377, respectively. Employing an alternative measure of general tax level changes, namely, state-local tax receipts as a percentage of personal income received in the state, in 1964/65 this ratio was 11.6. For 1970 and 1975, the projected ratios are 12.0 and 11.9, respectively. In short, tax payments relative to population are expected to increase substantially over the course of the next decade. However, because of economic expansion, state-local tax collections in Iowa, when expressed as a percentage of personal income, are projected to remain almost constant.

IV. EXPENDITURE-REVENUE BALANCES

When the projections of expenditures are combined with anticipated revenues, the emerging problems of Iowa state-local finance are evident. Table 3 gives a summary of the "most likely" projections of expenditures and revenues for 1970 and 1975 and indicates the additional tax revenue requirement necessary to cover expenditures. According to Table 3, the existing structure of state-local taxes will fall short of providing the revenues likely to be needs in 1970 and 1975 by \$148 million and \$266 million, respectively, or about \$30 million annually, on the average. This gap does not include any allowance for replacement revenues should it be considered desirable to reduce or remove one or more taxes in the present structure. For example, the repeal of the personal property tax on household furnishings and machinery and equipment would impose an additional tax requirement of approximately double the projected gap under the present structure, or a total of some \$60 million annually.

Working at least initially, with the \$30 million annual deficiency, the issue is: what kinds of state and/or local taxes can be employed to close the expenditure-revenue gap and which are most likely to be used?¹⁰

A. Local Property Taxes

It does not require much research to conclude that local property tax levies in Iowa have risen substantially in recent years. Whenever expenditure requirements have exceeded fiscal resources at the local levels,

¹⁰ An appraisal of the desirability of these likely occurrences, from the standpoint of state-local tax policy objectives, is to be included in the Staff Papers dealing with individual components of the revenue structure.

TABLE 3

IOWA STATE-LOCAL BUDGETARY REQUIREMENTS: 1970 and 1975
(in millions of dollars)

Item	1970	1975
Expenditures (Table 1) ^a	<u>1,480</u>	<u>1,862</u>
Less:		
Non-tax revenues (Table 2)	397	488
Tax revenues under present structure (Table 2)	<u>935</u>	<u>1,108</u>
Total revenues	<u>1,332</u>	<u>1,596</u>
Equals:		
Additional requirement	<u>148</u>	<u>266</u>

^a"Improvement" model projection.

the most likely action was an upward rate adjustment simply because the property tax rate is determined as a residual. In other words, once expenditure needs are determined, and state aid and nonproperty tax and other nontax revenue sources are estimated, the resulting difference is the amount to be raised by the property tax. The rate is calculated by simply dividing the aforementioned difference by the assessed value of taxable property. Moreover, since the rate adjustments are relatively gradual and small in contrast to, say, increasing the personal income retail sales tax rates, property tax rate increases have been and probably will continue to be the path of least resistance.

Based on rate increases in the recent past, but considering also the forces of resistance operating to narrow the tax base through exemptions and limitations, it would seem reasonable to expect property tax rates to increase sufficient to produce \$60 million of additional revenue, i.e., above the projection appearing on Table 2, by 1975. In other words, the local property tax rate increases will probably generate about \$6 million of incrementated annual tax revenue, on the average over the next decade over and above what is attributed to the normal expansion in the tax base due to economic growth. Clearly, the local property tax rates will not be increased sufficiently to close the Iowa state-local revenue-expenditure gap. Indeed, there is strong evidence on economic grounds to question whether or not the local property tax, in its present form, should be called upon to provide any of the additional revenue requirements. Thus, other kinds of tax increases or new taxes will be necessary.

B. Local Non-Property Taxes

According to the Bureau of the Census, Iowa local nonproperty taxes produce revenues equal to 1.4 percent of total local tax collections.¹¹ With increasing pressures on the local property tax, some attention in the near future may be focused on the various alternative forms of local nonproperty taxes as a means of modestly strengthening the sources of revenue for Iowa local units, particularly in counties with large urban areas. Since the state presently imposes both personal income and retail sales taxes, local supplements to either or both of these levies would probably be preferable to an independently administered tax. Permission for Iowa local governments to impose non-property taxes must, of course, come from the state legislature. Estimates are in the process of being prepared on the productivity of various types of local nonproperty taxes. But even in their absence, it seems certain that no local nonproperty tax could conceivably produce revenues of the magnitudes indicated in Table 3. In short, what projected expenditure-revenue gap exists after the likely impact of property tax rate increases is considered will have to be closed from state-imposed, state-collected tax sources.¹²

C. State Taxes

It would be premature at this point in the study to "guess" what adjustments in the state's tax structure would likely be made to secure the required annual revenue increment in the absence of a positive tax

¹¹Governmental Finances in 1963-64, Series G-GF64-No. 1.

¹²This does not preclude, for example, the possibility of entirely new federal aid programs to states, such as sharing in the federal personal income tax collections. However, programs such as these are not yet visible on the horizon.

reform program. An optimal package of Iowa state-local finance would be one which de-emphasizes the property tax, is conducive, insofar as possible, to economic growth, produces increasing revenues automatically at rates at least equal to the rates of growth in income, and distributes tax liabilities among individuals and businesses in some rational and acceptable fashion. The simultaneous attainment of these several goals is possible, if at all, only after an intensive review, analysis and appraisal of the individual components of the state's tax structure.

Table 4 below indicates, for the sake of illustration, some samples of possible tax adjustments and their net revenue effects. They are presented here as alternatives, but several may be considered in combination or singly. It should be remembered, in closing, that simply meeting the indicated revenue requirement for the next decade will do nothing toward removing the tax inequities and tax obstacles to economic growth. To the extent that these problems are solved only through the removal of present taxes, the magnitudes of the revenue requirement facing the State of Iowa in the decade ahead is substantially greater than previously indicated.¹³

¹³If the entire tax on personal property were to be replaced, for example, the annual expenditure-revenue gap would approximate \$100 million.

TABLE 4
ESTIMATED ANNUAL NET REVENUE EFFECTS
OF SELECTED IOWA STATE-LOCAL TAX STRUCTURE ADJUSTMENTS

Tax Adjustment	Net Increase in Tax Yield (In millions of current dollars)
1. PERSONAL INCOME TAX:	
a) Eliminate deductibility of federal income tax paid.....	12
b) Substitute 3% flat rate tax on federal adjusted gross income less \$600 taxpayer and dependent exemptions.....	37
c) Substitute 4% flat rate tax on federal adjusted gross income less \$1,000 taxpayer and \$500 dependent exemptions.....	53
2. SALES AND USE TAXES:	
a) Increase rate to 3%, extend tax base to include selected personal consumer-type services (e.g., laundry and dry cleaning, auto repair and parking, etc.), and exempt \$600 of taxable purchases per person via \$6 credit or rebate on personal income tax.....	55
b) Increase rate to 3%	52
c) Extend sales tax base to include selected services.....	12
3. CORPORATE NET INCOME TAX:	
a) Reduce rate to 3 percent, eliminate federal income tax deductibility, adopt 2-factor (payrolls and property) allocation formula, and impose 2 percent tax on gross margin or value added as minimum alternative levy (i.e., corporation would compute both taxes and pay the higher of the two).....	42
b) Retain present rate and statutory provisions and impose the minimum alternative 2% gross margins tax.....	34
c) Repeal net income tax and impose 3 percent gross margin or value added tax.....	47

TABLE 4 (Cont.)

Tax Adjustment	Net Increase (Decrease) in Tax Yield (In millions of current dollars)
4. PROPERTY TAX:	
a) Exempt tangible personal property except inventories	(45)
b) Exempt machinery, equipment, tools, dies, inventories, etc., from local property tax and impose specific state levy only on machinery and equipment at \$9 per \$1,000 of original cost and on inventories at \$18 per \$1,000 of book value (rates should approximate the average state-wide effective rate on real property).....	28

OCT.-4. 1966

THE IOWA STATE-LOCAL TAX STRUCTURE-- EQUITY CONSIDERATIONS

Note: This document summarizes the results of the staff research on the incidence (i.e., the burden by income class) of the Iowa State and local tax structure. It constitutes the second of the two "primary" or "framework" studies of the proposed research program. Subsequent reports will deal with specific components of the tax structure.

I THE OBJECTIVES OF THE EQUITY STUDY AND ITS MAIN FINDINGS

The analysis of the estimated distribution of tax liabilities among income groups in Iowa is intended to provide answers to the following questions: Is the present tax structure regressive, proportional, or progressive in its overall distribution of burden? To what extent does each major component of the present tax structure contribute to the overall distributional pattern? What proportion of the total tax collections are "exported" from the State and, consequently, borne by others than the residents of Iowa? Does the distribution of tax burden borne by Iowa residents follow some rational pattern and is it consistent with accepted notions of "fairness"? In addition, and equally important, the analysis suggests the general direction which future tax policy should take to improve the equity and alleviate the projected revenue deficiency.

A. The Main Findings

1. As a result of the provision for the deductibility from business or personal income for federal income tax purposes of specified State and

local tax payments, almost one fifth (\$131 million) of Iowa State and local tax collections are "borne" by the federal government. Another 8 per cent (\$56 million) is the responsibility of nonresidents who pay Iowa's taxes via purchases of goods produced in Iowa but sold out of the State. In total, Iowa residents, in their capacity as either consumers, producers, or owners of property, carry approximately 75 per cent of the actual burden imposed by Iowa taxes. For 1964/65, this amounted to \$539 million out of a total \$726 million of tax collections.

2. As indicated in Table 3, Iowa's present State-local tax structure is steeply regressive (i.e., tax burdens expressed as a percent of household income decline as income increases) throughout the income range up to \$15,000 and progressive thereafter. The "average" family with income of \$5,000 has State-local tax burdens relative to income which are 60 per cent greater than the "average" family with income above \$10,000. The regressivity at household income levels below \$5,000 is even more pronounced with taxes absorbing over 20 per cent of income.

3. The local property tax, particularly on residential real property, is primarily responsible for the overall regressive pattern of tax burden distribution. In the first place, it accounts for over 50 per cent of the total tax payments actually borne by all Iowa residents (Table 1), and, in the second place, housing expenditures constitute a larger proportion of income of the lower income groups than of higher income groups. By comparison to the only other major tax source which distributes its burden regressively, namely the retail sales and use tax, the property tax is seven times as significant a contributor to the overall distribution pattern. The policy

implication seems clear: as the major source of inequity in the existing State and local tax structure, any increased reliance on property taxation is an alternative to be avoided (assuming Iowa does not want to reinforce the already substantial regressivity of its tax structure).

4. The retail sales and use tax is mildly regressive throughout the income range (see Table 3). The tax could be made roughly proportional in its distribution, i.e., absorbing about the same percentage of income in each income group, if over-the-counter exemption of food purchases for home consumption were provided or in lieu of this exemption, an equivalent retail sales tax credit or rebate were instituted.

5. As would be expected, Iowa's individual income tax is slightly progressive throughout the range of income classes (see Table 3). The percentage of income absorbed by the income tax extends from 0.1 per cent for households in the lowest income group to 1.5 per cent for the group in the highest income bracket. But because the income tax provides less than 10 per cent of the total tax payments of Iowa residents, its distributional effects have little influence on the shape of the overall distributional pattern. The reciprocal offset provided by deductibility of the State income tax under the Federal income tax and of the Federal income tax under the State income tax is of substantial importance in reducing the progressivity of the State Individual income tax.

6. The remaining sources (mainly motor fuel, cigarette, beer, liquor, insurance premiums and inheritance taxes) of State and local tax revenue are individually of minor significance. But in the aggregate, they account for over one quarter of the total burden of tax collections imposed by the Iowa

tax structure. Because these imposts (the inheritance tax excepted) distribute their burden in accordance with the taxpayers' consumption patterns, i.e., the various uses of income, they add an additional element of regressivity to the overall distribution. The motor fuel tax and vehicle licenses, however, might better be considered user charges which are designed to distribute their liabilities in accord with the extent of actual use of the services provided by the highway network. In other words, the benefit principle seems appropriate in this case. Deduction of these charges from the distribution would reduce somewhat the severity of the regressive character of "all other taxes."

7. If only equity (i.e., the treatment of the higher income groups compared to the lower income groups) were at issue in the formulation of Iowa tax policy, the direction is clear: place increased reliance on the income taxes, both individual and corporate, and reduce, to whatever extent possible, the relative importance of the local property tax. Before this position can be completely substantiated, however, an evaluation of the structural features of the individual components of the Iowa State-local tax system is necessary. This information will provide answers to such questions as: What are the comparative economic effects of alternative tax adjustments? Are administrative considerations -- including compliance costs to the taxpayer as well as enforcement costs to the government -- of equal weight in each of the tax alternatives? Does any one levy have a greater degree of public acceptability? What economic groups would receive the benefit of a rollback in property taxation? Finally, can the present State-local tax structure be reformed, in conjunction with a program of tax revenue increases, to make it less inequitable?

II. SCOPE AND METHODOLOGY

A. The Equity Concepts

Equity in taxation refers to the fairness of the tax system and of individual tax measures. Tax systems are generally considered fair when tax liabilities vary in some reasonable relationship to a prescribed circumstance of the taxpayer or taxpaying group. It follows that where circumstances are similar, tax liabilities should also be similar. This "equal treatment of equals" or horizontal equity is particularly applicable to an evaluation of specific tax measures. Thus, for example, under Iowa's retail sales tax, taxpaying units having the same amount of consumption expenditures should pay the same amount of sales tax. To the extent equal-circumstance groups do not pay the same sales tax (e.g., if some purchases are exempt or otherwise excluded) horizontal equity is violated. Each major individual and business tax in the Iowa State-local tax structure is being examined for violations of the rule of horizontal equity. The focus of the staff research under consideration here, however, is not horizontal equity but rather vertical equity -- the treatment of the taxpayers in the lower income groups compared to taxpayers in the higher income groups.¹

In brief, the interpretation of the application of the principle of vertical equity to the tax structure is that the burden of general taxes should be distributed among taxpaying groups (families and individuals) on the basis of their respective abilities to pay, and that income is the most

¹See, "The Incidence of Iowa State and Local Taxes" by J.A. Dockel, Mary Faden, and Charles Meyer. The study also includes a four-group breakdown of occupational groups.

appropriate measure of the ability to pay taxes.² Thus, as income increases, the ability to pay taxes increases at least at the same rate as income increases.³ The degree of vertical equity is measured by comparing the distribution of effective tax rates, i.e., average tax payments, expressed as a percentage of income, of each income class. The overall distribution is described as regressive if tax payments as a percentage of income decline as income decreases; it is proportional if tax payments absorb an equal share of income for the different income groups; and, it is progressive if tax payments as a percentage of income increase along with incomes.

B. Impact, Incidence and Shifting

Needless to say, tax statutes do not automatically define tax burdens. The individual or business paying a tax is not necessarily the same individual or business bearing its ultimate burden. In the terminology of public finance, there is a critical distinction between the impact of a tax (i.e., the point at which the first effects are experienced) and its incidence or final burden. If there is a difference between the impact and incidence of a given tax, a process known as shifting has occurred. Tax shifting operates through price adjustments, i.e., either as an increase in the price of things sold or a decrease in the price of things purchased.

²The question of the proper definition of income is explored in detail in the staff report, op. cit.

³Another criterion of equity is benefits received, whereby tax liabilities reflect benefits from particular governmental programs. Tax payments are related to the costs associated with the actual use of the service by particular taxpaying units or groups. Highway financing on the basis of metered highway use as measured by motor fuel consumption is perhaps the best illustration of an attempt to employ the benefits received principle as a guide in the formulation of tax policy. The scope of additional benefit financing of public services in Iowa is clearly limited, even if it were considered desirable to extend the application of the concept.

Three forms of tax shifting are taken into account in the study of the incidence (final burden) of State-local taxes in Iowa. In the first place, Iowa taxpayers are permitted to deduct several Iowa-imposed taxes (primarily income, retail sales and property taxes) from the base of the Federal income tax. Without this provision, Iowans and citizens of other states as well would pay substantially higher federal taxes than they otherwise do. Consequently, the burden of taxes imposed by Iowa governments is less, by the amount of the estimated Federal offset, than the amount of actual tax collection. These offsets are said to be shifted to the Federal government.

The second type of shifting considered in this study occurs when State-local taxes increase the prices at which Iowa businesses sell their products. Most of these tax-induced price increases are borne by Iowa residents. But as a result of Iowa firms selling products both in and out of the State, some are borne by non-residents.⁴

The allocation of 1964-65 tax collections between Iowa residents and non-residents (including the Federal government) is given in Table 1 (on p. 8).

Finally, certain business "cost" taxes may not be shifted forward to consumers in the form of higher prices because of competitive market conditions. Rather, they are absorbed by the owners of the enterprise in the form of lower profits and/or incomes. Recipients of profits and income

⁴ To be sure, Iowans also bear some of the shifted portion of taxes imposed by other states. Concern here, however, is with the equity of taxes over which Iowa has control. The same rationale accounts for the exclusion of federal taxes from the Iowa incidence analysis. Moreover, the federal tax provisions are invariant with respect to geographic location.

Table 1
ESTIMATED ALLOCATIONS OF IOWA STATE AND LOCAL TAXES
BY TYPE OF TAX,
1964-5 (Millions of Dollars)

Tax	Allocation of Burden			Total
	Iowans	Nonresidents	Federal Government	
Retail Sales and Use Tax	69.1	6.2	18.0	93.3
Personal Income Tax	39.6	1.1	7.4	48.1
Property Tax	280.9	35.8	89.1	405.8
Other Taxes	149.4	13.1	16.0	178.5
Total	539.0	56.2	130.5	725.7

Note: The conceptual issues and statistical procedures involved in deriving the above allocation are discussed in the staff report, op. cit.

of Iowa-based business operations are not infrequently nonresidents. The extent to which the incomes of nonresidents are reduced by the imposition of Iowa taxes is also accounted for in the incidence study.

A summary by major tax of the allocation of 1964/65 Iowa tax collections paid by Iowa households and businesses and of the extent of shifting is given in Table 2 (on p.9).

C. A Caveat

It should be explicitly stated that any incidence analysis (i.e., the distribution of the ultimate burden of state-local taxes by income groups)

Table 1

ESTIMATED INCIDENCE OF IOWA STATE AND LOCAL TAXES
ON HOUSEHOLDS AND BUSINESS,
1964/65 (Millions of Dollars)

TAXES PAID BY IOWA HOUSEHOLDS	Allocation of Burden				Total
	Households	Nonresidents	Federal Government		
Retail Sales and Use	58.5		6.9		65.4
Personal Income	39.6	1.1	7.4		48.1
Property	94.2		10.8		105.0
Other	130.4		3.3		133.7
All Taxes	322.7	1.1	28.4		352.2
TAXES PAID BY IOWA BUSINESS	Iowa Consumers ^a	Iowa Owners ^b	Nonresidents	Federal Government	Total
Retail Sales and Use	5.6	5.0	6.2	11.1	27.9 ^c
Property	37.3	149.4	35.8	78.3	300.8
Other	10.8	8.2	13.1	12.7	44.8
All Taxes	53.7	162.6	55.1	102.1	373.5

^aBusiness "cost" taxes shifted forward in the form of higher prices to Iowa consumers.

^bUnshifted portion of business taxes.

^cRetail sales and use taxes on business purchases.

Source: Staff Report, op. cit.

is based on certain specified assumptions regarding the shifting of taxes from those who bear the statutory liability to those who experience the true economic burden. Absolute precision in the determination of shifting and resultant distributional patterns has never been accomplished. Indeed, it is doubtful it ever will be. Nevertheless, equity considerations, albeit somewhat approximate, are extremely important for purposes of tax policy recommendations, particularly when the ratio of taxes to income on the average in Iowa exceeds ten per cent and there is projected need for additional tax revenue. The several shifting assumptions made in this study follow the mainstream of scholarly opinion adapted to the practical situations found in Iowa, and the results, given the existing tax structure and the income and expenditure patterns of the State's families and individuals, are in general conformity with expectations.⁵

III. THE BURDEN OF IOWA STATE-LOCAL TAXES

Table 3 summarizes the results of the research into the incidence of the Iowa State and local tax system at 1964/65 tax rates and collections. Figure 1 graphically portrays the distributional pattern. The present tax structure is regressive over an income range which includes over 97 per cent of the State's taxpaying units (families and unrelated individuals), i.e., the resulting overall pattern of effective rates decreases as incomes increase.⁶

⁵The limitations of the incidence analysis are developed in detail in the staff study, op. cit.

⁶The same pattern emerges even if the very lowest income groups are ignored on the grounds that most of the taxpayers in this group are either welfare recipients, households with temporarily low incomes, or one-person "households."

Table 3
 ESTIMATED DISTRIBUTION OF IOWA STATE AND LOCAL TAX BURDEN, 1964-5,
 AS PERCENT OF HOUSEHOLD INCOME BEFORE TAXES^a
 (averages for income classes)

Income Class	Number of Households (1)	All Iowa Taxes (2)	Property Tax (3)	Retail Sales Tax ^b (4)	Personal Income Tax (5)	All Other Taxes ^c (6)
(dollars)						
Less than 1,000.	133,312	47.3	29.0	4.7	---	13.6
1,000 - 3,000	202,744	18.5	12.1	1.9	0.1	4.5
3,000 - 5,000	196,919	12.5	7.1	1.6	0.5	3.3
5,000 - 7,000	197,877	9.4	4.6	1.3	0.9	2.6
7,000 -10,000	103,547	8.3	3.7	1.2	1.1	2.4
10,000 -15,000	54,264	7.8	3.4	1.1	1.2	2.2
15,000 and Over	23,616	8.9	3.7	1.1	1.5	2.7
TOTAL	912,279	10.5^d	5.5^d	1.4	0.8^d	2.9^d

^aData from Staff Paper by J.A. Dockel, Mary Faden, and Charles Meyer.

^bIncludes use tax.

^cMainly taxes paid by consumers-cigarette, beer and liquor taxes, motor fuel taxes and the like.

^dWeighted averages.

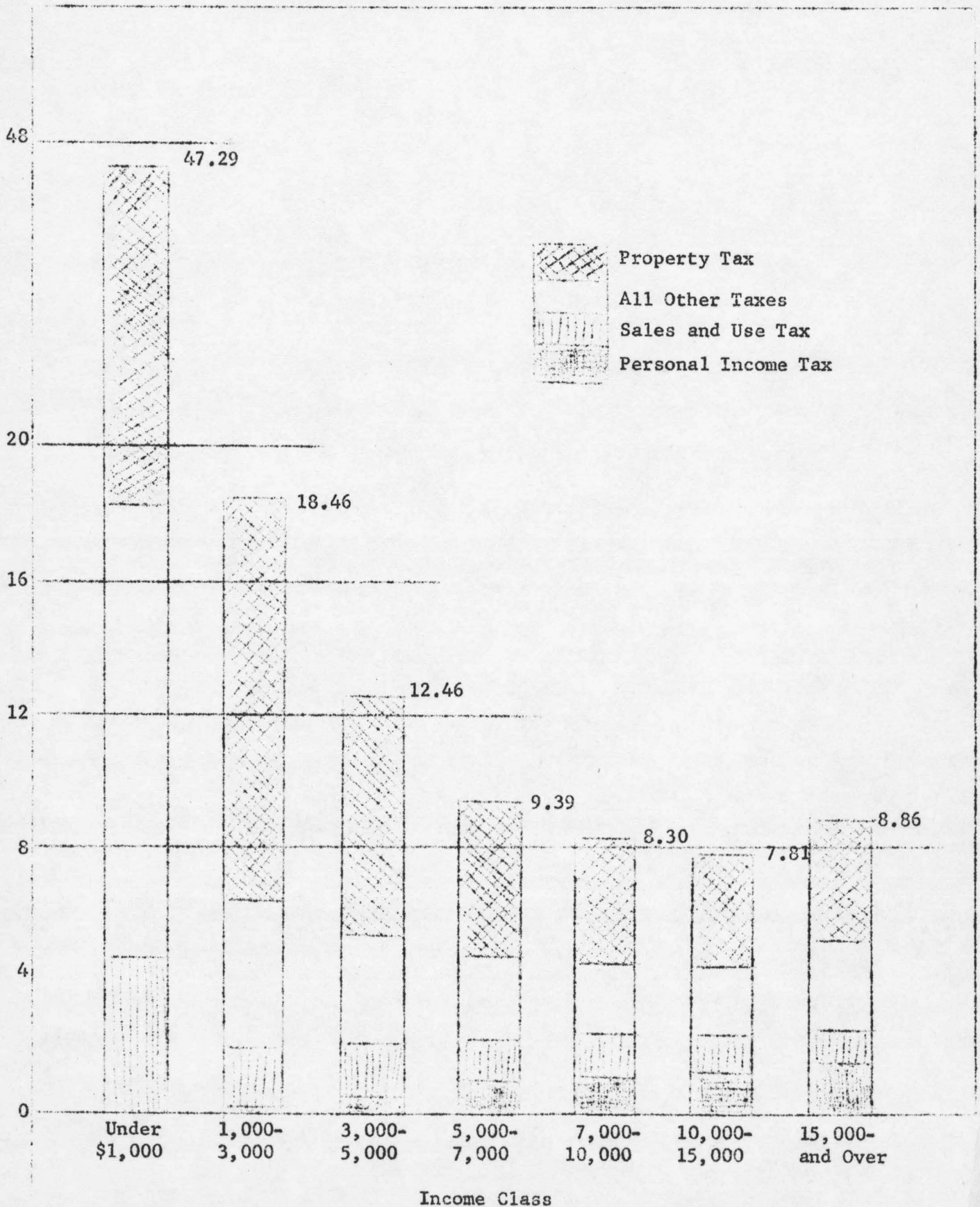
Note: The distribution reflects only that share of total tax collections which is estimated to fall on Iowa residents (see Table 1).

Taxes on property, which account for over 50 per cent of the total direct net burden of Iowa State-local taxes, exercise a pronounced influence on the overall pattern. The major reason for the regressive character of the property tax, especially that component levied against residential real estate, is that expenditures on housing or shelter, whether rented or owned, are generally income inelastic. As incomes increase, a less than proportionate increase in housing expenditures is made.

The direct net burden of the Iowa retail sales and use tax is estimated at 74 per cent of total collections in 1964-5. It was allocated to consumers on the basis of outlays on taxable purchases. Contrary to popular belief, the distributional pattern of the Iowa retail sales and use tax is only mildly regressive owing to the exclusion of a substantial fraction of the total of consumption expenditures -- shelter, medical care, services, etc. The pattern could be made roughly proportional through the exemption of food purchases for home consumption, or, alternatively, per capita credits or rebates for the tax paid on basic necessities. An estimated \$10.6 million of retail sales and use tax collections is derived from the intermediate purchases of Iowa businesses. Over half of this amount is assumed to be shifted forward to consuming household units.

The effective rates for the Iowa personal income tax are mildly progressive throughout the income range. It constitutes the only consistently progressive element in the entire tax structure. But despite the apparent graduation in the statutory rates, the tax absorbs on the average a maximum of only 1.5 per cent of income at the highest income class -- \$15,000 and over. At these higher levels, the Federal tax offset and reciprocal State provision become increasingly significant in the determination of the State-local tax burden.

Figure 1
ESTIMATED DISTRIBUTION OF IOWA STATE AND LOCAL TAX BURDEN, 1964-5,
AS PERCENT OF HOUSEHOLD INCOME BEFORE TAXES
(averages for income classes)



Source: Table 3

Table 3 (and Figure 1) also indicates the distributional pattern of "All Other Taxes" levied in Iowa-- cigarette, liquor, beer, insurance premium taxes, and the like. Because the burden of these taxes is generally borne via the spending process, they have been allocated according to the distribution of taxable expenditures among income groups. Cigarette tax collections, for example, are apportioned among the various income groups on the basis of the estimated distribution of expenditures for tobacco products. In total, this "package" of taxes is visibly more regressive than the retail sales tax.

IV. SUMMARY AND CONCLUSION

In brief, Iowa has a tax structure which rates as inequitable when measured by the ability to pay standard: tax payments as a percentage of income decrease as incomes increase. And the major source of the inequity is the local property tax, which produces over one-half of the tax revenue. The property tax is also very likely the most deficient element, from the point of view of adverse economic effects, of the Iowa State-local tax structure. Yet, in the absence of a positive tax reform program, heavier reliance on the property tax will again prove the path of least resistance.

The present tax structure contains two broad-based levies which could be used to implement a program designed to enhance tax equity as well as provide additional revenues. The personal and corporate income taxes and the retail sales and use taxes distribute their burdens in approximate accordance with widely accepted standards of fairness and equity in taxation. Their yields are also responsive to growth in the State's economy. Provided certain necessary structural adjustments are realized under these levies, they could be employed (a) to support increased expenditure requirements,

(b) to move in the direction of a rational and acceptable pattern of burden distribution, and (c) to provide replacement revenues for de-emphasizing the most objectionable elements of the Iowa State-local tax structure.

These structural adjustments are the focus of the series of research studies to follow.

THE IOWA PROPERTY TAX

MAIN FINDINGS

1. Measuring property tax "burdens" by the ratio of net property tax levy (gross levy less homestead, agricultural land and military credits) to personal income received in Iowa indicates that the current level is lower than that borne in the pre-1940 period. In recent years, however, the ratio has been increasing, which suggests that the rate of growth in the net property tax levy has been greater than the corresponding rate of growth in Iowa personal income.

2. Over time, the Iowa local property levy has become increasingly a tax to finance primary and secondary education. Almost 60 per cent of the gross levy is accounted for by school districts.

3. Per capita property tax revenue of \$146 in Iowa exceeds the U. S. average by \$35. In contrast, per capita nonproperty tax revenues of \$113 is below the U. S. average by \$25. Thus, compared to the rest of the nation, Iowa places more reliance on the property tax as a source of tax revenue.

4. Iowa is also above the national average in the distribution of revenue responsibility attributable to the different levels of government. One half of the total revenue in Iowa originates at the local level -- the national average is 44 per cent.

5. Real property currently accounts for 84 per cent (\$341 million) of the total property tax base. The remainder, 16 per cent or \$67 million, is derived from the tax on personal property. A disaggregation of revenue from the taxation of tangible personalty (Table IV) shows the importance of inventories, livestock and farm machinery in the total picture. These items alone account for two-thirds of the levy on all tangible personalty.

6. Based on the best evidence available, the variety and magnitude of property tax exemptions in Iowa accounts for approximately one-third of the current property tax rate. In other words, if all exemptions were eliminated and all property made taxable, the present rate on non-exempt property would be about two-thirds of its present level. The primary burden of providing property tax exemptions is borne by owners of taxable property.

7. Property tax credits (homestead, agricultural land, and a portion of the veterans' exemption), on the other hand, do not add directly to the burden of the owners of non-exempt property, because they are financed out of the State general fund.

8. The credit provisions, being based on millage rates, may provide an incentive to underassess property.

9. The large number of exemptions permitted under the so-called "Moneys and Credits" tax (Iowa's version of a tax on intangibles) makes the levy grossly inequitable and virtually impossible to administer efficiently.

10. There is substantial geographical inequality in effective property tax rates (i.e., tax levy as percentage of market value) in Iowa. The estimated countywide median rates ranged from a low of 1.0 per cent in Carroll County to a high of 2.6 per cent in Wapello County. Differences in property tax rates seem to be best explained by variations in the amount

III

of taxable property per capita (capacity) and in the percentage of elementary school students enrolled in private schools. Family income, the degree of industrialization and population shifts are of less importance statistically in explaining variations in property tax rates.

11. The only effective and efficient means of reducing property tax inequalities, assuming this to be a desirable objective, is a system of state grants to local units, financed out of general revenues with the distribution based on some measure of need.

12. The complete exemption of personal property from the local property tax with the revenues being replaced by state aid would tend to favor rural counties, but not necessarily the counties with disproportionately high effective tax rates.

13. The Iowa local property tax is markedly regressive when measured against the distributional pattern of household money income. This is not surprising when the majority of the tax is essentially a sales tax on housing consumption, and poorer families spend proportionately more of their income on housing than richer families. On the other hand, the benefits from expenditures (especially education) financed from the local property tax are markedly progressive in their incidence.

14. Substantial reconstruction of the Iowa local property tax requires the weighing of the advantages and disadvantages among alternative fiscal measures. It seems clear, however, that the decision to continue with the property tax as it exists presently may not be the best of all possible choices.

INTRODUCTION: HISTORICAL PERSPECTIVE

Perhaps no major fiscal device, in Iowa or in the nation, has been criticized at such length and with such vigor as the property tax. Yet, the figures in Table I clearly indicate that the levy here (as elsewhere) continues to yield increasing amounts of revenue for the support of local public services. What are the major criticisms of the tax? Can the levy be reformed or rehabilitated, or must it be eliminated? These and related questions are the context of this report.

A summary of trends in property tax collections and local government expenditures in Iowa is given in Table I.

Table I. Net Property Tax Levies in Iowa in Current and Constant Dollars and as a Percent of Personal Income (Millions of Dollars)

Year	Net Property Tax Levy*	Levy in Constant (1957-59) Dollars	Percent of Personal Income
1913	\$ 32.0	118.3	4.2%
1920	96.5	126.0	8.1
1929	110.8	165.6	7.8
1933	78.2	155.2	12.3
1940	83.4	163.5	6.6
1945	98.9	157.6	3.4
1950	159.5	190.0	4.2
1955	230.4	244.6	5.4
1960	345.7	331.9	6.2
1964	413.7	382.7	6.5

Source: For 1913 to 1960, A Half-Century of Local Governmental Finances: The Case of Iowa 1910-1960, (Iowa City: Institute of Public Affairs and Iowa Center For Research in School Administration, 1963), p. 72. For 1964, The Iowa Taxpayer, March - April, 1965, p. 3.

* Gross levies minus state payments for homestead, agricultural land and military service credits.

The net levies in dollar terms increased nearly ten times between 1913 and 1960, but a part of the increase can be attributed to inflation. In order to adjust for the effect of increases in the general price level, Wright, et.al, adjusted the figures to constant dollars (1957-59=100). Even after adjusting for inflation, however, the levies increased by nearly threefold. This occurred in spite of the almost total withdrawal of the state government from the property tax field during the 1930's.

A comparison of changes in property tax levies over time does not provide a satisfactory index of sacrifice on the part of taxpayers. Changes in the ability to pay taxes are also of significance. Personal income provides a rough measure of ability to pay, and in column three of Table I net levies are given as a percent of personal income. Levies were a somewhat larger percentage of income in the 1920's than they had been in the preceding decade. When per capita personal income of Iowans dropped by more than fifty percent between 1929 and 1933 the property tax burden became intolerable, even though the dollar amount of levies declined by thirty percent. Levies accounted for more than eleven percent of personal income and tax delinquency was widespread.

The state government responded by changing the tax structure so as to reduce the burden on property owners. In 1934 the General Assembly adopted the sales tax and taxes on individual and corporate incomes. Revenues from these sources not only replaced the property tax as a major source of revenue for the state, but also provided funds for state grants to local governments and for the homestead credit, which was adopted in 1936 to provide partial relief for homeowners.

During World War II declining school enrollment, restrictions on civilian resource use, and wartime prosperity combined to hold down the expenditures of local governments. Since that time property tax levies have risen at a rapid rate in response to the increased demand for public services and the rising cost of providing them.

The post war "baby boom" has been a major cause of postwar tax increases. Average daily attendance in Iowa public schools increased by 42 percent between 1945 and 1960 and it continues to rise. The shift of population from rural to urban communities generates demand for additional public services that are provided privately or are unnecessary in rural areas. Regions that are losing population (over 60 percent of the counties in Iowa lost population between 1950 and 1960) find the cost of local government does not decline commensurately. Finally, the prices of things purchased by state and local governments have risen more rapidly than the general price level. This means that state and local governments have to spend more to prevent the level and quality of public services from declining.

Another interesting feature of the study by Wright et.al., relates to changes in the percentage of gross property tax levies accounted for by different types of taxing units. The Technical Appendix to the study contains data on the percentage of the total levy accounted for by counties, municipalities, schools, and the state. Table II shows these percentages for the same years that appear in Table I. The most notable trends have been the decline in the relative share of county government and the increase in the share going to schools. The property tax is becoming increasingly a tax to support education. Municipalities

Table II. Percentage of Gross Property Tax Levies by Type of Taxing Unit

Year	Adjusted County Levy	Municipal Levy	Adjusted School Levy	State Levy
1913	40.0%	14.3%	35.6%	10.1%
1920	32.3	13.6	45.3	8.8
1929	31.3	13.7	44.4	10.7
1933	27.8	15.3	46.5	10.4
1940	36.3	14.8	44.6	4.3
1945	31.5	15.2	53.3	-
1950	33.1	16.2	50.7	-
1955	29.0	17.0	53.2	0.8
1960	24.3	18.1	56.6	1.0
1964	23.7	17.2	58.2	0.8

Sources: (1913-60) "Technical Appendix to Iowa Local Governmental Finance Studies", (Iowa City: Institute of Public Affairs, University of Iowa) pp. 37-8. (1964) Iowa State Tax Commission.

account for a gradually increasing share. This is not surprising in view of the trend toward urbanization. The state has withdrawn almost completely from the property tax field. In recent years the only state levy has been for veterans' compensation and for servicing the Korean Veterans' Bonds.

THE IOWA TAX STRUCTURE

In order to evaluate the property tax in Iowa it is necessary to view this tax within the context of the overall structure of state and local taxes. If property tax relief is to be provided, either by exempting some classes of property from taxation altogether or by lowering rates on all property through additional credits or other forms of state aid, revenues from other tax sources will have to be increased. As we have seen, this was done in the 1930's. Iowa already has a wide variety of state taxes, including taxes on personal and corporate income and retail sales. Thus the tax structure could be altered substantially by changing the rates and/or base of existing taxes.

A brief examination of revenue sources for state and local governments for fiscal year 1963-64 reveals the following information about the Iowa tax structure:

1. Per capita revenue of state and local governments in Iowa was \$363.82, \$6.11 above the U. S. average.
2. Per capita Federal grants were \$48.48, \$3.79 below the U. S. average. These figures refer only to grants to state and local governments. Other federal outlays, such as those associated with the farm price support program, are not included.
3. Per capita tax revenue (state and local taxes only) was \$259.47, \$9.72 above the U. S. average. Property tax revenue of \$146.04 exceeded the U. S. average by \$35.02, placing Iowa fourteenth in a ranking of the states. Per capita revenue from other taxes of \$113.42 was \$25.30 below the U. S. average.

Hence the Department of Commerce data show that in comparison with the country as a whole Iowa relies more heavily on property taxes and less heavily on other taxes.

Iowa's tax structure can also be compared to the tax structures of other states by looking at the percent of revenue originating at different levels of government. Percentages originating at the federal, state, and local levels are shown in Table III for state and local governments in Iowa, several neighboring states, and the U. S. The data show that nearly one half of the total tax and non-tax revenues of Iowa originate at the local level; about four fifths of this is from the property tax. Illinois, where local governments share in the retail sales tax, and Nebraska, which has neither a state sales or income tax, raise a larger percentage of their revenue locally. Minnesota and Missouri rely more heavily on federal and state sources. The percentages accounted for by property taxes, which are almost exclusively local taxes except in Nebraska, are shown in parentheses.

Table III. Percent of State-Local Revenue Originating at Federal, State, and Local Level, Fiscal 1963-64

State	Level of Government			
	Federal	State	Local	(Property)
Iowa	13.3%	36.7%	49.9%	(40%)
Illinois	12.2	34.8	53.0	(39)
Minnesota	13.6	40.8	45.6	(37)
Missouri	18.0	37.8	44.1	(29)
Nebraska	16.4	29.7	53.9	(55)
U. S. average	14.6	41.2	44.2	(31)

Source: U. S. Bureau of the Census, Government Finances in 1963-64, Washington, D. C., 1965.

The Composition of The Iowa Property Tax

(a) Although property tax relief could be provided on an equal basis for all classes of property, most proposals favor relief for specific classes only. In order to provide some insight into the amount of revenue required to replace or reduce the property tax on specific types of property, the amount of tax levied on various classes of real and personal tangible property in 1964 is shown in the following table.

Table IV. Composition of The Iowa Property Tax, 1964

Real Property	Tax Due* (Millions)	Percent of total
Agricultural land, bldgs.	\$127.9	31.4%
Residential lots, bldgs.	100.2	24.6
Mercantile lots, bldgs.	43.6	10.7
Ind. and mfg. plants (includes machinery)	19.3	7.4
Total Real Property	\$291.0	71.5%
Public utilities	49.5	11.6
Total Real plus Utilities	\$340.5	83.5
Personal Property		
Merchants inventories	\$ 16.7	4.1
Livestock	14.0	3.4
Farm machinery	11.5	2.8
Furn. and fixtures (mercantile)	8.0	2.0
Industrial inventories	5.3	1.3
Household furnishings	4.7	1.2
Furn. and fixtures (industrial)	2.3	0.6
Bldgs. on leased land	1.4	0.3
Contractors equipment	.9	0.2
Boats, launches, motors	.4	0.1
Hotel, motel, apt. furnishings	.4	0.1
Other	.9	0.2
Total personal property	\$ 66.5	16.3
Combined total	\$407.0	

* Levy minus homestead (\$29.8) and agricultural land tax (\$11.5) credits.
Sources: Real property - Iowa State Tax Commission; Personal property -
The Iowa Taxpayer, March-April 1965.

THE BASE OF THE IOWA PROPERTY TAX

In principle the general property tax is a tax upon all tangible and intangible wealth that possesses exchange value. A completely general tax would be levied at the same rate on all property valued at market value. Obviously no government attempts to levy so general a tax. Some types of property are excluded in part or in full from the tax base; other types are taxed at preferential rates. The erosion of the property tax base has occurred for a variety of reasons. Intangibles and personal property are often exempt because of administrative problems. Preferential treatment is also granted to improve equity among taxpayers, to favor particular classes of property owners such as homeowners and non-profit organizations, to promote economic development and institutional change, and, perhaps, to promote other less noble ends. The coverage of the property tax varies widely among states and even within states. Within-state variation is often the result of discretionary action on the part of local assessors, so one cannot always determine the extent of coverage by examining the relevant statutes. The property tax is becoming increasingly a tax on real estate. In 1961 real estate accounted for 83 percent of all locally assessed property in the United States and 89 percent in Iowa.^{2/} In three states, Delaware, New York, and Pennsylvania, only real property is taxed.

^{2/} U. S. Bureau of the Census, Census of Governments: 1962, Vol. VII, No. 15, (Washington, 1964) pp. 2, 110.

Tangible Property

Tangible property subject to taxation in Iowa includes most residential and business real estate and a wide variety of personal property. The assessed value of the major classes of real estate subject to tax is shown in Table V. Similar data for personal property are shown in Table VI. The market value of the various classes of real property is difficult to calculate, but a reasonable

Table V. Total Valuations Less Exemptions of Real Property in Iowa, 1964
(Millions of Dollars)

Type of Property	Valuation
Agricultural land and buildings	\$2,090
Residential lots and buildings	1,378
Mercantile lots and buildings	459
Industrial and manufacturing plants	213
Public utilities	554
Railroads	78
	<hr/>
Total	\$4,772

Source: Iowa State Tax Commission

Table VI. Total Valuation, Personal Property in Iowa, 1965 (Million of Dollars)

Type of Property	Valuation
Mercantile (Fixtures and Inventory)	\$262
Livestock	173
Farm Machinery	175
Industrial and Manufacturing	84
Household	53
Other	42
	<hr/>
Total	\$789

Source: Iowa State Tax Commission

estimate for real property would be four times the assessed value. This estimate is based upon a statewide average assessment - sales ratio of about 25%.

Changes Over Time

The composition of the property tax base changes over time. Some of the changes are due to legislation, court decisions, and administrative practices, but changes in the growth rates of different components in the base are also an important factor.

In Iowa the assessed value of agricultural land and buildings increased only five percent between 1953 and 1963, whereas assessed values of other classes of real property - residential, commercial, and industrial - increased by over fifty percent. Differences in the rate of growth in the market value of the different classes accounts for part of the shift. Residential and industrial realty increased in value at an annual rate of 4.1 percent, compared to 2.5 percent for commercial realty and agricultural land and buildings. In addition, the assessment - sales ratio for farm land declined from about .29 to .25 over the decade, whereas the ratio remained stable at about .25 in cities and towns.

The assessed value of personal property increased by only eight percent between 1953 and 1963. Changes in market value of personal property were not estimated.

Changes in the composition of the tax base are of importance to policy makers, because when some components of the base grow more rapidly than others the distribution of the burden of the tax among taxpayers shifts over time.

Should past trends continue a larger share of the burden will fall on owners of residential and industrial realty, while agriculture and personal property will account for a smaller portion.

Of course the property tax burden is not distributed among classes of property in direct proportion to their importance in the total tax base. First of all, urban tax rates tend to be higher than rural rates. Secondly, some relief is provided to homeowners and owners of agricultural land through the system of tax credits. The effect of these factors can be seen by examining the data in Table VII. The differences between columns one and two reflect the different millage rates applied to various classes; the differences between columns two and three show how the state tax credits alter the distribution of the property tax burden.

Table VII. Percent of Assessed Valuation, Levy, and Taxes Due (Levy Minus Credits) By Class of Property, Iowa, 1964

Class of Property	Percent of Assessed Valuation	Percent of Total Levy	Percent of Tax Due
Agricultural land, buildings	37.9	31.2	31.6
Residential	24.3	29.1	24.7
Mercantile	8.1	9.8	10.7
Industrial Real	3.7	4.3	4.8
Total Real	<u>74.0</u>	<u>74.3</u>	<u>71.7</u>
Industrial Personal	1.5	1.7	1.9
Other Personal	13.0	12.9	14.2
Total Personal	<u>14.5</u>	<u>14.6</u>	<u>16.1</u>
Public Utility	<u>11.5</u>	<u>11.1</u>	<u>12.2</u>
	100	100	100

Source: Iowa State Tax Commission

Exemptions of Tangible Property in Iowa

A sizeable amount of real and personal property is either exempt from the property tax or granted preferential treatment. All property owned by governments, including municipal utilities and fair organizations, is exempt from taxation. Taxation of property owned by the federal government is prohibited by the U. S. Constitution, and the property of other governmental units is granted full exemption by the State. In principle this appears to be justified on the grounds that governments, which are financed by taxes; should not have to use tax revenue to pay taxes to other governments. The argument is less convincing, however, when one considers that different sets of taxpayers are involved. The exemption of government property can become burdensome in communities where public facilities comprise a particularly large portion of the total property base. The federal government in recognition of this problem has established a program of grants to school districts in areas with large concentrations of federal employees.

Property owned by charitable, educational, religious, and scientific organizations is also exempt under Iowa law. These exemptions are defended on the grounds that the organizations involved help raise the quality of the population and/or relieve demands on the public treasury by providing services that are substitutes for public services.^{3/} While the policy of exempting such property appears to be generally accepted, there is support for stiffening the requirements that property must meet in order to qualify. Some non-profit institutions own commercial property that is rented to private business concerns or individuals. The proceeds from such property may be used for

^{3/}State of Iowa, Report of The Iowa Taxation Study Committee, Part I (Des Moines, 1956) p. 97.

worthwhile purposes, but the property enjoys the benefit of tax-financed public services while the tax burden is shifted to owners of taxable property. This is not necessarily the most efficient way to subsidize tax-exempt institutions.

Total exemption is also allowed on REA distribution lines. The effect is to shift the burden to owners of rural property and, to some degree, to taxpayers in cities and towns. In rural areas the effect is to distribute the tax burden according to property ownership rather than use of electricity.

Partial or total exemption is also allowed on a wide variety of personal property. In agriculture exemptions include crops in the hands of producers for less than one year, cattle less than one year old, sheep and swine less than nine months old, poultry, and farm machinery up to \$300 in assessed value. One effect of these exemptions is to reduce the share of farm property in the overall tax base. The exemptions also have the effect of favoring lightly taxed farm enterprises, such as grain production, relative to more heavily taxed enterprises such as beef cow operations. Other businesses and households are also granted partial exemptions. For example, manufacturers' inventories are assessed only on that portion representing the cost of parts and materials embodied in output. Value added in the production process is not included. Tools of trade, private and professional libraries, and household furniture are exempt up to \$300 of assessed value. Kitchen furniture, beds and bedding, and wearing apparel in actual use are granted a full exemption. In practice the personal property tax on household goods is applied to a limited variety of electrical appliances and musical instruments. The cost of administration, both in terms of personnel and taxpayer annoyance, is high. The pressure to

eliminate the tax, which yields less than two percent of total property tax revenues, is strong.

Data on the value of tangible property exempt from taxation are difficult to obtain, because most of the property involved is not assessed. In 1955 the Iowa State Tax Commission estimated that exempt tangibles had a market value in excess of five billion^{4/}. Assuming a ratio of assessed-to-market value of .3, property on the tax rolls in 1955 had a market value of approximately \$15 billion. This means that roughly one fourth of the tangible property in Iowa was exempt. If these estimates are accurate, the result was an increase of about one third in the property tax rate on non-exempt property.

The exemptions discussed thus far have the effect of limiting the property tax base and transferring the impact of the tax to owners of non-exempt property. In this respect the exemptions differ from the tax credits under which a portion of the tax levied on certain classes of property is paid out of the state general fund. Revenues for the state general fund are obtained primarily from state income, sales, and excise taxes. Hence the burden of a portion of the property tax is shifted from owners of property eligible for credits to those who pay state taxes.

^{4/}Ibid., p. 93. About 20 percent of the exempt property is owned by governments (four percent by the U. S. government). Property of non-profit institutions accounted for six percent. REA transmission lines and personal property account for the remainder. The major categories of exempt personal property include motor vehicles (subject to license fees which are based in part on value), livestock and poultry, farm crops, and household goods.

The homestead credit is the most important. Under it the state pays up to a maximum of 25 mills on \$2,500 of assessed value on owner-occupied dwellings. This amounts to a credit of \$62.50. The appropriation is open ended, which means that the credit is paid in full. The cost to the state currently runs in excess of \$30 million. The tax subsidizes homeowners relative to renters. Since homeowners, on the average, have higher incomes than renters, the credit can be said to subsidize a more privileged group within the population. On the other hand, the upper limit of \$62.50 means that the credit accounts for a larger percentage of the levy on lower-valued homes than on expensive homes. The homestead credit dates back to the 1930's when many homeowners were in arrears in paying property taxes. The credit has been retained during subsequent periods of prosperity on the grounds that it stimulates homeownership. Presumably homeownership contributes in some way to a more stable community. One might also argue that homeowners are more likely to take an interest in maintaining the appearance of their property than landlords and tenants. These suppositions would be difficult to substantiate. The degree to which the homestead credit encourages home ownership is also difficult to determine.

Under the agricultural land tax credit the state pays a portion of the general school fund levy in excess of 15 mills on agricultural land (in tracts of ten acres or more). The credit was adopted in 1946 with a legislative appropriation of \$500,000. The appropriation has increased over the years to its present level of \$15 million. In 1965 this amount was sufficient to pay 38 percent of the school levy in excess of 15 mills. The credit was introduced to reduce the resistance of landowners to school reorganizations that incorporated

farm land and cities and towns into the same school district. A detailed study of the effect of school reorganization on land taxes has not been made, but there is evidence to indicate that even with the land tax credits taxpayers in cities and towns have benefitted at the expense of owners of agricultural land.^{5/} The consequences of tax relief on farm land are discussed below. The formula for distributing the credit is subject to criticism because it is based upon millage rates. Tax revenue is the product of the millage rate times the assessed value. This means that a given amount of revenue can be maintained by lowering assessed valuations and raising the millage rate. If the tax credit payable to a county is a function of the millage rate, the county has an incentive to underassess so as to increase its share of the credit. Attempts by the State Tax Commission to equalize assessment ratios have met with only limited success. Recent legislation limits eligibility for the land tax credit to land owned by residents of Iowa. This provision is being contested in the courts, and its constitutionality appears to be in doubt.

The state also provides a partial reimbursement to local governments for tax revenue lost because of the various veterans' exemptions. Veterans of World War I are allowed an exemption on property with an assessed value of up to \$750; Veterans of World War II, the Korean War, and various military actions of the 1920's and 1930's are allowed exemptions up to \$500. Larger exemptions are allowed for veterans of earlier wars. In some cases relatives of veterans are also eligible. Five percent of the gross sales of state liquor stores are earmarked for the military service tax fund out of which counties are reimbursed for lost revenue. Payment is not to exceed 25 mills upon the valuation of

^{5/}Charles W. Meyer, "Geographical Inequalities in The Property Tax in Iowa", National Tax Journal, December 1965, pp. 393-4.

exempt property. Since the fund is insufficient to reimburse local governments in full, a portion of the burden is shifted to owners of non-exempt property.

Intangible Property

Intangible property includes currency, deposits in checking and savings accounts, stocks, claims against debtors, shares in savings and loan associations, and other non-physical assets such as patents and copyrights. During the nineteenth century a widespread effort was made to include intangibles in the property tax base, but the attempts were not very successful and by 1960, twenty states no longer taxed intangibles. Twelve states taxed intangibles at a special low rate, nine states subjected the yield from intangibles to a flat rate income tax, and in only nine states were they subject to the general property tax rate.^{6/}

In Iowa some intangibles are subject to the moneys and credits tax. The 61st General Assembly in 1965 cut the rate from 6 mills to 1 mill. The yield from this tax is earmarked to service the Korean bonus bonds and the Attorney General has ruled that repeal would be unconstitutional. Many intangibles are exempt from the tax. Those covered include savings accounts, shares in out-of-state building and loan associations, shares of stock in most out-of-state corporations, and a variety of bonds, mortgages, annuities and mature life insurance policies. In addition banks are assessed at 60 percent of capital stock after deducting the value of real estate owned, and savings and loan associations are assessed on the basis of their gross shares after deducting the indebtedness of all borrowing members. The five mills formerly levied by

^{6/} "Taxation of Moneys and Credits," Iowa Legislative Research Bureau, November 1960.

local governments are to be replaced by the 0.75 percent increase in the state income tax on taxable income above \$9,000.

The main reason for the demise of the tax on intangibles is the difficulty of administering the tax. Assessors are not equipped to uncover intangibles. As a result they rely on self reporting. Many taxpayers fail to report intangibles, and such widespread evasion tends to spread. This is clearly a tax that victimizes those who are honest, and this fact in itself may justify its elimination.

The tax on intangibles is also criticized on theoretical grounds. Many intangibles are either certificates of ownership or claims against tangible property that is subject to the property tax. When government taxes both the asset and the claim against it the result is double taxation. An obvious example is a tax that applies to both a home and the mortgage upon it. In this case mortgaged property would be subject to a higher tax than unmortgaged property of equal value. Of course not all intangibles represent claims against tangible assets. Money and patents are obvious examples. The value of ownership claims reflect the anticipated earning potential of the firm which may not be closely related to the value of its physical assets. Nevertheless, the indiscriminate application of a property tax to intangibles can lead to double taxation.

Finally, in Iowa the number of exemptions allowed under the moneys and credits tax is so great as to make the tax grossly inequitable and almost impossible to administer. In 1963, it was estimated that Iowans held intangible assets worth over \$6.6 billion.^{7/} Of this total less than 900 million (excluding bank stock and savings and loan shares) was subject to the moneys and credits tax.

^{7/} "Private Wealth of Iowans by Counties," Iowa Farm Science, March 1964, p. 11.

A tax of three or four percent on income from intangibles, to be administered in conjunction with the state personal income tax, has been suggested as an alternative to moneys and credits. The proceeds would presumably be returned to the local governmental jurisdictions in which the taxpayer resides. Those who favor such a proposal argue that it would redress the present imbalance between owners of real and intangible property while reducing the widespread evasion that occurs under local assessment. However, such a tax would not be free of discrimination. The problem of double taxation has already been cited. In addition income from federal securities cannot be taxed by states. Pressure for other exemptions would no doubt arise, just as under the moneys and credits tax. In particular if the tax applies to dividend income owners of closely held or family corporations would object. In addition a large portion of the income from stocks is in the form of capital gains which would not be taxed. Perhaps this would help cancel some of the double taxation. In terms of revenue a tax of three percent would appear to be sufficient to offset approximately the loss in revenue from the elimination of the local levy on moneys and credits.

PROPERTY TAX RATES

Property tax levies are stated in terms of millage rates. The millage rate may be defined as the number of mills due in taxes per dollar of assessed valuation. To illustrate, since there are 10 mills to the cent a millage rate of 100 applied to a tax base of one dollar in assessed value would yield ten cents, or ten percent, in tax revenue. Differences in millage rates are often cited as evidence of differences in tax rates, but a comparison of millages can be misleading. This is because millages are applied to assessed values rather than to market values. If all taxable property were assessed at full market value, comparison of millage rates would reflect actual differences in the tax rates. The evidence indicates that wide differences exist in the ratio of assessed value to market value both within and among taxing districts. Therefore assessed values must be converted to market values and tax rates must be calculated using market value as a base before meaningful comparisons of property tax rates can be made. This adjustment is possible only when reliable data on assessed and market values are available.

Since 1962 the Iowa State Tax Commission has been compiling data on the assessed value and sale price of most of the real property sold in Iowa. County recorders supply the data on selling prices, and data on assessed valuations are obtained from assessors. From these figures the Tax Commission calculates average assessment-sales ratios for various classes of urban and rural property within each assessor's jurisdiction. Frequency distributions are compiled to show the dispersion of ratios within each assessor's territory.

They are a valuable source of information on the degree of variance of ratios within communities. The results are available to the public in the annual Summary of Real Estate Assessment Ratio Study issued by the Commission. The 1962 issue contained ratios for urban residential property and improved and unimproved farm land. Ratios for suburban residential and commercial property, excluded in 1962 because of the small number of sales, were added in 1963. Ratios for industrial property, public utilities, and personal property are not available.

Results of the study must be interpreted with some caution. The sample is limited to properties that are sold during the period of the study. These properties therefore are not a random sample and the results could be biased. The danger of bias is probably greater for commercial property and perhaps for farm land than for most types of residential property. Nevertheless the study is a useful source of information for those concerned with property tax administration, and the Tax Commission will undoubtedly make extensive use of the results in its efforts to bring about equalization of assessed valuations throughout the state.

Results from the assessment ratio studies of 1962 and 1964 were used to convert assessed values to market values so that property tax rates can be compared.^{8/} Comparisons of rates applying to different classes of property are made for 1964, and an earlier study,^{9/} comparing rates in each of Iowa's 99 counties in

^{8/} The ratios for 1964 are as follows: farm land and buildings, .235; residential, 2.39; commercial, 2.86; state average, .242.

^{9/} Meyer, loc. cit.

1962, is summarized. The purpose of the following two sections of this report is to reveal the amount of variability in the rate at which different properties are taxed in Iowa.

Rates on Real Property

The average rates on the four major classes of real property in 1964 are shown in Table 8. They are given as a percentage of market value. The agricultural land tax credit was subtracted from the levies on agricultural land and buildings, and the homestead credit was deducted from the levy on residential property. The rates are lower on these two classes than on mercantile and industrial property. The reader is warned, however, that the estimates of market value are likely to be much less accurate for commercial and industrial property. The assessment-sales ratio used to adjust the assessed value of mercantile real estate is obtained from a much smaller number of sales, even though it includes

Table VIII. Property Tax Rate by Class of Real Property, Iowa, 1964

Class of Property	Rate
Agricultural Land and Buildings	1.45%
Residential Lots and Buildings	1.79
Mercantile Lots and Buildings	2.78
Industrial Realty (includes machinery)	(a) 2.34
	(b) 1.82
Average Rate	1.64

observations made over a three year period (1962-64). Furthermore, mercantile property that was sold may not be as representative of the entire class as the agricultural and residential property that changed hands. No sales data are

available for industrial realty. As a consequence two estimates of the industrial rate were made. Estimate (a) was obtained by using the statewide average assessment ratio of .242 to adjust assessed value to estimated market value. The resulting rate of 2.34 percent is above all but the rate on mercantile property. The .242 ratio was also used to adjust the aggregate assessed value of real property to obtain the 1.64 percent average rate on all realty. An alternate method of estimation of the rate on industrial realty was used to obtain the second figure of 1.82 percent. This rate was obtained by dividing the estimated value of the investment in industrial buildings in Iowa into the levy on industrial property. The estimate of investment in industrial construction was obtained from a study of the Iowa economy conducted at Iowa State ^{10/} University. If the estimate is accurate it implies that industrial property is assessed at a lower percentage of actual value than other real property. Since the estimate is for 1960 and does not include investment in land or machinery, both of which are included in the base by local assessors, the contention that industrial property is underassessed relative to other real property is strengthened.

Geographical Differences in Property Tax Rates - By State

Accurate data on tax rates in the fifty states are not available because of the difficulty of converting assessed values to market values. For purposes of comparison, however, some rough estimates of statewide rates for 1961 were derived from the 1962 Census of Governments. The census contains data on assessed value after exemptions, and sampling procedures were used to obtain

^{10/} It estimates investment in construction in excess of one billion dollars in manufacturing industries (including food processing) in 1960.

estimates of the assessment ratio in each state. ^{11/} By dividing the assessed value by the assessment ratio, one obtains an approximation of the market value of taxable property. The statewide property tax rate for each state is then obtained by dividing market value into tax yield. The results should not be taken too literally, but the method does provide useful insights into the pattern of rate variation throughout the United States.

The rates range from a high of 2.79 percent in Massachusetts to a low of 0.49 percent in South Carolina. To illustrate the magnitude of this difference, a piece of real estate valued at 20,000 would be subject to a tax of \$558 at the 2.79 percent rate and \$98 at the 0.49 rate. Iowa, with a rate of 1.69 percent, ranks fourteenth from the top behind the six New England states, New Jersey, New York, Minnesota, Michigan, and the Dakotas. The Iowa rate exceeds the rate in such states as Illinois (1.53 percent), Nebraska (1.39 percent), Indiana (1.29 percent), and Missouri (1.08). A geographical pattern is discernable. The New England states have the highest rates, but rates are generally high in the Middle Atlantic states and the Midwest. Rates below one percent are most common in the Southeast and in some of the Western states.

Geographical Differences in Property Tax Rates in Iowa

The same procedure was followed in estimating the geographical inequalities in property tax rates in Iowa for 1962. Assessment ratios for urban and rural realty were used to adjust the assessed value of tangible real and personal property to market value. Once again reservations about the use of these ratios to adjust assessed values of all property to market value are in order. Nevertheless, the results do appear to provide useful information about the degree of

geographical inequality among Iowa counties. Separate calculations were made for property in rural areas and in cities and towns (hereafter referred to as urban property). The rural and urban values and taxes due (levy minus homestead and agricultural land tax credits) were then added for each county to obtain the combined rate for the county.

The median rate on rural property in Iowa in 1962 was 1.4 percent of estimated market value, but the range was from a low of 0.8 percent (Carroll County) to a high of 2.4 percent (Decatur County). Rates in urban areas tend to be somewhat higher. This should not be surprising, because local governments are required to provide more services for urban residents. The median rate for urban property was 1.7 percent; rates ranged from 1.2 percent (Plymouth County) to 3.0 percent (Wapello County). To illustrate the consequences of this difference in terms of a parcel of real estate worth 20,000, a rate of three percent results in a tax of \$600; with a 1.7 percent rate the tax would be \$340 and with a 1.2 percent rate, \$240.

For urban and rural property combined the median rate for a county is 1.5 percent. Average county rates range from 1.0 percent (Carroll County) to 2.6 percent (Wapello County). In order to examine changes over time a similar study was made for 1953. The assessment ratios were obtained from the report of the ^{12/}1956 tax study. In 1953 the median county rate was 1.1 percent. The lowest rate was 0.8 percent (Sioux County) and the highest was 2.2 percent (Decatur County). Thus over the decade both the level and the spread in property tax rates increased somewhat.

12/ Report of the Iowa Taxation Study Committee, Part I, op. cit., p. 94.

The rates for each county and frequency distributions of the rates are found in Appendix I.

The data for 1962 have been analyzed statistically in an attempt to relate differences in tax rates to demographic and economic variables. ^{13/} The most important determinants of differences in property tax rates appear to be the amount of taxable property per capita and the percentage of elementary school students enrolled in private schools. Median family income, industrialization, and changes in population seem to be of less importance.

In a more general sense property tax rates depend on the need for public services and the availability of revenue to finance them. The availability of revenue depends in turn upon the ability and willingness of members of the community to pay for public services. In Iowa, where four-fifths of the revenue of local governments comes from property taxes, the availability of revenue depends largely upon the ability and willingness of citizens to pay property taxes.

As one would expect, counties with a high dollar value of property per capita usually have a low property tax rate. Differences in need are not likely to be related to differences in taxable wealth. In fact in some cases the greatest need for public services is found in those counties that have the least wealth. In 1962, for example, taxable property per capita ranged from a high of \$13,727 in Franklin County to a low of \$4,988 in Wapello County. Hence it is not surprising to discover that tax rates were 45 percent below the state average in Franklin County and 37 percent above average in Wapello County.

^{13/} Meyer, loc. cit., pp. 394-6.

Another important determinant of property tax rates is the percentage of students enrolled in private schools. With 53 percent of the total taxes levied going to schools one would expect this result. Of course this does not relieve residents of communities with large private school enrollment from the cost of supporting education. School funds are channeled through the private sector instead.

Median family income, like taxable wealth, is another measure of taxpaying capacity. In urban areas in Iowa tax rates tend to be higher in those communities with higher incomes, although there are exceptions. In rural areas, however, an inverse relation holds. This is because high farm incomes are most often found in counties with high land values.

In urban communities the statistical evidence indicates that tax rates tend to be somewhat lower in communities in which owner-occupied dwellings make up a relatively high percentage of the tax base. This result is somewhat surprising, since one would expect them to have a lower level of industrialization and, therefore, less property per capita. On the other hand, when homeowners are required to pay a larger share of the tax bill they may generate more opposition to higher taxes. Since homeowners vote in local elections, whereas most stockholders in industrial firms do not, the homeowners may be able to exert more influence upon decision makers in local government.

A brief comment on the implications of the results just cited may be in order. Policy makers in the state government must decide whether or not the variation in property tax rates within the state should be reduced. If they decide to do so state aid must be directed primarily to those areas with the highest tax rates. The present system of tax credits on agricultural land and

homesteads does not bring about any significant reduction in rate inequality.^{14/}
 A system of state grants based upon needs, such as an expanded foundation program for schools, would be more effective in reducing inequality.

Elimination of the local tax on personal property with revenue losses made up by state grants would aid some of the high-rate counties that are forced to tax such property heavily because of small real property bases. A preliminary examination of the data indicates, however, that this policy would not be a completely satisfactory solution to the inequality problem. Per capita payments of personal property taxes were about \$25 in 1964, but the range was from \$13.25 to \$36.40. Payments exceeded \$30.00 per capita in 22 counties; none of these contain large populations. In twelve counties payments were less than \$20 per capita, and most of these are relatively populous. Hence adoption of this type of relief would appear to be most advantageous to rural counties, not necessarily to counties with high rates.

Aside from equity considerations attention should be given to the possible effect of high property tax rates on economic development. Some of the highest rates are found in counties with the lowest per capita income. If property taxes can be shown to have a significant influence on the regional allocation investment funds^{15/} these regions may be unable to attract capital investment, keeping incomes and the tax base small and tax rates high indefinitely.

^{14/} Ibid., pp. 392-3.

^{15/} The influence of taxation on location of industry is difficult to measure, but the available evidence indicates that the effect is less important than is popularly believed. See John F. Due, "Studies of State-Local Tax Influences on Location of Industry," National Tax Journal, June 1961, pp. 163-73.

Are Property Taxes Too High?

For some time we have been hearing warnings that property taxes have reached their upper limit, yet they continue to rise. Perhaps we should not be surprised, particularly since critics seldom attempt to define what they mean by "upper limit". Do they mean that collections in dollar terms cannot be permitted to go any higher? This does not appear to be a satisfactory definition of the upper limit in an economy with rising prices, personal income, and property values. An upper limit defined in terms of constant tax rates would allow tax increases to keep pace with rising property values. Alternatively, an attempt might be made to hold increases in property taxes in line with the growth of personal income. The latter two guidelines, both of which have lagged behind increases in property tax revenues since World War II, allow for an upward adjustment in the limit as the capacity to pay taxes increases.

In trying to determine whether property taxes have reached an upper limit one might also examine some of the direct manifestations of taxpayer dissatisfaction. Examples of taxpayer resistance include repeated rejection of bond issues, more numerous delinquencies and protests about assessed valuations, and increased turnover of local office holders at election time.

The causes of resistance to higher property taxes can be traced to specific characteristics of the tax and the expenditures that it finances as well as to resistance to taxation in general. A person's property tax bill is a function of the amount of taxable property he owns. In some cases owners of property may have low incomes and a limited amount of liquid assets. The number of people in this situation increases during general or agricultural recessions. The problem of low incomes and illiquidity may be permanent for elderly property owners.

Furthermore, the elderly are less likely to benefit from expenditures of local governments. This is especially true of outlays for education, which account for nearly 60 percent of the property tax levy in Iowa. When benefits are not closely related to burdens taxpayers resentment is to be expected.

In view of the differences in the situations of individual taxpayers as well as the differences in tax rates across the state, about all one can say is that some taxpayers may be unable to absorb additional increases in taxes. In extreme cases property owners may be forced to sell their property or become delinquent. For most taxpayers, particularly those in communities with relatively low rates, the situation is not so serious. For the majority the relevant question centers about their preference for other taxes, presumably on income or retail sales, as an alternative to higher property taxes. The redistribution in tax burdens that would result from substitution of other taxes for property taxes is discussed in the paper on tax incidence. Other consequences of various forms of property tax relief are analyzed in the following section.

ECONOMIC EFFECTS OF TAX REFORM

Support for property tax relief comes from many groups within the state. As we have seen, some relief is already provided through programs of federal and state assistance to local governments, the tax credits on homesteads and farm land, and the virtual elimination of the tax on moneys and credits. Proponents of additional relief usually envision replacement of lost local revenue by increased state taxes and state grants, although in some quarters hopes are expressed that tax cuts might be made possible by reduction in expenditure. As the report "On Financing Governments in Iowa" indicates, however, the latter solution does not appear to be realistic for a number of reasons. The following discussion is based upon the assumption that property tax relief is made possible by increased revenue from state taxes. Total expenditures by local governments are assumed to remain unaffected. The effect of various forms of property tax relief on the economic behavior and wellbeing of property owners will be examined.

Property tax relief may take the form of rate reductions on all property now subject to the tax; or it may come in the form of complete exemption for certain types of property. Complete exemption is usually envisioned for various types of personal tangible property, or even for all personal property. Partial relief is usually contemplated for some or for all classes of real estate.

Personal Property

More than 90 percent of the personal property tax is paid by business firms including farmers. Mercantile property accounts for 37 percent, industrial for eleven percent, and livestock and farm machinery for 33 percent. Therefore in the absence of shifting the chief beneficiaries of reduction or elimination of

the personal property tax would be owners of business firms and farmers. The major exception is the tax on household personal property. This tax, which in 1964 yielded only \$4.7 million (seven percent of the total tax on personalty) is perhaps the most onerous component of the property tax, since it is costly and difficult to administer and is a nuisance to homeowners. The present policy of limiting the tax to a few selected items also leads to significant inequities among households.

It is widely recognized that the burden of taxes paid by business firms may be shifted forward to consumers in the form of higher prices. Backward shifting to employees or suppliers is also a possibility. If the firm is unable to shift the burden forward or backward the burden of the tax rests on the owners in the form of reduced profits. In the short run the income of owners of businesses will be reduced; in the long run this may lead to a reduction in investment and some marginal firms may go out of business.

It is difficult to determine the extent to which the Iowa personal property tax is shifted because phenomena of this sort are very difficult to measure. The likelihood that the tax can be shifted is greater for those firms that do not face competition from firms not subject to the tax. Perhaps some examples will help to demonstrate why this is so.

Iowa farmers pay a personal property tax on a part of their investment in farm machinery and on some types of livestock. The individual farmer cannot pass this tax on to the buyers of his output because he has no market power. He cannot raise his prices above the market price. If the tax on machinery and livestock makes certain farm enterprises less attractive and leads to a contraction in output by a number of Iowa farmers, the reduction in supply may

lead to higher prices, but Iowa farmers must compete with farmers from other states and other countries. The responsiveness of the market is also restricted by government farm programs. Hence any changes in output that result from the effects of the Iowa personal property tax are likely to be too small to have much influence on prices. As a consequence it is not likely that the tax is shifted forward by Iowa farmers.

A similar argument can be applied to the case of Iowa manufacturers. Manufacturing firms usually have more market power than individual farmers, but the products of Iowa firms must compete with the products of outside firms in regional, national, and international markets. Hence it is not likely that changes in taxes paid by Iowa industrial firms will be reflected in changes in the prices of the products they produce.

If the burden is not shifted forward, it must rest either on the owners of the firms or on the Iowa labor force or other suppliers. Backward shifting in turn can have the effect of inducing outward migration of labor and reduced capital investment, although the effect of taxation on such developments is the subject of much disagreement.

The personal property tax on mercantile inventories and fixtures is more likely to be shifted forward by both retailers and wholesalers.^{16/} This is because these firms face only limited competition from outside the state. In the case of retailers the closest competitors are often found in the same community where their property is assessed by the same assessor and is subject to the same millage rate. These conditions make forward shifting easier since everyone is

^{16/} Thomas F. Hady, "The Incidence of the Personal Property Tax," National Tax Journal, June 1961, pp. 163-73.

"in the same boat". For these reasons the tax on mercantile property is more likely to be shifted forward to consumers. The functioning of retail markets is such that responsiveness to changes in tax rates may be somewhat uncertain. Thus while a degree of forward shifting to consumers may be expected, one should not expect that elimination of the tax on retailers would lead to an immediate comparable reduction in prices paid by consumers.

Real Estate Taxes

According to the data in Table IV taxes on real estate excluding public utilities account for more than 70 percent of the total property tax revenue in Iowa. Credits on homesteads and agricultural land provide some tax relief for two classes of real property. In 1964 the credits amounted to twelve percent of the levy on residential real estate and agricultural land and buildings. The likely effects of property tax relief for agricultural land, residential property, and business real estate are analyzed in the following paragraphs. For purposes of this discussion the assumption is made that the level and quality of local services are unaffected by the reduction in real estate taxes. The economic effects of alternative taxes will be ignored, since they are discussed in other reports.

One way in which the property tax may sometimes be shifted is through the process of tax capitalization. This process may be illustrated most easily by taking as an example the way property taxes might affect the value of a marketable, income earning asset such as farm land or rental property. When one acquires such an asset he also acquires an obligation to pay future property taxes. The price that must be paid for the asset will, in an informed market,

equal the discounted value of the expected future net receipts. Thus a piece of land that is expected to yield a net future return of \$5,000 per year discounted at five percent is worth \$100,000. Obviously property taxes must be deducted from anticipated future earnings. Therefore the present value of the asset will be reduced by an amount equal to the discounted value of expected future property tax payments. If the market accounts for expected tax payments in this way, the price that the buyer must pay for the asset will be reduced. When this occurs the burden of the future tax payments falls on the seller, who receives a lower price for the asset, even though the buyer will make the actual tax payments. If the current owner decides not to sell he will make the future tax payments. In either case the burden falls on the current owner, not on the potential buyer who will have to pay more for land if taxes are reduced. Should expectations about future tax payments change, as may be the case if unforeseen property tax relief or tax increases should occur, the current owner will experience a windfall capital gain or loss. Wealth effects resulting from significant alterations in property tax rates should not be overlooked when major revisions of the tax structure are being considered.

The degree to which tax capitalization takes place is subject to dispute. The amount of capitalization can vary among assets, depending on how well informed the market happens to be and on the extent to which the supply of assets can be altered. In the case of agricultural land the market is active, the productivity of the land can be determined rather accurately, and the supply more or less fixed. Thus it can be argued that the market for farm land possesses a degree of perfection sufficient to account for the effects of future

tax liabilities. If this is true property taxes on farm land would have the effect of depressing land values. Yet the value of farm land has increased during the postwar period. This does not prove that tax capitalization is not occurring. It may mean that other determinants of land values are offsetting the depressing effect of property taxes. These other factors include the pressure to enlarge the size of farms to take advantages of economies of scale in agricultural production, the attractiveness of land as an inflation hedge, the purchase of farm land for non-agricultural uses, and the farm price support program. The presence of all of these other factors influencing land prices makes it difficult to separate out the effect of property taxes on land values.^{17/}

Tax capitalization can also arise in markets for other classes of real estate. This is particularly likely in the case of land used for non-farm purposes. Whenever the market is sufficiently well informed to take account of the effects of future tax liabilities on future returns from the property (or the future cost of occupancy in the case of owner-occupied residences) capitalization can occur, but this is less likely than in the case of farm land.

The effect of tax capitalization on the value of business property will be examined first, since it is less complicated than in the case of residential property. The overall effect of a tax reduction on business property would be to lower the cost of this input relative to other inputs. If in the long run the supply price of additional industrial and commercial property is constant, the price could fall by the full amount of the tax reduction. Should this occur, there would be no increase in the value of property in existence at the time of

^{17/} Attempts to verify the presence of tax capitalization in the price of farm land have been only partly successful. See Dick Netzer, Economics of the Property Tax (Washington, 1966) pp. 34-36; F.O. Woodard and Ronald W. Brady, "Inductive Evidence of Tax Capitalization," National Tax Journal, June 1965, pp. 193-201.

the tax cut. In other words, there would be no capitalization of the tax reduction and, hence, no windfall gain to property owners.

The response of business firms to a reduction in property taxes could take many forms. The incentive to substitute the input of taxable property for other inputs may take the form of increased investment. The degree to which the reduction will lead to lower prices as compared to higher profits will vary considerably depending on such factors as the degree of competition and freedom of entry in various markets. It also depends on the incidence of alternative taxes upon ^{18/} business firms.

As for residential property, the effect of the property tax is to increase the cost of housing. In an equilibrium situation this is true of rental property as well as of owner-occupied dwellings. The property tax on rental property reduces the returns on this type of investment and therefore reduces the supply. For a given level of demand higher rents will result. This may not be true in a disequilibrium situation, and disequilibrium may persist for a long time in some communities. Landlords in towns with a stable or declining demand for rental housing will find it particularly difficult to shift higher taxes on to tenants in the form of higher rent. Thus tenants are less likely to bear the burden of property tax increases in communities with a stable or declining population than in growing communities where the supply and demand of rental units is more likely to be in equilibrium. ^{19/}

^{18/} Property taxes on business are also discussed in the staff report, "Taxation of Commerce and Industry in Iowa".

^{19/} This argument requires qualification if demand for housing is also influenced by changes in taste or in income, especially since housing is not a homogeneous good.

For purposes of discussion it appears to be feasible to drop the distinction between owner-occupied and rented dwellings. If the property tax on housing is reduced the price of housing will decline relative to other prices. Households will have an incentive to increase their consumption of housing at the expense of other consumer outlays. Families will tend to select living quarters with more floor space and other characteristics of higher quality. It is possible that the relative prices of housing of different quality will be altered. Attempts by owners of the stock of housing in existence at the time of the reduction in property taxes to capture the gains for themselves will be limited because, if the housing market is in equilibrium at the time of the tax reduction, it will become profitable to expand the quantity of housing after the tax cut. Therefore, it would appear that the greater reproducibility of urban real estate makes tax capitalization less likely than in the case of agricultural land. For those few cases where location is of great importance, this generalization may not hold.

If a reduction in property tax rates is less likely to result in a windfall gain for owners of urban real estate than for owners of farm land, does this mean that property tax relief is more justified for owners of urban property than for owners of agricultural land? Insofar as urban residential property is concerned, the policy maker must decide whether it is desirable to encourage greater consumption of housing. While rising property taxes serve to restrict consumption of housing, the deduction provisions of both the federal and state income tax have the opposite effect, at least for owner-occupied dwellings.

Property taxes and interest payments on mortgages are both deductible. The income tax is usually said to discriminate against renters, but if the deductions for housing were dropped the ten percent standard deduction allowed under the federal tax would probably be reduced. Furthermore, the landlord is able to shift a part of his property tax burden to the federal treasury, since his taxes can be treated as a cost. The main point is that the income and property taxes pull in opposite directions. As the property tax is replaced by an income tax there may be a tendency for housing expenditures to account for a larger proportion of the consumer budget than would be the case in the absence of tax effects. Substitution of a sales tax for property taxes would also have the effect of encouraging a shift from taxed commodities to housing, although the complementarity between sales-taxed items and housing outlays could dampen the effect somewhat.

CONCLUSIONS

Many of the criticisms of the property tax have been examined, and a number of them appear to be justified. The tax does tend to fall more heavily on those types of tangible property that are relatively easy to locate and evaluate. Real estate and the tangible property of businesses and farms, including inventories, and a limited list of household electrical appliances comprise nearly all of the tax base. Property on the tax rolls is taxed at rates that differ widely owing to inaccurate valuation and to geographical inequalities in the level of property taxes. In brief, the burden of the property tax is distributed unequally among property owners.

Another criticism of the property tax, about which little is said in this report, is that it is regressive or at best proportional. In other words, the percentage of income paid in taxes either falls or remains constant as incomes rise. The estimated tax burden by income groups is shown in Appendix II. A study of asset holdings of Iowa residents is now in progress. The results of this study should give us more information on regressivity.

The people of Iowa and their political representatives cannot escape the problem of selecting the optimal tax structure. Many people urge property tax relief, but as we have seen this can take many forms and can be brought about only by increased reliance on other sources of revenue. The strengths and weaknesses of the most promising alternative sources are considered in other reports in this series.

APPENDIX I

ESTIMATED PROPERTY TAX RATES ON URBAN (CITIES AND TOWNS) AND
RURAL PROPERTY IN IOWA, BY COUNTY, 1962

County	Urban Rate	Rural Rate	Combined Rate	County	Urban Rate	Rural Rate	Combined Rate
Adair	1.72%	1.92%	1.88%	Chickasaw	1.57	1.60	1.59
Adams	1.97	2.10	2.08	Clarke	2.33	2.11	2.16
Allamakee	1.81	1.77	1.78	Clay	1.36	1.07	1.16
Appanoose	2.23	1.86	2.01	Clayton	2.01	1.96	1.98
Audubon	1.88	1.67	1.71	Clinton	1.74	1.25	1.52
Benton	1.99	1.20	1.36	Crawford	1.42	1.57	1.53
Black Hawk	2.15	1.34	1.97	Dallas	1.77	1.28	1.42
Boone	2.12	1.35	1.62	Davis	1.75	1.88	1.85
Bremer	1.78	1.69	1.73	Decatur	2.62	2.44	2.49
Buchanan	2.16	1.51	1.68	Delaware	1.62	1.61	1.62
Buena Vista	1.61	1.24	1.36	Des Moines	2.11	1.55	1.93
Butler	1.65	1.35	1.42	Dickinson	1.59	1.51	1.54
Calhoun	1.51	1.04	1.13	Dubuque	1.50	1.32	1.45
Carroll	1.30	0.82	0.99	Emmet	1.76	1.29	1.46
Cass	1.57	1.67	1.63	Fayette	2.04	1.61	1.76
Cedar	1.53	1.37	1.40	Floyd	2.07	1.98	2.01
Cerro Gordo	1.90	1.20	1.64	Franklin	1.33	1.09	1.15
Cherokee	1.60	1.20	1.31	Fremont	2.02	1.59	1.66

County	Urban Rate	Rural Rate	Combined Rate	County	Urban Rate	Rural Rate	Combined Rate
Greene	1.68	1.27	1.36	Marion	1.86	1.85	1.85
Grundy	1.51	1.15	1.23	Marshall	2.03	1.51	1.74
Guthrie	2.22	1.79	1.87	Mills	1.48	1.19	1.23
Hamilton	1.55	1.11	1.24	Mitchell	1.77	1.22	1.33
Hancock	1.76	1.15	1.25	Monona	1.92	1.75	1.79
Hardin	1.60	1.28	1.39	Monroe	2.16	2.14	2.14
Harrison	1.98	1.79	1.85	Montgomery	1.98	1.47	1.64
Henry	1.46	1.40	1.42	Muscatine	1.90	1.25	1.59
Howard	1.73	1.54	1.59	O'Brien	1.37	0.96	1.06
Humboldt	1.44	1.21	1.27	Osceola	1.93	1.05	1.21
Ida	1.44	1.44	1.44	Page	1.68	1.76	1.73
Iowa	1.55	1.40	1.43	Palo Alto	1.90	1.49	1.58
Jackson	1.71	1.53	1.59	Plymouth	1.20	1.10	1.13
Jasper	1.78	1.26	1.48	Pocahontas	1.34	1.05	1.10
Jefferson	1.65	1.52	1.57	Polk	2.32	1.78	2.24
Johnson	1.85	1.34	1.63	Pottawattamie	2.19	1.44	1.82
Jones	1.74	1.60	1.64	Poweshiek	1.90	1.58	1.68
Keokuk	2.20	1.58	1.71	Ringgold	2.41	1.93	2.01
Kossuth	1.69	1.07	1.18	Sac	1.63	1.28	1.37
Lee	2.13	1.33	1.84	Scott	1.79	1.31	1.70
Linn	2.26	1.74	2.17	Shelby	1.59	1.29	1.35
Louisa	2.04	1.38	1.48	Sioux	1.38	0.96	1.07
Lucas	2.47	2.16	2.27	Story	2.14	1.42	1.79
Lyon	1.56	1.10	1.18	Tama	1.43	1.18	1.24
Madison	1.71	1.55	1.59	Taylor	2.13	1.89	1.94
Mahaska	1.97	1.39	1.59	Union	2.14	1.73	1.89

County	Urban Rate	Rural Rate	Combined Rate	County	Urban Rate	Rural Rate	Combined Rate
Van Buren	2.29	1.96	2.03	Winnebago	1.68	1.22	1.34
Wapello	2.97	1.90	2.65	Winneshiek	1.45	1.74	1.65
Warren	1.96	1.81	1.86	Woodbury	2.50	1.96	2.39
Washington	1.90	1.41	1.54	Worth	1.46	1.21	1.26
Wayne	1.89	1.66	1.70	Writht	1.72	0.90	1.13
Webster	1.99	1.21	1.58				

APPENDIX II

INCIDENCE OF IOWA PROPERTY TAX BY INCOME GROUP, 1964

Income Before Taxes	Percent of Income Paid in Property Tax
Under \$1,000	29.0%
1 - 3,000	12.1
3 - 5,000	7.1
5 - 7,000	4.6
7 - 10,000	3.7
10 - 15,000	3.4
Over 15,000	3.7
Weighted Average	5.5

Source: Staff Paper on "The Incidence of Iowa State and Local Taxes" (Preliminary)

OCT. - 4. 1966

Research Memorandum IV

GSISLTS
JAP
7/19/66

STATE-LOCAL FINANCIAL RELATIONS IN IOWA

SUMMARY AND CONCLUSIONS

The main points of the research report are summarized in outline form. The supporting data and analyses are presented in the subsequent sections beginning after page 13.

I. THE PROBLEMS AND POSSIBLE SOLUTIONS

State assistance to Iowa local governments has generally been advocated as a means of accomplishing three tasks: (1) raising the performance level of local governments, (2) reducing intra-state variations in tax effort to attain a given performance level, and (3) providing local governments with superior revenue sources. Some of the problems involved in implementing various policies to achieve these tasks are indicated below.

A. Raising performance levels:

1. One way of raising local performance levels in some sphere is to legislate standards of performance. This policy is not generally acceptable for some functions because of the element of compulsion. Further, it may place an undesirable economic burden on some communities, and perhaps cause a reduction in other, perhaps essential, outlays in order to finance higher standards of performance.
2. Performance levels might also be raised by transferring certain functions to the state government. This approach is resisted for some functions because of a strong preference for local autonomy.

IOWA STATE LAW LIBRARY
State House
DES MOINES, IOWA

Transferring functions to the state government will raise performance levels if state taxes are in some way more acceptable than local taxes. Otherwise it is difficult to understand why citizens will vote for higher state taxes to finance higher performance levels but not for higher local taxes.

Placing functions in the hands of the state places an upper limit on performance levels. Some localities may prefer performance levels higher than those determined by the state.

3. Performance levels might be raised with an increase in grant-in-aid programs. There is a possibility that state aid programs will raise performance levels in some sphere only if the aid depends on the amount of local expenditures for the function. That is, aid must be conditioned on an increase in local expenditures. Otherwise, resources from the state government may simply be substituted for local resources.

A state aid program may cause local governments to forego other services in order to finance the program which is partially financed by the state government.

A state aid program may cause a redistribution of resources among localities. If state taxes are increased to finance the aid program, and the amount of aid received by some localities is greater than the extra taxes paid (i.e., the localities receive a net subsidy), other localities must be receiving less

aid than the extra taxes paid by them.¹ Resources will be reallocated to localities receiving a net subsidy.

On the other hand, if no locality receives a net subsidy (i.e., the extra taxes paid equals the aid received for all localities), it raises the question of why localities would not raise local expenditures without an aid program. The answer may be that local expenditures are held down because state taxes are more generally acceptable, or because localities compete to keep taxes low.

B. Reducing intra-state variations in tax effort:

1. To implement successfully a policy of reducing intra-state variations in tax effort in order to attain given performance levels, aid should be inversely related to fiscal capacity and directly related to the per capita cost of achieving a given performance level. The cost of attaining a given performance level in a locality depends on factors such as the population age structure, urbanization, population density, and population change.
2. Aid formulae which are independent of actual local expenditures minimize the possibility that grants will alter decisions about the over-all level of local expenditures. However, the change in distribution of income among localities may cause public expenditures to be different than otherwise.

¹This assumes that localities cannot shift taxes to other localities or outside the state.

C. Providing Iowa localities with better revenue sources:

Local revenue sources may be inadequate because they are more inequitable than other revenue sources, less responsive to growing needs, or more difficult and costly to collect than other taxes. The possible solutions to these problems include separating revenue sources, extending the tax authority of local governments, allowing local governments to impose rates supplementary to state taxes, and sharing revenues.

1. Separating sources:

This policy would involve the withdrawal of the state government from the use of certain taxes in favor of local governments. This approach is of limited value because there are few significant sources of revenue which the state is likely to give up.

2. Extending local taxing authority:

A local income tax has the advantage of being able to tax non-residents who work in and use the public services of a locality. The tax is criticized on the general grounds that the rates are typically flat; no allowance is made for exemptions, credits, or deductions; and the tax is imposed for the most part on only wages and salaries. While these may be objectionable features of local income taxes, it is not clear that the tax is more inequitable than other alternative local taxes.

The income tax is more responsive to growth than local property taxes.

While it is often contended that a local income tax may discourage residents or industries from locating in the locality, it is not clear that this is the case. Citizens may prefer an income tax if it is more equitable than the property tax, or if it allows better public services to be provided (e.g., education).

Like a local income tax, a local sales tax enables localities to tax non-residents. However, this advantage is offset by an incentive for residents to make purchases outside the taxing district, and for firms to locate outside the locality.

There are other taxes which localities might adopt, but the income tax and sales tax are the most significant sources of additional local revenue.

3. Supplementary rates:

Local governments might be granted the authority to levy tax rates supplemental to the state's tax rates. The state could collect the revenue and return it to the localities. Compared to a policy of extending the tax authority of local governments, supplementary rates offer the possibility of eliminating duplicating machinery, lowering collection cost, using the enforcement power of the state, avoiding different tax bases, and perhaps increasing the yield. If the rates were supplemental to the state income tax, it would be possible to use exemptions, deductions, progressive rates, and to include non-wage and salary income in the base.

4. Shared revenues:

With a policy of shared revenues, the state collects a tax and returns a portion of it to localities. Unlike supplementary rates, localities do not choose to levy the tax. However, a policy of shared revenues offers some of the advantages of supplementary rates--eliminating duplicative machinery, avoiding different tax bases, lower collection costs, etc.--and in addition has the advantage of rate uniformity. Thus, inter-area migration and purchases are lessened.

A policy of shared revenues may encourage some irresponsibility and an unwise expenditure of funds because of the separation of responsibility for raising revenues and making expenditures.

II. EVIDENCE OF NEED FOR STATE ASSISTANCE TO IOWA LOCAL GOVERNMENTS

The second part of this study is concerned with whether (1) local performance levels in Iowa are low, (2) there are significant variations in needs and fiscal capacity among counties, and (3) the state tax structure is superior to the local tax structure. In other words, in light of the reasons which are advocated for rendering state assistance to local governments, is there evidence of need for increased state assistance to local governments in Iowa?

A. Performance levels:

The two principal categories of expenditures made by local governments are education and highways. Therefore, our attention

is focused on the question of performance levels in these two areas.

1. Education

- a. Given the factors which seem to explain variations in current education expenditures among the 48 contiguous states, Iowa is performing as well as, and perhaps better than, the nation as a whole. On the other hand, capital expenditures are lower than might be expected.
- b. A comparison of education expenditures in Iowa with the rest of the nation does not necessarily reveal anything about Iowa's relative performance in terms of quality. For example, Iowa does not compare favorably in terms of at least two indices of quality: teacher salary levels and the educational attainment of elementary teachers. This suggests the possibility that it takes relatively more expenditures for a given quality of education in Iowa than in the nation as a whole. This could be due to differences in administrative organization and a dispersed population.
- c. An increase in education expenditures can be justified on the grounds that the rate of return on this form of investment is higher than the rate of return on alternative investment expenditures in public and private sectors.
- d. There are significant variations in education expenditures among Iowa's 99 counties. In 1962, the range for current expenditures per public school enrollee was from \$222 to \$586. The average was \$408.

- e. Variations in education expenditures among Iowa's counties appear to be explained by cost-determining factors, such as population density, rather than income differences. It appears that lower income counties attempt, on the average, to do as well in terms of expenditures as higher income counties. However, more expenditures may be required for a given quality level in relatively low income, rural, sparsely populated counties.

2. Highways

- a. According to the 1960 Iowa highway study conducted by the Public Administration Service, the greatest engineering (but not necessarily economic) needs exist at the county level. However, this system of roads conveys benefits primarily to local property owners who use the roads rather than to the state as a whole.
- b. Changing travel patterns, the location of economic activity, and population shifts indicate that relatively more state funds should be allocated to the state primary road system and to towns and cities.

B. Intra-state variations in need and fiscal capacity:

1. There are significant variations in indices of need (the per capita cost of providing public services) and fiscal capacity among the counties. The gap between the indices of need and fiscal capacity tends to increase as fiscal capacity falls. As

incomes fall, therefore, a greater effort must be made to achieve a given performance level.

2. Poorer counties tend to make a greater tax effort than higher income counties.

C. Attributes of state and local tax systems:

1. The state tax system grows more rapidly without tax rate changes than the property tax. This is truer for some state taxes than others. An extension of local tax authority, supplementary tax rates, and shared revenues offer localities the possibility of using more responsive tax revenues.
2. The state tax structure is less regressive than the local tax structure. Thus, more reliance on state taxes will lessen the over-all regressivity of the state-local tax structure.
3. The state government can collect and administer most non-property taxes better than local governments. This argues for a system of supplementary rates or shared revenues.

III. INTERGOVERNMENTAL PROGRAMS IN IOWA

A. School aid

1. For the most part, Iowa's school aid program is not explicitly designed to raise the performance level of local education, though this may be an incidental effect. If this is a desired function of school aid, the distribution formula should be tied to education expenditures.
2. Only a minor part of school aid is intentionally allocated on the basis of needs relative to fiscal capacity. That part

which is based on fiscal capacity uses an inappropriate index of fiscal capacity (assessed property values).

3. Although for the most part the formula for distributing school aid is not based on needs and fiscal capacity, an examination of whether this might be the incidental effect of the aid program was made. The evidence is that the actual distribution of school aid is independent of needs and fiscal capacity. However, needs and capacity do vary, and aid to reduce burdens may be in order.
4. The agricultural land tax credit has an uncertain effect on school reorganization and the level of education expenditures.
5. The agricultural land tax credit is redistributive with respect to needs and fiscal capacity.

B. The homestead credit

1. One of the reasons for the homestead credit is to take advantage of some of the attributes of the state tax system by giving property tax relief to homeowners. However, the credit discriminates against people who rent.
2. There is no evidence that the homestead credit stimulates home ownership.
3. The homestead credit tends to favor higher income counties or, at least, is not redistributive with respect to fiscal capacity.
4. The homestead credit is not designed to raise performance levels.

C. Highways

1. The formula for distributing highway aid is not tied to local expenditures and therefore offers no incentive for localities to increase expenditures.
2. Per capita highway aid to counties is highly redistributive with respect to income. This is because each county receives about the same amount of total aid, but since much of it is distributed on the basis of area, the poorer counties have less population.
3. Street aid to towns and cities favors relatively high income counties. This is because the aid is based on population, and is higher in higher income counties.

D. Liquor store sales

1. The allocation of 10 per cent of liquor store sales is not intended to raise local performance levels.
2. The allocation of liquor store sales favors higher income counties. This is because 5 per cent of liquor store sales is based on population and more people live in higher income counties. The other 5 per cent of liquor store sales finances the military credit, and apparently more veterans live in higher income counties.
3. The military credit discriminates against veterans who rent. If it is desirable to compensate veterans, a more equitable and efficient means could be devised.

E. Welfare collections from Iowa counties

1. It is difficult to justify the collection of funds from counties to support activities which convey state-wide benefits,

particularly if the state tax system is superior to the local tax structure and there are variations in the capacity of localities to support such activities.

2. Welfare collections from counties are unrelated to fiscal capacity.

F. General conclusions

1. Of all the aid programs, only a small part of the school aid program is intentionally designed to raise local performance levels. If this is a desirable objective of a state aid program, the aid distribution formulae must be revised in order to provide localities with an incentive to raise performance levels.
2. Of all the aid programs, only a small proportion of the school aid program is designed to reduce intra-state variations in tax effort. Even in this case, the distribution formula probably accomplishes this objective quite imperfectly, if at all, because it assumes assessed property values is an index of fiscal capacity.

Although the aid distribution formulae for the various aid programs are for the most part not designed to redistribute income, some of the aid programs, and the over-all aid program, nevertheless, have this effect. However, if it is desirable to reduce variations in tax effort further, the following steps must be taken: (a) the formula for distributing school aid and street aid to towns and cities must be revised, (b) the homestead credit and allocation

of liquor store sales must be replaced or supplemented with a general aid program which distributes aid inversely to fiscal capacity, and (c) local support of state welfare and mental health programs should be abandoned.

3. Since for all practical matters the state aid programs are not presently designed to raise performance levels or reduce intra-state variations in tax effort, the purpose of the aid programs must, by and large, be attempts to provide localities with alternative sources of revenue. An exception is the military credit. In this case the rationale is to compensate veterans for military service. But even with this program, it is curious that the compensation should take the form of property tax relief when this discriminates against veterans who do not own property. Perhaps another exception is the homestead credit, which may have had as one of its objectives the stimulation of home ownership. It is doubtful, however, that the credit has had this effect.

INTERGOVERNMENTAL FISCAL RELATIONS IN IOWA

I. INTRODUCTION

A development of considerable importance during the past several years has been the growth of intergovernmental revenue flows. In 1964, federal transfers to the state government of Iowa amounted to \$130 million, which was about 25 per cent of the state government's total general revenue. Federal transfers to local governments in Iowa were considerably less than this--\$4.1 million, or .6 per cent of local total general revenue. In the same year, 21 per cent of the local government's revenue consisted of transfers from the state government (\$132 million), and the state government received 5 per cent of its total revenue from local governments (\$25 million).

Intergovernmental revenue flows in the United States and in Iowa are a result of attempts to deal with a number of specific problems confronting state and local governments. These problems and the policies involved in dealing with them are discussed in general terms in Part I of this study. Part II attempts to determine the extent to which these problems exist in Iowa. Part III is an analysis of the pattern of revenue flows in Iowa and whether existing policies deal effectively with the problems discussed in Part I.

II. THE PROBLEMS AND POSSIBLE SOLUTIONS

It is difficult to find an unambiguous discussion of the rationale for the various forms of state assistance to local governments. The discussion of state-local revenue flows is frequently intermingled with problems of federal-state fiscal relations, and while the problems are often the same or similar, this is not always the case. Furthermore, some observers emphasize certain points while they are implied or overlooked by others. In other cases, the reasons cited are repetitive or overlapping. However, a survey of the literature indicates that the reasons which are cited for state assistance to local governments can be reduced, for the most part, to the following:¹

(1) performance levels by local governments in some sphere may be regarded as inadequate; (2) there may be undesirable intra-state variations in tax effort required to provide given levels of public services; (3) the revenue sources available to local governments may be considered inadequate. These points are discussed below.

¹See, for example, J. F. Due, Government Finance (Homewood, Ill.: Richard D. Irwin, Inc., 1963), pp. 435-442; Harold M. Groves, Financing Government, 6th ed. (N. Y.: Holt, Rinehart & Winston, 1964), pp. 526-530; William J. Schultz and C. Lowell Harris, American Public Finance (Englewood Cliffs, N. J.: Prentice-Hall, Inc.), pp. 458-475.

Inadequate Performance Levels

The benefits from many local public goods and services accrue for the most part to local residents. This is the case, for example, with fire protection, sanitation facilities, and parks. If the provision of these services is inadequate it may be considered ill-advised outside the local area, but the effects of the decision are felt largely by that community. Indeed, the decision may be an accurate reflection of the prevailing tastes and preferences of the community. On the other hand, the failure of some communities to provide adequate levels of other public services is not a matter of indifference to the citizens of other communities. There may be a strong feeling, for example, that educational opportunities ought to be reasonably uniform or that welfare programs ought to meet certain minimum standards. In other words, citizens in other communities are affected by some of the collective decisions of citizens in another community.

A community may not be providing what is considered by the state as a whole as an adequate level of public services for essentially two reasons. First, a community may simply be indifferent about, or unaware of, the problem (if it exists). Second, a community may be performing at low levels because some of the benefits derived from the service are not confined to the community but "spill over" to other communities as well. The benefits of education, for example, are widely diffused through migration.

The streets of a locality are used by non-residents who do not necessarily contribute toward their construction and maintenance. Since the extra cost to residents of providing such services exceeds the extra benefits enjoyed by them, there may be a tendency to allocate too few resources to these forms of investment.

Any policy of raising public performance levels requires some means of determining when the performance level in some sphere is satisfactory. This is an exceedingly difficult task. Opinions differ sharply about whether more resources should be allocated to the public sector and which functions, if any, have more merit than others. Some of the problems involved in determining the adequacy of performance levels are discussed below.¹ At this point we simply want to point out that this is a complex problem, and in the discussion below attention is focused on policies aimed at raising performance levels without making a judgment about whether performance levels at the local level in Iowa are indeed satisfactory.

Policies aimed at improving local performance levels typically take three forms: (1) legislating certain standards of performance, (2) transferring certain local functions to the state government, and (3) transferring resources from the state government to local governments. An example of the first approach is the requirement that localities provide certain educational programs or services. Such a policy, particularly if carried too far or applied to certain

¹See pp. 23-41.

areas, is frequently resisted because of the element of compulsion. Furthermore, to meet state-wide standards, localities may choose to finance the higher performance level by reducing expenditures on other, perhaps more essential, functions. On the other hand, if higher performance levels are financed not by a reduction in other expenditures but by an increase in local taxes, there may be an undesirable economic burden placed on the citizens of poorer communities.

Although transferring certain functions from local governments to state governments is another policy which has been advocated as a means of raising performance levels, there is no guarantee that this will be the result. If performance levels are considered low in all localities, it raises the question of why people would vote for an increase in state taxes to enlarge a program but not an increase in local taxes. The answer may be that the state tax structure is more acceptable in terms of equity, administration, cost of collection, etc., or that localities are reluctant to raise local taxes to certain levels because of a fear of repelling industry and residents. On the other hand, if performance levels are satisfactory in a significant majority of localities and unsatisfactory in the remaining localities, the majority could vote to transfer the function to the state and over-all performance levels could be raised. In this case the over-all tax bill of the majority of localities need not be higher since the state taxes to finance the

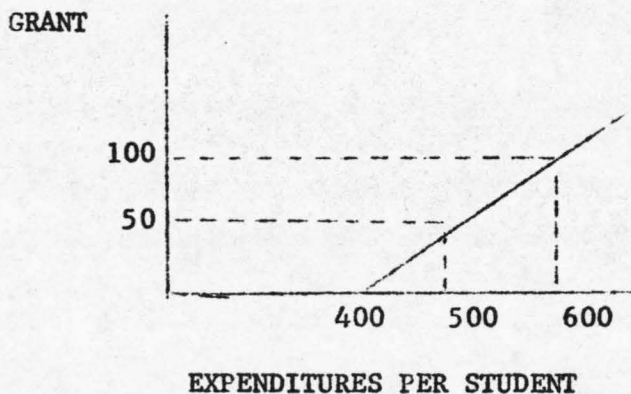
program might simply replace the local taxes which were financing the program. On the other hand, it could be that with a state program the tax base is such that the majority of localities would be partially subsidizing other localities. This could be incentive enough to keep the function at the local level. Another incentive to keep the function at the local level is that a state program places an upper limit on performance levels. That is, some communities might prefer higher levels of performance in some sphere than is possible with a state-wide program. This, plus a general desire for local autonomy, may require a policy of transferring resources to localities rather than transferring local functions to the state government.

One way of trying to provide localities with more resources is a grant-in-aid program. It should be pointed out at the outset, however, that there is no guarantee that local expenditures for some function will be higher with an aid program than without one. There is some empirical evidence that in general total state and local expenditures are higher the higher is state aid.¹ But whether this is true of a particular state is another matter. The preferences of the citizens of a particular state may be such that a certain performance level for some function will be attained regardless of whether there is a state aid program. It is clear,

¹See Seymour Sacks and Robert Harris, "The Determinants of State and Local Expenditures and Intergovernmental Revenue Flows of Funds," The National Tax Journal, Vol. XVII, No. 1 (March, 1964), pp. 75-85.

however, that if a state aid program is to maximize the possibility of raising expenditures in some sphere, the aid must depend on the level of local expenditures.

If, for example, a flat grant is given, local governments have the option of increasing expenditures or reducing local taxes. On the other hand, if the size of the grant depends on the difference between some minimum level of expenditures and whatever expenditures are actually made, communities receive more aid only if they increase expenditures. The diagram below illustrates this point. Suppose that the grant is for education, and before any community can receive aid it must spend \$400 per student. Assume that expenditures above this level will be matched in the amount of 50 per cent by the state. In this example, a school district which spends \$500 per student will receive \$50 per student from the state; an expenditure of \$600 will be matched by \$100 from the state, etc.¹



¹The function need not be linear, of course. The function may be an increasing or decreasing one, and there might be some upper limit.

The effects of this type of program can be explained with an example, which is not wholly realistic but which nevertheless illustrates some of the major problems involved in implementing an aid program. Suppose that there are only three localities A, B, and C, and each locality responds to the aid program by increasing expenditures to the level as shown in column (1), Table 1. Suppose the state finances 50 per cent of the increase in expenditures [column (2)] with total aid of \$300 million and a total tax base (e.g., income, property) of \$6 billion [column (3)], the over-all tax rate must be 5 per cent. Applying this rate to each locality's tax base¹ yields the state tax collections needed from each locality in order to finance the aid program. The difference between state tax collections and aid received by each locality is the net subsidy (plus or minus). In this example, only locality A receives a positive net subsidy [column (5)].

Compared with a completely locally financed program of the same magnitude, the aided program has become less expensive for A, but more expensive for localities B and C. Because the over-all tax rate is higher for B and C with an aid program than without one, B and C may choose to reduce their tax burden by cutting other, perhaps essential, outlays. This is a risk which must clearly be recognized.

¹The tax rate applied to each locality's base need not be proportional as assumed here. It may instead be progressive or regressive.

Table 1

THE EFFECTS OF A HYPOTHETICAL AID PROGRAM

<u>Locality</u>	(1) Increased expenditures (millions)	(2) State aid (millions)	(3) Tax base (millions)	(4) State tax collections (millions)	(5) Subsidy (millions)
A	\$160	\$ 80	\$1,000	\$ 50	\$ 30
B	180	90	2,000	100	-10
C	<u>260</u>	<u>130</u>	<u>3,000</u>	<u>150</u>	<u>-20</u>
Total	\$600	\$300	\$6,000	\$300	\$ 00

In the example above, there has been a redistribution of resources to localities which receive a net subsidy. It is possible, of course, that a redistribution of resources among localities need not occur with this type of aid program. The tax base and tax structure could be such that each locality receives no net subsidy. That is, the aid received by each locality could equal the state taxes paid by each to finance the aid program. In this case, each locality is financing the aid program out of its own resources, and it raises the question of why localities would be unwilling to expand expenditures without an aid program. Like the policy of transferring local functions to the state government, the answer may be that local taxes are more objectionable than state taxes, or that competition among localities keeps taxes and thus performance levels down.

Intra-state Variations In Need and Fiscal Capacity

In order to maintain services at what is generally considered desirable levels, some localities must make a greater tax effort than other localities. This arises because of variations in needs (e.g., school-age population, welfare problems) and fiscal capacity among localities. Communities with relatively high needs and relatively low fiscal capacity may either accept lower standards of performance or make a greater tax effort than other localities. Neither of these alternatives may be acceptable.

The possible solutions to this problem involve transferring certain functions to the state level, or transferring state funds to localities. The merits of the first alternative were discussed above. Some of the problems involved in implementing the second alternative are discussed below.

The following example demonstrates how tax burdens might be equalized to attain a desired performance level. The example is not meant to be entirely realistic; rather, it is aimed at illustrating the major problems met in devising an equalization formula.

Suppose that there are only three localities and the tax base and desired performance levels are quantifiable as shown in Table 2. With a desired performance level of \$480 million for all localities and a total tax base of \$6 billion, the over-all tax rate would be 8 per cent. Applying this rate to the tax base of each locality determines the tax collections from each locality.

The difference between the tax collections and the desired performance level determines the subsidy (plus or minus) to each locality.

Table 2

HYPOTHETICAL EQUALIZATION AID PROGRAM				
<u>Locality</u>	<u>Tax base (millions)</u>	<u>Desired performance level-- expenditures (millions)</u>	<u>State tax collections (millions)</u>	<u>Subsidy</u>
A	\$1,000	\$130	\$ 80	\$ 50
B	2,000	190	160	30
C	<u>3,000</u>	<u>160</u>	<u>240</u>	<u>-80</u>
Total	\$6,000	\$480	\$480	\$ 00

In this example, the tax burden of achieving a given performance level is the same for all localities (8 per cent). It may be desirable, of course, to have a different relationship between the tax base and tax collections. For example, it would be possible to have the rate progressive, rising as the per capita tax base rises.

In this illustration, higher expenditure levels may be made if localities are willing to pay higher taxes. Furthermore, the formula for distributing aid provides localities with no incentive to increase or decrease expenditures. The amount of aid which a locality receives does not depend on the level of expenditures,

but on defined performance levels. However, the change in the distribution of income among localities (in this example from C to A and B) may cause expenditures to be different. This is because the elasticity of public expenditures with respect to income may be different among localities. In other words, locality A, if at all willing, may increase public expenditures with a given increase in income more than B and C reduce public expenditures (if at all) with a reduction in income.

To implement this or similar aid distribution formulae, it is necessary to (1) determine the desired performance level and the cost of achieving the performance level in each locality, (2) define and measure the tax base of each locality, and (3) decide upon the rate structure which is desirable.

With respect to performance costs, the per capita expenditures needed to provide a particular spectrum or bundle of local government services may depend on a number of factors. First, certain elements of the population may require more public expenditures than others. For example, as a locality's school-age population rises relative to its total population, the per capita expenditures needed to achieve a given level of performance in education and other spheres of local government activity will probably increase. As the per cent of the population in old-age and welfare groups increases, a locality may also need to make greater total expenditures per capita if it is to maintain a given level of performance

in all areas. Population structure is therefore a factor that may affect the per capita cost of local government--a factor which should be taken into account in the distribution of aid.

Apart from the effects of population structure, the costs of providing some types of services may be affected by population density (county road systems) or the extent to which the population is concentrated in urban areas (sanitation, police, fire protection). Consequently, incorporation of measures of population density and urbanization into aid formulae may be warranted.

The costs of providing local government services may vary among localities for other reasons--e.g., intrastate differences in the price of resources purchased by local governments. However, since our objective at this point in the discussion is limited to pointing out that there are intrastate differences in the expenditures required to provide a given spectrum of local government services, a discussion of additional sources of expenditure differentials will not be undertaken.

The task of defining target performance levels, tax bases, and the degree of progression properly falls on the legislature. Given these definitions, rough estimates of desired performance levels and the tax base for each locality could be obtained--but only at considerable cost.

However, even if performance levels and the tax base cannot be pinned down to single numbers, several general statements can

be made about aid formulae aimed at equalizing the tax burdens required to achieve a given level of performance.

1. Per capita aid distributions should be inversely related to measures of fiscal capacity such as per capita income and, perhaps, per capita property value.
2. Per capita aid distributions should reflect differences in the cost of the target performance level that grow out of differences in population structure and geographic distribution, prices of goods purchased by local governments, etc.
3. Unconditional block grants and aid formulae that are independent of actual expenditure and tax policies of local governments minimize the possibility that grants will alter decisions about the over-all level of taxes and expenditures and about the composition of expenditures.
4. The redistributive or burden-equalizing effect of this type of formula can obviously be offset in several ways. State governments may leave less to be provided for by local governments in some localities than in others. Thus, the pattern of state expenditures may offset (or reinforce) the equalization effected by grants-in-aid. Similarly, the state tax system may act to reinforce or offset equalization. Hence, a grant program to local governments which tends to equalize tax burdens required for a

particular expenditure level will not guarantee equalization. However, the partial effect of the grant system is to promote equalization.

Inadequate Revenue Sources

The third general reason for state assistance to local governments is the inadequacy of existing revenue sources at the local level. Traditional tax sources may be inadequate or inferior in terms of (1) equity, (2) elasticity, or (3) ease and cost of collection. If property taxes are more inequitable than other taxes, then some forms of assistance to local governments can ameliorate inequities. If property taxes do not respond adequately to the growing cost of providing public services, then state assistance can help to meet growing needs. If local governments have difficulty in administering certain types of taxes, there are various forms of assistance which can reduce the cost or increase the ease of collection.

If it is desirable to simply provide local units of government with additional tax sources, the possibilities include: (1) separating tax sources, (2) extending the tax authority of local governments, (3) using supplementary rates, or (4) sharing revenues.¹

¹Grants-in-aid do not seem to be an appropriate policy if the idea is only to take advantage of the attributes of non-property taxes or the state's tax system. Grants-in-aid require some formula for distribution, e.g., population, population structure, fiscal capacity, and as such imply some purpose other than providing communities with alternative sources of revenue.

Separation of sources. A separation of sources involves the withdrawal of one unit of government from the use of particular taxes in favor of another unit. The states, for example, have withdrawn for the most part from the use of the property tax. The difficulty with this approach now is that there are few significant sources of revenue which the state governments are likely to relinquish. It is difficult to imagine the state government giving up, for example, the personal income tax, the general sales tax, the motor fuels tax, or the motor vehicle license--the most significant sources of revenue exclusive of federal transfers. The remaining sources of revenue are marginal, and some would be difficult to administer, e.g., cigarettes, beer, inheritance, corporate income.

Extension of taxing authority. If local units were allowed to adopt whatever taxes they wished, regardless of whether the state used such taxes, the most likely candidates, but not the only ones, are the income or general sales taxes.

For the most part, localities which have adopted the income tax have imposed it at a flat rate on selected sources of income. For administrative reasons, the tax is imposed mainly on wages and salaries, income from unincorporated enterprises, and corporate income. The principal source of income which goes untaxed is property income--dividends, interest, etc. The taxation of property income involves extensive and elaborate investigative techniques which most localities have been unwilling to undertake. In addition,

certain sources of income, such as public relief, unemployment compensation, casual sales, etc., are specifically exempted.

Localities which use the income tax may tax non-residents who work in the area, as well as residents. This is justified on the grounds that non-residents use the public services of the locality where they work, although it might be argued that their tax bill may substantially exceed benefits received. If a number of localities adopt income taxes, then the double-taxation argument emerges, i.e., a person is taxed where he works and where he lives. However, the relevance of the issue is questionable. A non-resident would pay taxes at his place of residence whether the tax was on income, property, or what have you. The form of taxation does not alter the fact that a non-resident enjoys the benefits of the public services provided by the locality where he works.

Local income taxes have been attacked on equity grounds because the rates are flat, and there is generally no provision for exemptions or credits. Thus, the tax is not related to ability to pay. Furthermore, the tax is discriminatory because it falls mainly on wage and salary income. Although these features of the local income tax may be objectionable, it remains to be proved that a local income tax is more inequitable than the property tax or other forms of local taxation. An income tax may be less regressive than a property tax and, in any case, income is probably a better measure of ability to pay than the value of a person's property.

The income tax has the advantage of being more responsive to growth than property taxes. Incomes and prices rise together, so that rising costs from this source are met, in part, automatically with an income tax. If the wages and salaries of government employees must be increased because of rising incomes in the private sector, the revenues will likely be forthcoming. On the other hand, the value of the property tax base tends to be more rigid because of a reluctance to assess property values upward.

While the income tax is responsive to growth, the yield falls when incomes fall, forcing communities to cut outlays or borrow. Traditionally, most localities prefer stable revenues, but it is not clear that this is a virtue. Requiring citizens to pay taxes in the face of declining incomes forces them to cut outlays, dissave, or borrow. It would seem preferable for the government (state, local, and federal) to absorb the shock of recessions rather than have the burden spread indiscriminately among individuals and families whose incomes are linked with fluctuating or declining industries.

Another question of considerable importance is the impact of an income tax on business and location decisions. Where withholding is instituted there is an additional expense borne by businessmen, but this is likely to be minimal because procedures for withholding are already in use for the state and federal governments. The effect of a tax on profits may be no greater

than if property taxes were higher in lieu of an income tax, and the income tax has the additional advantage of varying directly with profits instead of having the more or less fixed cost characteristic of the property tax.

The fear is frequently expressed that an income tax will encourage residents to move out of the taxing district or discourage others from locating there. It is not clear, however, that the tax has this effect. The important consideration, it would seem, is the over-all tax rate, equity, and preferences for public services. The over-all tax rate in a community (A) with an income tax and a property tax may not be any higher than a community with only a property tax (B), and if the combination of taxes in A is considered more equitable than the taxes in B, there would be no inducement to migrate to B. Even if the taxes in A are higher, they might be higher whether there is an income tax or not. The higher taxes may simply be a reflection of the community's preferences for more or better public services-- better schools, superior police protection, better recreational facilities, etc.

The second major non-property tax source available to local governments is the general sales tax. This tax is probably easier to administer than the income tax because there are fewer returns to handle and audit. Compliance is much more difficult with the use tax, and collections are confined for the most part to large purchases.

Like a local income tax, the general sales tax has the advantage of taxing non-residents who use the public services of the taxing district. This is offset, in part, however, by an incentive for residents to purchase outside the locality. The importance of shopping outside the taxing district will depend on the accessibility of near-by shopping areas and the size of purchases. A local general sales tax undoubtedly encourages some retailers to locate outside the taxing area, especially if the taxing community is small and shopping areas are available near by. Such taxes may also increase resistance to annexation, but differential property tax rates have the same effect. These problems would become less serious the more widespread local sales taxation becomes.

The sales tax is, of course, regressive, and its use is resisted on these grounds. In Iowa, the sales tax is less regressive than in other states because of the inclusion of a number of services, but probably more regressive than states which exempt food. If the choice is between a flat income tax on mostly wage and salary income and the sales tax, the sales tax may be no more inequitable than an income tax. Furthermore, a sales tax is probably less inequitable than the property tax.

There are other taxes which might be considered for local use, e. g., motor fuels, alcoholic beverages, tobacco products, public utilities, amusements, and inheritance; but for one reason or another the choice would appear to lie with the income

or general sales tax. Local governments already receive part of the motor fuels tax and liquor store revenues from the state. An additional tax on automobiles, such as a wheel tax, would simply be an extension of the property tax. Revenues from a local tobacco tax would not be significant and would undoubtedly give rise to evasion and enforcement problems. The yield from amusement and inheritance taxes would also be marginal. A public utilities tax could yield substantial revenue, and administration of the tax is quite simple since there are few taxpaying units. A public utilities tax is regressive, but it may be no more or less regressive than the property tax. If it is as regressive as the property tax, not much is gained in its use. If the tax is based on price, it will discriminate against small consumers since the price generally declines with increases in the quantity purchased.

Supplementary rates. Instead of extending the taxing authority of local governments, localities might be granted authority to levy rates supplemental to state tax rates, e.g., the income tax or sales tax. The state would in turn collect and return the revenue to the localities. Compared to a policy of extending the taxing authority of localities, supplementary rates have much merit in terms of eliminating duplicative machinery, lowering the cost of collection, marshalling the enforcement and compliance powers of the state, avoiding different tax bases, and probably increasing the yield. Furthermore, the effect of this approach on local

autonomy and responsibility would not be an issue, as is the case with shared revenues, since communities have the option of levying a tax.

If local communities were to levy rates supplemental to the state's income tax, this would meet some of the objections to the use of local income taxes. It was pointed out above that where local governments have adopted their own income taxes, for the most part rates have been flat and on wage and salary income, with no allowance for exemptions or credits. With supplemental rates it would be possible to take advantage of the features of the state income tax--exemptions, deductions, progressivity--and to include income which might otherwise go untaxed.

Shared revenues. A fourth possible solution to inadequate revenue sources is shared revenues. With this approach, the state government collects a tax and returns a certain portion to local governments. Like supplementary rates, this kind of state assistance eliminates duplicative administrative machinery and has the additional advantage of rate uniformity. With uniform rates, tax-induced intra-state migration and inter-area transactions do not arise. On the other hand, this approach is frequently resisted on the grounds that local autonomy is weakened (localities would not choose to levy the tax), some communities would receive funds they do not need, and there may be a tendency to spend the funds unwisely since no responsibility is attached to raising the revenue. If, on the other hand,

communities need more revenues and cannot raise them to desired levels with the property tax, there is some loss of autonomy or freedom of action in any case. The obstacle may be an inequitable or politically unpopular tax. Furthermore, communities which receive more funds than they need have the option of lowering property taxes, and if the political process is effective at all, this is likely to occur in the long run.

III. EVIDENCE OF NEED FOR STATE ASSISTANCE TO LOCAL GOVERNMENTS IN IOWA

The discussion above was concerned with the general rationale for state assistance to local governments and some of the problems involved in implementing various intergovernmental fiscal policies. Since the rationale for state assistance to local governments is to raise performance levels, redistribute income, or provide localities with better revenue sources, this section is concerned with whether or not performance levels are low in Iowa, whether or not there are significant variations in needs and fiscal capacity among Iowa's counties, and whether or not the state tax structure is superior to the local tax structure. In other words, is there evidence of a need for state assistance to local governments in Iowa?

Performance Levels

The three principal categories of state-local public expenditures are education, highways, and public welfare. Since welfare expenditures are financed and administered for the most part by the state, it is unlikely that expenditures for this purpose would be low because of inadequate local tax resources. Therefore, our attention is focused on the level of education and highway expenditures.

The level of education expenditures. One cannot say whether public expenditures for a particular function are adequate unless there is some agreement on what criteria are appropriate for making

such a judgment and sufficient information is available to make the criteria operational. To make some judgment about the adequacy of local education expenditures we assume that at least one criterion is generally acceptable: at a minimum, Iowa's students ought to be given educational opportunities which are equal to the education opportunities of other students in Iowa and the rest of the nation.

In terms of current expenditures, Iowa is performing somewhat better than the rest of the nation. In a cross-section regression analysis of the 48 contiguous states for the years 1958-64, current education expenditures per student at the local level were regressed against time, per capita income, square miles per student (density), the per cent of the population in cities of 50,000 to 500,000 inhabitants, and the per cent of the population in cities having more than 2,500 inhabitants. There was a positive association between expenditures and all the independent variables except the per cent of population living in cities having 50,000 to 500,000 inhabitants (Table 3). These variables explained 78 per cent of the variation in current expenditures over the seven-year period.

Given the value of the independent variables for Iowa in 1958-1964, the regression equation predicts a level of current education expenditures below actual current education expenditures. The average residual, on a per student basis, was \$76 over the seven-year period, with no apparent trend (Table 3). In other words, Iowa was performing at a higher level in terms of per student current

expenditures than expected, given the factors which seem to explain the variation in expenditures among the states.

Table 3

VARIABLES EXPLAINING INTERSTATE LOCAL
EXPENDITURES: POOLED EXPENDITURES 1953-1964

	<u>Per cent variation explained</u>	<u>Time</u>	<u>Per capita income</u>	<u>Square miles per student</u>	<u>Per cent of population in cities 50,000- 500,000</u>	<u>Per cent of population in cities 2,500 and over</u>
Current expenditures per student	0.78	+	+	+	-	+
Capital expenditures per student	0.44	+	+	+		+

If one simply looks at current expenditures per pupil, expenditures in Iowa were just about equal to expenditures per pupil in the nation as a whole in 1963-1964 (Table 5). This has not always been the case. In 1961, for example, expenditures in Iowa were somewhat below the national average. Of the seven surrounding states, Iowa ranked in the middle in 1963-1964.

An analysis of capital expenditures for local schools indicates that Iowa is performing below what would be expected from the prediction equation. The independent variables used in the regression equation and their association are shown in Table 3. Actual capital expenditures are below the predicted values in every year but two. The average residual, in per student terms, is -\$15.40 (Table 4).

Table 4

ACTUAL AND PREDICTED
EDUCATION EXPENDITURES, IOWA: POOLED 1958-1964
(DOLLARS PER STUDENT)

	<u>Actual</u>	<u>Predicted</u>	<u>Residual</u>
Current expenditures per pupil	493.89	417.89	76.00
Capital expenditures per pupil	55.11	70.51	-15.40

Table 5

ESTIMATED CURRENT EXPENDITURES
PER PUPIL IN AVERAGE DAILY
ATTENDANCE IN PUBLIC ELEMENTARY
AND SECONDARY DAY SCHOOLS

<u>State</u>	<u>Current expenditure per pupil</u>
Minnesota	\$509
Wisconsin	498
Illinois	479
IOWA	456
Missouri	419
South Dakota	403
Nebraska	385
United States	455

Source: Digest of Educational Statistics,
United States Department of Health,
Education and Welfare, 1964 edition.

Whether Iowa's per student expenditures are equal to, greater, or less than the national average does not in itself prove that Iowa is doing as well as, better, or worse than the rest of the nation in terms of quality. It may be that it takes more expenditures to provide a given quality of education in Iowa. The fact that expenditures per pupil is not an adequate index of quality is illustrated by the following facts. Although there are a number of factors which affect the quality of education, the competency of teachers is certainly a major factor, and the more competent teachers command higher salaries. Of the seven states reported here, Iowa ranked fifth in terms of average annual salaries for teachers, exceeding Nebraska and Missouri. Nationally, average salaries for teachers were a little more than 12 per cent higher in the nation as a whole than in Iowa (Table 6).

Looking at the educational attainment of teachers in 1962-1963, 55.7 per cent of Iowa's elementary teachers had at least four years of college education (Table 7). Of the 33 states for which data are available, this compares to a high of 99.8 per cent for Oklahoma and a low of 26.5 per cent for South Dakota. More significantly, Iowa ranked 31st among the 33 states for which data are available.

Table 6

ESTIMATED AVERAGE ANNUAL SALARY
OF INSTRUCTIONAL STAFF IN PUBLIC
ELEMENTARY AND SECONDARY DAY SCHOOLS
1963-1964

<u>State</u>	<u>Average annual salary</u>
Illinois	\$6,810
Minnesota	6,300
Wisconsin	6,120
Missouri	5,626
IOWA	5,494
Nebraska	5,030
South Dakota	4,500
United States	6,164

Source: Digest of Education and Statistics,
United States Department of Health,
Education and Welfare, 1964 edition.

These facts should not be interpreted to mean that in terms of the quality of education, Iowa is in fact performing at levels below the national average. To determine Iowa's position relative to other states, more facts are needed, e.g., the number and quality of course offerings, library facilities, the achievement of students, etc. However, these facts do suggest that if the quality of education in Iowa is inferior relative to other states, it is not because of a failure to provide the same amount of resources as other states (on the average); rather it is because it takes more expenditures for a given quality of education. There

Table 7

ALL ELEMENTARY-SCHOOL TEACHERS IN SERVICE

<u>State</u>	<u>With at least 4 years of college</u>	<u>Rank of state</u>	<u>With less than 2 years of college</u>
Oklahoma	99.8%	1	---
Utah	99.2	2	*
Florida	97.9	3	0.1%
New Mexico	96.6	4	---
North Carolina	95.8	5	0.1
Colorado	95.1	6	0.1
Alaska	93.3	7.5	0.3
South Carolina	93.3	7.5	0.6
Missouri**	93.0	9	2.1
Connecticut	91.7	10.5	0.2
Louisiana	91.7	10.5	0.4
Georgia	90.0	12	*
Hawaii	89.9	13	---
Delaware	88.8	14	1.9
Kansas	88.5	15	---
Arkansas	88.4	16	0.2
Alabama	87.2	17	2.5
District of Columbia	86.5	18	0.7
Oregon	85.9	19	0.3
Kentucky	84.1	20	0.7
Maryland	80.3	21	3.3
Wisconsin	78.0	22	0.2
Tennessee	77.1	23	0.9
West Virginia	77.0	24.	2.4
Virginia**	73.1	25	---
Ohio	71.3	26	1.4
Minnesota	62.3	27	4.7
Idaho	61.4	28	0.1
Vermont	59.5	29	---
Maine	58.6	30	7.8
IOWA	55.7	31	4.0
Nebraska	42.9	32	11.7
South Dakota	26.5	33	5.6

*Less than 1/10 of 1 per cent.

**

**Data for 1962-1963. Data are not available in Arizona, California, Illinois, Indiana, Massachusetts, Michigan, Mississippi, Montana, Nevada, New Hampshire, New Jersey, New York, North Dakota, Pennsylvania, Rhode Island, Texas, Washington, and Wyoming.

Source: National Education Association, Teacher Supply and Demand in Public Schools, Research Report, 1964-R9, 1964, p. 21.

are several reasons why this might occur. We have already seen that it would not be attributable to higher teacher salaries. However, there may be factors which operate to require relatively more teachers in Iowa than in the United States as a whole. For example, the pupil-teacher ratio in Iowa has been somewhat lower than the rest of the nation,¹ and this may be due to a more dispersed population, more school districts, and/or attempts to upgrade quality. Nevertheless, the proportion of total current expenditures for instructional purposes has been somewhat lower in Iowa than the United States as a whole. On the other hand, the proportion of total current expenditures for administration, operation of plant, and other services (such as transportation) are somewhat higher in Iowa (Table 8). This again suggests that a dispersed population and the number of school districts may be important cost-determining factors. In this connection, it is interesting to note that Iowa had about 423 students per school district in 1961-1962, while for the United States the figure was 1,051.²

Comparing the educational opportunities of Iowa's students with students in the rest of the nation is not the only acceptable

¹In 1959 the teacher-pupil ratio for public secondary schools was 13.8 in Iowa and 22.7 in the United States (Statistical Abstract, 1963, p. 133).

²The number of school districts are from United States Department of Health, Education and Welfare, Digest of Educational Statistics, 1964 edition. Enrollment figures are for the fall of 1961 from Statistical Abstract, 1962.

Table 8

PER CENT OF TOTAL CURRENT PUBLIC ELEMENTARY AND
SECONDARY EDUCATION EXPENDITURES FOR VARIOUS FUNCTIONS:
UNITED STATES AND IOWA, 1961-1962

	<u>United States</u>	<u>Iowa</u>
Administration	4.4	6.2
Instruction	67.3	65.4
Operation of plant	8.6	9.8
Maintenance of plant	3.2	3.0
Fixed charges	7.2	5.2
Other services	3.0	9.2
Other programs	<u>1.3</u>	<u>1.2</u>
	100.0	100.0

Source: Computed from United States Department of Health, Education, and Welfare, Digest of Educational Statistics, 1964 edition.

critereion in judging the adequacy of education expenditures in the state. If we abstract from the income redistributive effects of an increase in education expenditures and evaluate capital expenditures¹ on the basis of their "efficiency," then some judgment must be made about the rates of return (increases in aggregate output and income) on alternative forms of private and public investment.

For the nation as a whole, the rate of return on education appears to be quite substantial (estimates are as high as 17 per cent) and "probably exceed the return to investment in private and in non-educational public expenditures."² Because of the lack of information, it is not known whether the same circumstances exist in Iowa or not. The national figures indicate, however, that growth potential is directly related to the quality of education, and one simply has to rely on intuitive judgments about whether the rate of return is higher in Iowa on this form of investment than on alternative forms of investment.

We cannot, of course, ignore the redistributive effects of an increase in education expenditures. It has its costs as well as its benefits.³ The benefits include whatever increase in

¹Expenditures on education are considered as a capital expenditure because of the effect of education on increases in output and income.

²Don Winkelman, Cost of Public Education in Iowa, Special Report No. 44, Agricultural and Home Economics Experiment Station, Cooperative Extension Service, Iowa State University, February, 1965, p. 9.

³One might also say that a failure to increase educational outlays has its costs as well as its benefits.

satisfactions accompanies an increase in educational opportunities. That is, some people will feel better off because educational opportunities are greater or better distributed; students may feel better off because of the inherent satisfactions derived from a better education and increased earning power; other persons may be better off because of the possibilities of a greater rate of growth. Against this must be balanced whatever loss of satisfaction accompanies an expansion of expenditures. Since economic resources are limited, an expansion in one area means a contraction or a reduced rate of expansion in the private sector or in the provision of other public goods. Those people who bear the cost of the reallocation of resources are not necessarily those who derive the benefits from it, or, at least, there is not a strict correspondence between costs and benefits received by individuals.

While educational opportunities may be favorable or unfavorable when compared to other states, this reveals nothing about the distribution of opportunities within the state. Even if expenditures or quality are adequate on the average, it may be necessary to raise the performance level in localities where educational opportunities are not adequate. If performance levels are not to fall in other localities, the state-wide average would have to increase.

In 1962, current expenditures per public school enrollee averaged \$408 among Iowa counties. The lowest expenditure was \$222,

and the highest was \$586. Twenty-six of the 99 counties exceeded the mean by more than one standard deviation.

Counties which exceeded mean current education expenditures by more than one standard deviation are noted in Table 9. Counties which exceeded mean median family income by more than one standard deviation are also shown. For 54 of the counties, educational expenditures and median family income fell within one standard deviation from the mean.

It is interesting to note that 11 of the 14 counties which fall below mean family income by more than one standard deviation have educational expenditures which are above or within one standard deviation from mean education expenditures. Eleven of the 16 counties which had median family incomes which were above the mean by more than one standard deviation had educational expenditures more than one standard deviation below the mean or within one standard deviation.

This indicates that educational expenditures tend to be independent of income levels. This is confirmed by regressing per student expenditures on income and other (cost-determinint) variables. Income is not a significant variable. The evidence is that cost-determining variables, such as population density, are more important and that low income counties attempt, on the average, to do as well as higher income counties. It also suggests that if quality is directly related to income, the higher income counties obtain a

Table 9

COUNTIES ABOVE (+) OR BELOW (-)
THE MEAN BY MORE THAN ONE STANDARD DEVIATION
FOR MEDIAN FAMILY INCOME AND CURRENT EXPENDITURES
PER PUBLIC SCHOOL ENROLLEE

	<u>Counties</u>	<u>Median family income (1960)</u>	<u>School expenditures per public school enrollee</u>
1	Adair*	-	
2	Adams**	-	+
3	Allamakee*	-	
4	Appanoose		
5	Audubon*	-	
6	Benton		
7	Black Hawk	-	-
8	Boone		-
9	Bremer		-
10	Buchanan		
11	Buena Vista		
12	Butler		+
13	Calhoun		
14	Carroll		+
15	Cass		
16	Cedar		
17	Cerro Gordo	+	+
18	Cherokee		
19	Chickasaw		
20	Clarke		
21	Clay		-
22	Clayton*	-	
23	Clinton**	+	
24	Crawford		
25	Dallas		
26	Davis		
27	Decatur	-	-
28	Delaware		
29	Des Moines**	+	
30	Dickinson		
31	Dubuque	+	
32	Emmett		
33	Fayette		
34	Floyd		
35	Franklin		
36	Fremont*	-	
37	Greene		+
38	Grundy		

Table 9 (cont.)

	<u>Counties</u>	<u>Median family income (1960)</u>	<u>School expenditures per public school enrollee</u>
39	Guthrie		
40	Hamilton		-
41	Hancock		
42	Hardin		
43	Harrison		
44	Henry		
45	Howard	-	-
46	Humboldt		+
47	Ida		
48	Iowa		+
49	Jackson		-
50	Jasper		
51	Jefferson		
52	Johnson		
53	Jones		
54	Keokuk		
55	Kossuth*	-	+
56	Lee**	+	
57	Linn**	+	
58	Louisa		
59	Lucas		
60	Lyon**	+	
61	Madison		-
62	Mahaska		
63	Marion		-
64	Marshall	+	+
65	Mills		
66	Mitchell		+
67	Monona		-
68	Monroe		
69	Montgomery		
70	Muscatine		
71	O'Brien		
72	Osceola*	-	
73	Page		
74	Palo Alto*	-	+
75	Plymouth		

Table 9 (cont.)

	<u>Counties</u>	<u>Median family income (1960)</u>	<u>School expenditures per public school enrollee</u>
76	Pocahontas		
77	Polk**	+	
78	Pottawattamie	+	-
79	Poweshiek		
80	Ringgold*	-	+
81	Sac		
82	Scott**	+	
83	Shelby		
84	Sioux		
85	Story**	+	
86	Tama		
87	Taylor*	-	
88	Union		
89	Van Buren		
90	Wapello**	+	
91	Warren**	+	
92	Washington		
93	Wayne	+	+
94	Webster		
95	Winnebago		
96	Winneshiek		
97	Woodbury**	+	
98	Worth		+
99	Wright		

* Median family income below the mean by more than one standard deviation and school expenditures above or within one standard deviation.

** Median family income above the mean by more than one standard deviation and expenditures below or within one standard deviation.

higher quality of education for a given level of expenditures than do low income counties (per student expenditures tend to fall with urbanization). Some quality may have to be sacrificed in lower income (more rural) counties because per unit costs are higher.

A policy of equalizing educational opportunities becomes a very difficult task in light of the fact that differences in expenditures among counties may not reflect differences in quality. This is not to say that an increase in expenditures would not raise quality; it simply means that it is difficult to determine, on the basis of inter-county expenditures comparisons, where expenditures ought to be allocated to reduce inequalities in educational opportunities.

Highway expenditures. Is there evidence that local governments are underperforming in the area of highways because of inadequate local resources or by failing to account for the spill-over effects of highway expenditures? In the 1960 Iowa highway study by the Public Administration Service, it was noted that Iowa's needs exceeded expected revenues by an annual amount of \$22 million a year over a twenty-year period, with the "principal deficit in the program for the support of (the) local county road network of almost 59,000 miles of roads, over 50 per cent of the total, which carry less than 5 per cent of the total traffic of the state."¹ The needs of

¹Public Administration Service, Financing Iowa's Highways, 1960, p. 69.

the county road systems were estimated at \$392 million over a 20-year period.

It should be pointed out that the "needs" of the highway system are engineering needs based on traffic volume, characteristics of traffic, relevant population data, etc. and are therefore only a rough indication of economic needs. That is, it should not be inferred that the increased benefits which might be derived from increased expenditures on highways are greater than the increased benefits which flow from the same amount of expenditure for private or other public purposes. Resources have alternative uses, and other social and economic "needs" have to be considered as well. Indeed, the 1960 highway study suggested that legislators "take cognizance of the relative demands of the several other state programs before they raise additional revenues for road purposes."¹ Further, the report went on to note that "It is considered that this (the county road system) is a general obligation which should be borne by the beneficiaries of the 58,000 mile local county road system. These are generally the rural residents who use them to get to and from their properties."²

With respect to the issue of distribution of funds to the various units of government, the highway fiscal study

¹Ibid., p. 85.

²Ibid., p. 84.

recommended that a higher relative share of revenue be allocated to the state and cities and towns, and a lower relative share be allocated to counties. It was recommended that 55 per cent be allocated to the state, 30 per cent to the counties, and 15 per cent to cities and towns. At the time this recommendation compared with a 42-50-8 per cent distribution of the Road Use Tax Fund to the state, counties, and cities and towns, respectively, and a 51-42-7 per cent distribution, if account is taken of the then special tax of 2 cents per gallon on motor vehicle fuel. Funds from the special 2-cent tax were allocated to the primary road fund. Currently the Road Use Tax Fund is allocated to the state, counties, and cities and towns on a 47-40-13 per cent basis, although a higher amount will be allocated to the state with the increase in the motor fuels tax by the 61st General Assembly.

At the present time, Iowa has one of the most extensive highway networks in the country. Only seven states have more road mileage than Iowa, and among these are Texas and California-- states which encompass a large area. Iowa accounts for 3.1 per cent of the total highway mileage in the United States and takes up 1.6 per cent of the land area. To maintain and upgrade such an extensive system requires substantial resources, and so long as revenue distribution formulae are not adequately related to

need, which seems to be the case, additional revenues will have to be raised to finance needs which follow population shifts, the location of economic activity, and changing travel patterns. This apparently, is the course Iowa has followed with the recent increase in the motor fuels and vehicle taxes and the stipulation that the increase in revenue from this source be allocated to the Primary Road Fund. The alternative would have been to allocate existing resources more efficiently.

Variations in Need and Fiscal Capacity

The second reason for state aid is to reduce variations in the gap between needs and fiscal capacity among localities. Need is measured here by population age structure, population density, and population change. The public needs of a community increase as it has more young people to educate, and more young and old people who have welfare needs. There is evidence that the per capita cost of providing public services rises with an increase in population sparsity. Population increases may require greater capital outlays, and a loss of population may require spreading certain fixed services over fewer people.¹

Possible indices of fiscal capacity include median family income, per capita market property values, and per capita personal

¹These indices are obviously not all-inclusive. They are only meant to be illustrative.

income. Median family income by county is available from the Census only for 1960. The shortcoming of this variable is that it fails to account for non-money income (e.g., income in kind). Per capita market property values by county are available for 1962 and later dates. These data suffer from a lack of completely satisfactory assessment sales ratios for commercial and industrial property. The personal income data are estimates of the Bureau of Business and Economic Research, University of Iowa, and are subject to error because of certain technical problems of income estimation.

The correlation between median family income and per capita market property values is $-.22$, and the coefficient for per capita personal income and property values is $.11$. The low correlation between income and property values is attributable to either (1) assessment--sales ratios which do not reflect the true value of industrial and commercial property, or (2) a relatively lower earning capability of agricultural property relative to other property. If the assessment--sales ratios for industrial and commercial property are, in fact, lower than those which were used to adjust assessed valuations upward, then the market value of industrial and commercial property used here is lower than it should be. An upward adjustment would probably show a higher, positive correlation between property values and income since more industrial and commercial property is located in more urban,

higher income areas. If this is the case, income and property values could be substitutes, to a degree, as measures of fiscal capacity.

On the other hand, if there is, in fact, a low correlation between property values and income, this, as we have seen, could be explained by a relatively lower earning capability of agricultural property. More rural counties are generally poorer in money income terms. The correlation coefficient between median family income and the per cent of the population living in rural areas is $-.56$. If there is little relationship between property and income, then income rather than property is the best measure of fiscal capacity because, in the long run, taxes must be paid out of income.

Of central importance here is the variation among counties in needs relative to fiscal capacity. If the indices of need and fiscal capacity are inversely related, or if the indices of need and fiscal capacity are unrelated, then the gap between needs and fiscal capacity rises as fiscal capacity falls. In the first case, needs rise as fiscal capacity falls, and in the latter case, needs remain constant as fiscal capacity falls. In either case the gap between needs and fiscal capacity rises, although the change in the gap is more severe when needs and fiscal capacity are inversely related. The mean and standard deviation of median family income, indices of need, and effort are shown in Table 10. Counties which

are within one standard deviation from the mean will be considered as having "average" needs or "average" income levels. Counties which are above the mean by more than one standard deviation will be considered as having "above-average" income levels or needs, and counties will be considered "below average" if the observations are below the mean by more than one standard deviation.¹ (Table 11)

Table 10

NEEDS, FISCAL CAPACITY, AND EFFORT:
THE MEAN AND STANDARD DEVIATIONS

	<u>Mean</u>	<u>S. D.</u>	<u>No. deviations by more than one S. D.</u>
Median family income	\$4,868	\$757	30
Per cent of population age 0-19	38.0	2.4	33
Per cent of population age 65 and over	13.2	2.2	28
Square miles per person	.031	.013	29
Taxes as a per cent of personal income	7.0	1.4	34

Of interest here is the fact that in a number of cases, need and fiscal capacity (as measured by median family income) are not directly related. That is, needs do not necessarily increase (decrease) in proportion to increases (decreases) in fiscal capacity. Thirteen counties which have "below-average" income have "average"

¹The exception here is population change. See footnote to Table 2.

Table 11

COUNTIES ABOVE (+) OR BELOW (-)
THE MEAN BY MORE THAN ONE STANDARD DEVIATION
FOR MEDIAN FAMILY INCOME AND INDICES OF NEED

Counties	(1) Median family income (1960)	(2) Per cent population 0-19 years (1960)	(3) Per cent population 65 years & over (1960)	(4) Sq. mi. per person density (1960)	(5) Projected per cent population change (1960-1970)
1 Adair*	-	-		+	-
2 Adams*	-			+	-
3 Allamakee*	-	+			
4 Appanoose		-	+		-
5 Audubon*	-				
6 Benton					
7 Black Hawk	-	+	-	-	+
8 Boone		-			
9 Bremer					
10 Buchanan		+			
11 Buena Vista					
12 Butler					
13 Calhoun					
14 Carroll		+			
15 Cass		-			
16 Cedar					
17 Cerro Gordo**	+			-	
18 Cherokee					
19 Chickasaw					
20 Clarke		-	-	+	-
21 Clay					
22 Clayton*	-				
23 Clinton**	-			-	+
24 Crawford					
25 Dallas					
26 Davis				+	
27 Decatur*	-		+	+	-
28 Delaware		+			
29 Des Moines**	+			-	
30 Dickinson					
31 Dubuque**	+	+	-	-	+
32 Emmet		+			
33 Fayette					
34 Floyd					
35 Franklin					
36 Fremont*	-	-		+	-
37 Greene					
38 Grundy					
39 Guthrie			+		-
40 Hamilton					
41 Hancock					
42 Hardin					

Table 11 (cont.)

<u>Counties</u>	(1) Median family income (1960)	(2) Per cent population 0-19 years (1960)	(3) Per cent population 65 years & over (1960)	(4) Sq. mi. per person density (1960)	(5) Projected per cent population change (1960-1970)
43 Harrison					-
44 Henry		-	+		
45 Howard*	-				
46 Humboldt					
47 Ida					
48 Iowa					
49 Jackson					+
50 Jasper					
51 Jefferson					
52 Johnson			-	-	+
53 Jones					
54 Keokuk			+		
55 Kossuth*	-	+	-		
56 Lee**	+			-	
57 Linn**	+		-	-	+
58 Louisa					
59 Lucas		-	+		
60 Lyon	+	+	-		
61 Madison			+	+	
62 Mahaska					
63 Marion		-			
64 Marshall**	+			-	
65 Mills					
66 Mitchell		+			
67 Monona				+	-
68 Monroe			+		
69 Montgomery		-	+		
70 Muscatine				-	
71 O'Brien					
72 Osceola*	-	+	-		
73 Page		-	+		-
74 Palo Alto*	-	+			
75 Plymouth		+			
76 Pocahontas					
77 Polk**	+		-	-	+
78 Pottawattamie	+	+	-	-	+
79 Poweshiek					
80 Ringgold*	-	-		+	-
81 Sac			+		
82 Scott**	+			-	+
83 Shelby		+	-		

Table 11 (cont.)

<u>Counties</u>	(1) Median family income (1960)	(2) Per cent population 0-19 years (1960)	(3) Per cent population 65 years & over (1960)	(4) Sq. mi. per person density (1960)	(5) Projected per cent population change (1960-1970)
84 Sioux		+			
85 Story**	+		-	-	+
86 Tama			-		
87 Taylor*	-	-		+	-
88 Union		-	+		-
89 Van Buren		-	+	+	
90 Wapello **	+		+	-	
91 Warren	+	+			+
92 Washington					
93 Wayne	+	-	+	+	-
94 Webster				-	
95 Winnebago					
96 Winneshiek					
97 Woodbury**	+			-	
98 Worth					
99 Wright					

*Median family income more than one standard deviation below the mean and at least three indices of need one standard deviation above the mean or within one S. D.

**Median family income more than one standard deviation above the mean and at least three indices of need more than one standard deviation below the mean or within one S. D.

In columns (2), (3), and (4), if a county has a plus sign, the "need" is relatively high, and if the sign is negative, "need" is relatively low.

In column (5) either a plus or minus sign indicates a relatively high need because population reductions as well as increases may exert an upward pressure on per capita public services.

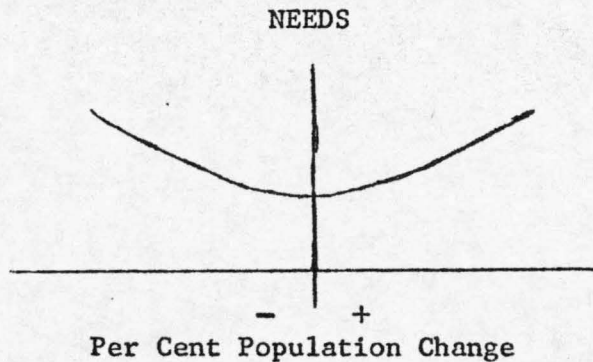
or "above-average" needs in at least three categories. On the other hand, there are 13 counties which have "above-average" income and "average" or "below-average" needs. For the most part, the remaining counties have "average" incomes and "average" needs.

A similar picture emerges if simple correlations are computed between median family income and indices of need. There is very little correlation between the school-age population and median family income, or between per capita personal income and the school-age population, indicating that educational needs, as they are determined by the school-age population, are independent of fiscal capacity (if it is assumed that fiscal capacity is measured by income).

The correlation between the proportion of the population 65 years of age and over and the median family income is negative ($r = -.47$), meaning that needs as they are measured by this variable rise, on the average, as incomes fall. Furthermore, incomes rise as population density rises. Hence, if the per unit costs of providing a given service level fall as population density increases, then there is once again an inverse relationship between an index of need and fiscal capacity.

There is a fairly high correlation between population change and median family income ($r = .77$), meaning that counties with higher population growth have higher incomes, and counties with slower population growth and higher population losses have lower

incomes. The needs of localities with population growth of a certain magnitude may be just as great as localities with a population loss of the same magnitude. Those counties with higher population growth must make greater capital and variable outlays, and it would seem that the higher the population growth the greater the adjustment must be. For counties which are having population losses, certain fixed outlays and some variable outlays must continue to be made, and it might be argued that the higher is the population loss the more severe is the adjustment in public service outlays. The relationship between needs and population change might appear as depicted below. While the relationship



may not be symmetrical, it is probably in the general direction as indicated. In this case, needs rise as fiscal capacity rises or falls.

There is also evidence that counties with low fiscal capacity tend to make a greater effort to provide public services. Tax collections as a per cent of personal income are inversely

correlated with per capita personal income ($r = -.77$) and median family income ($r = -.59$). This suggests that the costs of providing services of a given quality are higher for counties which are more rural and have lower population density, or that rural areas attempt to maintain quality in the face of low incomes.

Attributes of State and Local Tax Structures

A third reason for state aid is the superior attributes of state tax systems. The purpose of this section is to determine whether this is the case in Iowa.

One desirable feature of a tax system is that revenues increase with increases in the cost of providing existing government services--increases which are attributable to rising prices, rising wages, population shifts, etc. That is, it is assumed that services which are currently provided are generally acceptable (education, highways, welfare, police protection, etc.) and as the cost of these services rises for one reason or another, revenues ought to be forthcoming without tax rate changes to finance them. With this assumption, an increase in the quality of services or the addition of new services would be the only occasion for raising tax rates. One way of determining how responsive the various sources of revenue are to growth is by comparing their income elasticity coefficients.¹

¹The income elasticity coefficient compares the average rate of change in some variable (in this case, revenue) with the average rate of change of income. The coefficient is computed by dividing the rate of change in revenue by the rate of change in income. If the coefficient is less than one, income is increasing at a faster rate than revenues, and vice versa if the coefficient is greater than one.

The property tax, which is the principal source of revenue at the local level, is relatively inelastic with respect to income. One study covering the period 1910-1960 found the elasticity coefficient of the property tax in Iowa to be 0.86.¹ Some of the change in the property tax collections over this period was due to increases in millage rate rather than increases in the tax base (i.e., increases in the value of existing property or property additions). Another study showed that in the period 1956-1961 the elasticity coefficient of the property tax base was between 0.4 and 0.5, depending on the base used.² In contrast, the coefficient for the United States as a whole was greater than one. The lower coefficient for Iowa may be attributable to negligible population growth and a slower rate of industrialization and urbanization than the nation as a whole. Both of these factors imply a lesser rate of residential, commercial, and industrial property additions, as well as a slower growth in the demand for existing property. Further, employment and income are falling in some areas of the state, so that rising property values in growing and prosperous areas of the state are offset by falling or stagnant values elsewhere.

¹Deil S. Wright and Robert M. Marker, "A Half-Century of Local Finances: The Case of Iowa," National Tax Journal, Vol XVII, No. 3, pp. 274-291.

²The bases used were the assessed value of all property, assessed value of locally assessed real property, and the market value of locally assessed property. See B. Bridges, "Income Elasticity of the Property Tax Base," National Tax Journal, Vol. XVII, No. 3.

The state's over-all tax system is more elastic than the local tax structure. The income elasticity coefficient for the over-all tax structure was 1.15 for the period 1954-1965. The elasticity coefficient for the major taxes is shown in Table 12. Of the major taxes, the sales tax, motor fuel tax, motor vehicle license, and cigarette taxes are inelastic. The income tax, on the other hand, is highly elastic.

In terms of equity, the over-all state tax structure (state and local) is regressive, with the property tax as a principal source of regressivity. The state's income tax is mildly progressive; the sales tax is mildly regressive; and the sum of all "other" taxes is more regressive than the sales tax.¹ Some of the taxes used by the state, therefore, offer some opportunity for lessening over-all regression.

To lessen the reliance on the property tax and provide localities with alternative sources of revenue, tax levies and collections on behalf of local governments by the state government offer certain advantages compared to extending the authority of local governments to adopt non-property taxes. The possible advantages include a lower cost of collection, uniform administration, an identical tax base, greater compliance, and a larger yield.

¹Research Memorandum II.

Table 12

ELASTICITY COEFFICIENT OF
MAJOR REVENUE SOURCES OF
THE STATE GOVERNMENT, 1954-1965

<u>Tax</u>	<u>Coefficient</u>	<u>Yield, 1965</u> <u>(millions of dollars)</u>
Sales	0.71	77.6
Personal income	2.09	57.4
Motor fuels	0.51	65.7
Motor vehicle license	0.67	54.3
Cigarettes	0.55	15.2
Beer	0.07	3.4
Corporate income	1.09	5.9
Inheritance	1.62	10.0
Use	1.94	17.3
Liquor store profits	1.31	11.9
Ten per cent allocation of liquor store sales to local governments	0.69	5.2
Total tax and non-tax revenues ^a	1.15	345.1
Total appropriable tax revenues ^b	1.22	217.0

^aThis is not the same figure of general revenue published by the Compendium of State Government Finances. It does not include, for example, federal revenues.

^bExcludes motor fuels tax and motor vehicle license. Includes minor taxes not shown above and non-tax revenue such as fees, interest, etc.

IV. INTERGOVERNMENTAL REVENUE FLOWS IN IOWA

The first part of this study discussed the reasons for, and problems involved in, rendering various forms of state assistance to local government. Given the rationale for state assistance to local governments discussed in Part I, the second part was concerned with whether conditions existed in Iowa which justified state assistance to local government. This part analyzes the actual revenue flows in Iowa and the extent to which they deal with the problems discussed in Part I. There is first an analysis of general trends in revenue flows and then a description and analysis of specific state-local programs.

An Overview of Revenue Flows

From 1954 to 1965, state intergovernmental expenditures in Iowa increased from \$87 million to \$149 million, about a 70 per cent increase. In 1965, three categories of expenditures accounted for 97 per cent of state intergovernmental expenditures: highways (38 per cent), education (35 per cent), and general support (24 per cent) (Table 13). General local government support includes such items as the homestead credit, military credit and the distribution of part of liquor store sales.

Figures on intergovernmental revenue flows from the state government to the local government are misleading because they do

Table 13

STATE TO LOCAL INTERGOVERNMENTAL EXPENDITURES
IOWA, 1954-1965
(THOUSANDS OF DOLLARS)

<u>Year</u>	<u>Total</u>	<u>Education</u>	<u>Highways</u>	<u>Health and hospitals</u>	<u>General local support</u>	<u>Other</u>
1954	87,127	26,119	31,730	1,155	27,575	548
1955	90,437	27,369	33,754	661	28,136	517
1956	106,697	35,250	41,981	737	28,236	493
1957	105,487	37,065	38,390	807	28,716	509
1958	108,762	36,368	41,373	487	30,032	502
1959	111,058	38,232	40,920	713	30,677	516
1960	112,749	38,507	40,470	776	31,737	1,259
1961	119,542	41,506	43,592	1,370	32,280	794
1962	123,989	43,935	45,613	717	33,007	717
1963	138,127	49,253	52,614	1,063	33,751	1,446
1964	137,833	47,093	54,054	888	34,163	1,635
1965	148,629	52,232	56,777	1,048	35,337	3,235

Source: Compendium of State Governmental Finances.

Table 14

INTERGOVERNMENTAL REVENUE FROM LOCAL GOVERNMENT TO STATE GOVERNMENT,
IOWA, 1954-1965
(THOUSANDS OF DOLLARS)

<u>Year</u>	<u>Total</u>	<u>Welfare</u>	<u>Highways</u>	<u>Health and hospitals</u>	<u>Education</u>	<u>Other</u>
1954	11,645	3,034	-	8,283	-	328
1955	11,356	2,980	-	8,095	-	281
1956	12,861	2,963	-	9,531	-	367
1957	14,594	3,337	1,129	9,802	-	326
1958	15,883	3,543	1,106	10,913	-	321
1959	29,710	3,692	14,398	11,260	-	360
1960	26,015	3,908	9,092	12,581	78	356
1961	27,351	4,598	9,471	12,776	81	425
1962	19,647	4,319	2,504	12,338	78	408
1963	23,148	5,298	3,401	13,929	90	430
1964	25,499	5,436	6,018	13,509	56	480
1965	26,802	6,646	7,817	11,679	79	521

Source: Compendium of State Governmental Finances.

not reveal the full extent to which responsibility for financing or carrying on governmental activities has been lodged with the state government. In the first place, it is necessary to make an adjustment for intergovernmental revenue flows from the local governments to the state government. In 1965, this amounted to \$26.8 million, up from \$11.6 million in 1954. In 1965, these funds went for the support of health and hospitals (44 per cent), highways (29 per cent), and public welfare (25 per cent) (Table 14). Support for highways began in 1957, and has ranged from \$1.1 million in that year to \$14.4 million in 1959. Support for public welfare increased from \$3 million to \$6.6 million over the decade, and local support for health and hospitals rose from \$8.3 million to \$11.7 million in 1965.

If revenue flows from the local governments to the state government are subtracted from the state government's intergovernmental expenditures, state support to local governments is reduced from \$149 million to less than \$122 million in 1965. While this adjustment gives a better indication of the extent to which the state government supports local governments, it is still misleading, particularly when compared to the amount of state aid to local governments by other states. To make any meaningful inferences about the relative importance of state aid, it is necessary to know something about the allocation of responsibility between the state and local governments for carrying out particular government functions. State aid for a particular function may be negligible in some states because the

state governments have direct responsibility for carrying out that activity. For example, one of the areas in which a division of responsibility between units of government makes a considerable difference is public welfare. In a number of states, including Iowa, the local governments play a minimal role in administering and financing the aid programs under the Social Security Act, while in other states, local governments receive state aid for carrying out these programs.

About the only category of state aid for which it is possible to make interstate comparisons is state aid to education. None of the state governments in the Plains region made direct expenditures for local schools in 1965, and of the other states which made direct expenditures the sums are, on the whole, minor when compared to total education expenditures in the states. In 1965, Iowa's per capita state aid expenditures for education amounted to \$18.92, while the weighted average for the Plains states was \$30.60 and the average for the United States was \$43.27.¹

While total intergovernmental expenditure figures cannot be used to make meaningful inferences about the extent to which the state government supports local public services (with aid, or by assuming direct responsibility for some functions), it is possible to determine the degree of reliance on the different levels of

¹United States Department of Commerce, Compendium of State Government Finances, 1965.

government by comparing the relative amount of total revenue each raises. In general, the more revenue the state government raises, the more local governments are relieved of the financial responsibility for government functions. Other things equal, the higher the state aid and/or the more direct responsibility states assume for government functions, the higher the relative amount of revenue raised by state governments.

Currently, there is more reliance on local governments to support total government services in Iowa than in the United States as a whole. In 1964, the local governments raised 49.9 per cent of total general revenue, whereas for the United States the corresponding figure was 46.1 per cent. The state government in Iowa raised 36.7 per cent of total general revenue, whereas state governments as a whole contributed 41.2 per cent to total general revenue. The federal government accounted for the remaining revenue--13.3 per cent in Iowa and 14.6 per cent for all states (Table 15).

Since 1958, there has been an increase in the reliance on local governments in Iowa to support government services. The increase occurred in 1961, but there is no apparent trend since then. At the same time, there has been a slight decline in the relative amount of revenue raised by the state government. On the other hand, for the states as a whole, there has been a gradual reduction in the relative amount of revenue

raised by local governments, while the amount contributed by state governments has remained about the same. The difference is accounted for by a somewhat larger share of federal revenue since 1958.

Table 15

PER CENT OF GENERAL REVENUE
ORIGINATING WITH LOCAL GOVERNMENTS

<u>Year</u>	<u>Iowa</u>	<u>United States</u>
1958	47.7	47.1
1959	46.6	45.4
1960	46.7	45.9
1961	51.9	47.9
1962	51.1	47.6
1963	51.5	47.6
1964	49.9	46.1

Source: United States Department of Commerce,
Governmental Finances.

School Aid

Description of aid programs.¹ The sources of state aid to local schools and the present amount of funds annually appropriated for each purpose include:

¹A general description of the school aid programs is included in School Business (Revised Edition), Iowa State Department of Public Instruction, 1965, pp. 29-31.

1. General aid, \$33.5 million
2. Supplemental aid, \$4 million
3. Transportation aid, \$4 million
4. Special education aid, \$2.5 million
5. Vocational aid, \$2.4 million
6. Mining camp aid, \$55 thousand
7. Emergency aid, \$200 thousand
8. Driver education aid, \$1.2 million

In order to qualify for general aid, a school district must levy 15 mills for the General Fund.¹ The distribution of general aid is on a per pupil basis, and the amount of aid varies with the general class level of students.²

A school district receives supplemental aid if it has levied at least 15 mills for the General Fund, and if it cannot raise \$120

¹Expenditures from the General Fund cover such items as administrative and instructional costs, operation and maintenance, and the purchase of equipment.

²More specifically, the aid formulae are:

- a. 17 cents per day per elementary pupil
- b. 20 cents per day per high school pupil
- c. \$1 per day per resident junior college student plus the full time equivalent of resident students carrying less than 12 semester hours.
- d. \$2.25 per day per non-resident junior college student plus the full-time equivalent of non-resident students carrying less than 12 semester hours.
- e. \$1.30 per day per pupil to a district which pays tuition to an area vocational technical school.
- f. \$1.50 per day per student in an approved area vocational technical program. The students must have graduated from high school or be over the age of 21.

per elementary pupil and \$170 per high school pupil with a levy of 10 mills in districts without high schools or 15 mills in districts with high schools.¹ The amount of aid allocated to a district is determined by adding \$170 times the number of high school students and \$120 times the number of elementary students, and subtracting from this sum the proceeds of the 10 or 15 mill levy.

Transportation aid is allocated on the basis of \$30 per pupil per year transported by bus, and \$23 per pupil per year when bus transportation is not practicable and approved special transportation is provided (e.g., common carrier). The law specifies the circumstances which require local schools to provide transportation.

A school district which has an approved program for educating handicapped children is entitled to receive special education aid in the amount that the cost of educating handicapped children exceeds the cost of educating students in the regular curriculum.

A school district which maintains an approved vocational education program is entitled to reimbursement for one-half the expenditures for the salaries and travel of vocational teachers. Aid for this purpose comes from both state and federal funds.

The distribution of mining camp aid is at the discretion of the state superintendent of instruction. It is intended to be distributed to mining camp areas which have a low assessed valuation.

¹These levies are exclusive of the levy for the school house fund, which covers expenditures for construction, repairs, improvements, sites, principal and interest on bonded indebtedness, and the rental of buildings.

Emergency aid is allocated to districts which cannot maintain "reasonable standards" without levying a tax in excess of 100 mills, and is allocated at the discretion of the state superintendent of instruction.

Driver education aid is allocated in an amount not to exceed \$30 for each pupil who successfully completes a driver education course. School districts are required to offer or make available a course in driver education.

In all cases, if the appropriations are insufficient to cover the total claims for aid the funds are pro-rated, i.e., the aid each district applies for is multiplied by the ratio of appropriations to the total claims of all districts.

The effect of school aid on performance levels. The only school aid programs which may stimulate school expenditures for specific functions are special education aid and vocational aid. If this is one of the purposes of these aid programs, an implicit assumption is that these functions ought to be encouraged but they are not important enough in the total scheme of things to require all districts, or at least districts which "need" such programs, to offer or make them available. While these stimulative aids may encourage school districts to undertake or expand special and vocational education programs, this does not mean that either total education expenditures or total state and local expenditures will increase by the amount of the increases in expenditures on

special or vocational education. Stimulative aid programs may instead induce a substitution of stimulated functions for other educational programs, or induce a substitution of educational expenditures for other (non-educational) government services.

Transportation aid and driver education aid are not stimulative aid programs because school districts are required by law to provide these services (in the case of transportation, school districts are required to provide this service under specified circumstances).

The other forms of aid--general aid, supplemental aid, mining camp aid, and emergency aid--differ from the aid programs discussed above in that there would be no tendency to substitute one educational program for another. On the other hand, these aids may either cause educational expenditures to be higher or property taxes to be lower. If the aids induce an increase in educational expenditures, other public expenditures may in turn be lower.

The relation of school aid to needs, fiscal capacity, and effort.

Before discussing the implications of the aid formulae in terms of need, fiscal capacity and effort, it is necessary, perhaps, to be reminded that need refers to variations in the cost of providing a given level of services. Total needs or costs will vary with the number of students to be educated and factors which affect per unit (say, per student) costs.

Nearly all the school aid formulae take some account of variations in the total cost of providing educational services. General aid, supplemental aid, transportation aid, and driver education aid are all distributed on a per pupil basis.¹ In addition, some of the aid programs take into account variations in per unit cost. The formula for distributing transportation aid recognizes that it is more costly to transport children by school bus than, say, common carrier. The formula is not geared to variations in per unit cost of transporting students among school districts providing the same type of transportation. Such variations in cost may or may not be significant.

Special educational aid is designed to cover whatever extra costs are associated with special education, and as such varies directly with per unit cost. On the other hand, the expenses of vocational education are only partially covered by state funds, but that portion which is covered varies with the unit cost of providing this service to the extent per unit cost varies with teachers' salaries. So long as the cost of providing driver education per student varies among districts, this form of aid is related to per unit cost up to the maximum amount of aid per student. Where the cost of driver education per student is in excess of \$30, the aid ceases to be related to per unit cost.

¹In addition, supplemental aid takes into account assessed property valuation.

The general aid formula takes into account variations in per unit cost of instruction between grade levels (i.e., between elementary schools and high schools), but it does not take into account variations in per unit cost of elementary or high school education among school districts--variations which may be caused by a rapid growth in enrollment, size of district, population density, etc.

The only forms of aid which attempt to relate aid to fiscal capacity are supplemental aid and mining camp aid. The formula for supplemental aid is based on the assumption that assessed valuation is a measure of fiscal capacity. This assumption is clearly invalid for two reasons. In the first place, the ratio of assessed valuation to market value may vary considerably among districts. Consequently, two districts which have the same per capita tax capacity (as measured by market values) and the same number of students can receive different amounts of aid. But even if the ratio of assessed valuation were the same for all districts, assessed valuation would not be a completely satisfactory measure of capacity. Since taxes are paid out of income, a more complete measure of capacity would include the level and distribution of income.

General aid and supplemental aid also attempt to induce a minimum effort on the part of school districts by requiring a 15 mill levy for the General Fund. However, the levy is on assessed

valuation so that the ratio of tax collections to market values is uneven and inequitable in terms of that objective. In other words, the "minimum" is not the same for all communities.

The Agricultural Land Tax Credit

Description of the credit. The agricultural land tax credit is applied to agricultural land of ten acres or more lying in school districts where the general school fund levy exceeds 15 mills. The amount of credit allocated to a farmer is equal to the millage rate in excess of 15 mills times the assessed valuation of farm property. If total appropriations for the agricultural land tax credit are insufficient to cover all claims, the credit allocated to each school district will be equal to its claims times the ratio of ~~total~~ total claims in the state to total appropriations. The annual appropriation for this purpose is currently \$15 million.

The credit and performance levels. The purpose of the agricultural land tax credit was to facilitate the merger of urban and rural school districts. That is, it was felt that such mergers were resisted by the rural population because the value of property per student was higher for farmers than the population living in towns and cities. Thus, farmers would be paying more to educate children than would urban dwellers.

To the extent that the quality of education depends on school reorganization, and to the extent that the agricultural land tax credit has facilitated reorganization, the over-all performance

level of education is higher. However, whether the land tax credit has had a significant effect on school reorganization is open to question. Industrialization, by reducing the rural-urban disparities in property values per student, has undoubtedly had some impact on reorganization as well. Further, given the allocation formula for the land tax credit, there is considerable uncertainty about how much farmers will benefit from the credit from time to time. Appropriations in recent times have not been sufficient to pay the full amount of claims in excess of the 15 mill levy for the school general fund. It might be argued, of course, that the 15 mill ceiling is too low anyway, but if this is the case it ought to be made explicit. In any case, uncertainties about future claims and appropriations cannot have served as the best inducement to school reorganization. Even where school reorganization has been successfully undertaken, if decisions about increases in education expenditures are constrained by real or imagined tax inequities between the farm and non-farm population, uncertainties by decision-makers about the future course of appropriations and total claims may act to keep expenditures below what is generally regarded as desirable. An increase in educational expenditures in a given time period may or may not be partially financed by state funds.

Needs and fiscal capacity. The agricultural land tax credit is related to need (variations in cost) if it costs more to educate

students in predominantly agricultural communities than in urban communities. Per unit cost may diminish with a consolidation of rural and urban communities but, nevertheless, per unit cost may still be greater in predominantly agricultural districts.

The aid is inversely related to fiscal capacity if rural property is less of an index of fiscal capacity than urban property. In general, this is the case. That is, in general, more property is associated with a given level of farm income than with the same income of urban dwellers. It is quite possible that per capita property values in a predominantly agricultural community are higher than the per capita property values of urban communities, and at the same time for per capita income in agricultural communities to be lower.

The distribution of the credit among rural communities may be directly or inversely related to fiscal capacity. Because the credit is equal to assessed valuation times the millage rate in excess of 15 mills (for the general fund), wealthier agricultural communities would have a higher assessed valuation than poorer communities and would therefore receive more credit for a given millage rate. On the other hand, the lower property values of poorer communities may have a higher millage rate to finance a given level of education. The product of the millage rate over 15 mills and assessed valuation could conceivably be the same in both communities.

The Homestead Credit

Description and rationale. The homestead credit is equal to an amount not to exceed 25 mills on the assessed valuation of eligible property up to \$2,500. The annual appropriation to finance the homestead credit is currently \$30.7 million.

The original purpose of the homestead credit was to give property tax relief to homeowners who had great difficulty in paying their taxes during the depression of the 1930's. The rationale may still be to give homeowners property tax relief, in which case it must be assumed that the state tax system is in some way superior to the property tax. Proponents of the credit have also argued that it promotes home ownership, and that this in turn stimulates the construction industry and expands the tax base. It is highly questionable that the credit has this effect when the amount of credit (the maximum is \$62.50 per year) is compared with the many other factors affecting the choice to rent or purchase a home. Even if home ownership is encouraged, the construction of rental dwellings would fall (or increase at a slower rate) and the net effect of the credit on total construction would be uncertain.

The homestead credit does reduce the regressivity of the property tax. Once the maximum credit is reached, the ratio of credit received to the value of property declines as the value of property rises. However, if the property tax

is shifted from landlords to tenants, the homestead credit benefits the homeowner at the expense of the people who rent. In this case, tenants receive no direct benefit from the credit, and they must pay higher state taxes or forego some government services in order to finance the credit.

Performance levels, need, and fiscal capacity. The homestead credit is obviously not intended to raise local performance levels. Furthermore, the homestead credit is not explicitly related to need. The needs of communities which have relatively more people who rent may be as great or greater than communities with relatively more homeowners.

Whether the aid is related to fiscal capacity depends on a number of considerations. On the one hand, poorer communities are likely to have fewer homeowners than wealthier communities and would, therefore, receive less aid than wealthier communities. Furthermore, the distribution of the aid depends on disparities in the ratio of assessed valuations to market values, differences in the distribution of the value of home ownership among households, and differences in the amount of home ownership relative to renting. The first situation is obvious--the lower is the assessed valuation, the less credit a community receives (so long as the assessed valuation on some homes is \$2,500). This case is not likely since

a community can raise the assessed valuation and qualify for more credit, and if the community wants to avoid higher taxes, the millage rate can be reduced. In the second case, a community with a more even distribution of the value of home ownership would be more likely to receive more credit than a community with a very lopsided distribution. Where distribution of ownership is quite uneven, fewer homes would qualify for the maximum credit. With respect to the third situation, there is likely to be more renting in highly congested urban areas in contrast, say, to suburbs.

The Distribution of Liquor Store Sales Receipts

Five per cent of gross liquor store sales is allocated to each incorporated town or city in the proportion that its population bears to the total population in towns and cities.

The distribution of this portion of liquor store sales probably meets a need criterion to some extent. Expenditure needs are some function of population, which is the basis for the distribution of liquor store profits. However, where population shifts are occurring, need criteria become more complex. Liquor store aid follows the population, but the increased need of communities receiving the population may be no greater, up to a point, than the increased per unit cost of providing public services in the declining communities.

The formula for distributing liquor sales is probably such that as per capita income rises, per capita aid falls. Since the

aid is based on the population in towns and cities, and population and per capita income are higher in more urbanized counties, aid will be positively associated with income.

The state also allocates five per cent of liquor store sales to partially reimburse local governments for the exemption of veterans from the local property tax, up to specified amounts. Since many veterans live in urban areas, one would expect higher income communities to receive, on the average, relatively more property tax relief than poorer communities.

It should be pointed out that this form of aid discriminates against veterans who rent. If it is desirable to compensate veterans for military service, it is curious that only veterans who own property are rewarded.

Highways

The principal source of state highway revenues is the Road Use Tax Fund. This fund consists of receipts from the registration of motor vehicles, the motor vehicle fuel tax, license fees, ten per cent of the general sales tax, and the use tax on motor vehicles, trailers, and motor vehicle accessories and equipment.

Forty-seven per cent of the Road Use Tax Fund is allocated to the primary road fund, 30 per cent to the secondary road fund of

counties, 10 per cent to farm-to-market roads, and 13 per cent to cities and towns. In addition, the 61st General Assembly increased the motor vehicle fuel tax by one cent per gallon (gasoline and diesel fuel), and the funds from this source are allocated exclusively to the primary road fund. This will increase the absolute and relative share of the state government's own sources of total highway revenues allocated to the primary road fund, and reduce the per cent (but not the absolute amount) allocated to counties and cities.

As it was pointed out above, a highway fiscal study by the Public Administration Service in 1960 recommended that a higher relative share of revenue be allocated to the state and cities, and towns, and a lower relative share be allocated to counties. It was recommended that 55 per cent be allocated to the state, 30 per cent to the counties, and 15 per cent to cities and towns. At the time this recommendation compared with a 42-50-8 per cent distribution of the Road Use Tax Fund to the state, counties, cities, and towns, respectively, and a 51-42-7 per cent distribution if account is taken of the then special tax of 2 cents per gallon on motor vehicle fuel. Funds from the special 2-cent tax were allocated to the primary road fund.

Of the funds which are allocated to the counties, 60 per cent of the secondary road allocation is distributed in the proportion that the needs of the county bear to the total needs

of the state as determined by the Automotive Safety Foundation.¹ The same formula applies to the allocation of funds to farm-to-market roads. The remaining 40 per cent is based upon the ratio of the county's area to the total area of the state. Area per se, of course, does not account for variations in cost which are caused by travel, type of use, terrain, etc., and in that sense is not related to needs. The distribution formula does not explicitly take fiscal capacity into account, although highway aid to counties does in fact favor lower income counties. This is not the case with street aid to towns and cities.

Because highway aid is not tied to local expenditures, this form of aid does not provide localities with an incentive to increase highway expenditures.

Local-State Revenue Flows

Up to this point the analysis of inter-governmental revenue flows has been confined to revenue flows from the state to the local governments. However, a substantial sum of funds flows from the local governments to the state government. In 1964, this sum amounted to \$25.5 million. Of this, local support for

¹The Automotive Safety Foundation conducted an engineering needs study of Iowa's highways at the same time the Public Services Administration conducted a study of highway financing.

public welfare accounted for \$5.4 million, support for health and hospitals totaled \$13.5 million, and support for highways amounted to \$6 million.¹

In the first part of this study it was argued that two ways in which state assistance could be rendered to local governments was by (1) transferring certain government functions to the state government, or (2) transferring state funds to local governments. In the case of public welfare and mental hospitals, Iowa has chosen the first alternative. That is, the state government has the responsibility for administering the welfare program and mental hospitals. However, the state does not assume complete responsibility for financing these programs.²

Since the care of the mentally ill and indigent is apparently a state-wide responsibility, it is curious that the state government does not assume complete responsibility for financing this activity. This is particularly critical given the superior tax sources of the state government. Further, if one of the functions of welfare programs is to redistribute income, the use of matching funds, where

¹United States Department of Commerce, Governmental Finances, 1964.

²The state's welfare program consists of medical aid to the aged, old age assistance, Indian relief, aid to the blind, aid to dependent children, aid to the disabled, child welfare and emergency relief. The latter five require contributions from the counties. Contributions from the counties in fiscal 1965 for these purposes amounted to \$6 million. This compares to \$19.8 million appropriated by the state and federal funds of \$38.8 million.

this is provided for, defeats, in part, this objective. The idea may be to make localities responsible for part of their welfare needs, but if this is the case it must be assumed that the payment of state taxes by localities to finance the program is not a sufficient demonstration of responsibility. This is a questionable assertion.

More of a case can be made for the use of local taxes to finance part of the highway program. If the state can administer highway programs, or at least some highway programs, more efficiently than local governments, there is no reason why owners whose properties benefit from highways should not pay for their support.

The Redistributive Effects of State Aid

State aid will be considered as redistributive if per capita aid increases to counties when the gap between needs and fiscal capacity increase. We have seen above that in Iowa the indices of need and fiscal capacity are unrelated in some cases and tend to be inversely related in others. This means that the gap between the indices of need and fiscal capacity rises as incomes fall, and therefore aid which is redistributive with respect to income (i.e., per capita aid rises as incomes fall) will also tend to be redistributive with respect to the gap between the indices needs and fiscal capacity. Aid which is directly related to income will be called regressive.

In order to determine whether various state aid programs are redistributive or regressive, correlation coefficients for aid and median family income were obtained. These are shown in Table 16.

The agricultural land tax credit and the secondary road aid are highly redistributive. That is, as income falls, per capita aid rises. The agricultural land tax credit is redistributive because rural counties, which receive relatively more credit, are generally poorer. The secondary road aid is redistributive because much of the aid is allocated on the basis of area. The area of the counties does not differ significantly so that each county would receive about the same amount of total aid (or that portion which is based on area). As population falls, therefore, per capita aid will rise. However, the lower population counties are also low per capita income areas. The correlation between population density and median family income is .67.

The correlation between street aid and median family income is .84. This is because the more urban counties, which receive relatively more of this aid, are also higher income counties.

There is hardly any correlation between school aid¹ and median family income, and a low negative correlation between school aid and per capita personal income. In any case, the low correlation

¹The correlation between school aid by county and other variables may be subject to some error since aid was assigned to the primary county of a school district straddling two counties.

Table 16

SIMPLE CORRELATION COEFFICIENTS
FOR AID TO COUNTIES AND INDICES OF FISCAL CAPACITY

<u>Aid (1962)</u>	<u>Median family income (1960)</u>	<u>Per capita personal income (1962)</u>	<u>Per capita market property values (1962)</u>	<u>Total amounts of aid or payment (millions \$)</u>
Agricultural land tax credit	-.73	-.40	.54	11.3
Homestead credit	.28	.21	.07	29.2
School aid	-.05	-.34	-.05	29.0
Secondary road aid	-.87	-.61	.18	33.1
Street aid	.84	.62	-.32	12.4
Alcohol store sales allocations	.84	.62	-.29	2.2
Military credit	.35	.38	.12	2.3
Welfare payments	-.31	-.43	-.43	17.9
Total aid	-.76	-.63	.04	137.4
Total aid minus welfare payments	-.82	-.60	.25	119.5
Welfare collections from counties	.06	-.13	-.38	4.0

or negative relationship can be attributed to the fact that most aid is allocated on a per pupil basis and there is a lower proportion of the population enrolled in public schools in the more urbanized, wealthier counties. The reason for this is not that there are fewer school-age children in higher income counties, but that there is relatively more enrollment in private schools in the higher income counties. While the correlation coefficients between private enrollment and income is quite low, this partially explains why there is a low or negative correlation between income and school aid.

Aid to towns and cities for streets and the allocation of 5 per cent of liquor store sales to towns and cities are regressive, i.e., as incomes rise per capita aid rises. The correlation coefficients are quite high. This relationship is explained by the fact that these aids are allocated on the basis of population in towns and cities. Per capita aid in rural areas, therefore, would be smaller, as is income.

The homestead credit and military credit are somewhat regressive, as herein defined. There are apparently more homeowners and veterans living in more urbanized, wealthier counties.

Although welfare is not part of the aid program, welfare payments by county are included here to give the reader an idea of the effects of this program. Welfare payments are redistributive, but the correlation coefficient is not high. There is virtually no correlation

between welfare collections (matching funds) from counties and income.¹ This means that on a per capita basis the average lower income counties raise about as much funds for welfare purposes as higher income counties.

Total aid payments, whether welfare payments are included or not, are redistributive. This is true not only for 1962, but for 1960 and 1961., indicating that the pattern in 1962 is not accidental.

¹It is not inconsistent for per capita welfare collections (matching funds) from counties not to be correlated with income, and yet have welfare payments to counties tend to rise as incomes fall. The largest categories of aid which a (low income) county receives may not be the ones which require matching funds. A more detailed breakdown of welfare payments would be required to confirm this.

OCT.-4. 1966

Research Memorandum V

GSISLTS
JAP
7-27-66

THE IOWA RETAIL SALES TAX

Purpose, Summary and Conclusions

The purpose of this research memorandum is to analyze, appraise and evaluate the retail sales and use tax in Iowa. The evaluation is concerned primarily with the revenue and equity aspects of the levy. Administrative considerations, including compliance costs to the retailer as well as enforcement costs to the state, and the factor of public acceptability are not treated extensively.

The main conclusions of the study may be summarized as follows:

1. The Iowa retail sales and use tax is a relatively dependable source of revenue and is probably superior to most other sources of state-local revenue in terms of its economic effects.
2. The retail sales tax as presently constituted is not a "growth tax" in that its yield lags behind advances in the economy of the state.
3. The distribution of the burden of the retail sales tax discriminates against low income families, that is, it is steeply regressive. Also, because of the exemption of many consumer services, the tax burden varies among taxpayers within the same income group (i.e., similarly circumstanced) on the basis of the individual's pattern of consumption.
4. Because of the inclusion within the scope of the tax of a substantial number of intermediate, inter-firm purchases, the industrial and business community is responsible for almost a third of the total retail sales and use tax collections. In terms of comparative yields,

the tax is the most important source of state business taxation.

5. The "readily available" rule governing the taxable status of industrial goods purchased out of state for use within Iowa constitutes a gross violation of inter-taxpayer equity. The provision is difficult to administer and introduces a major element of uncertainty in compliance. Its positive impact on those few firms affected is overstated.

6. Reduction, and in some cases, elimination of the major equity deficiencies of the Iowa retail sales tax, while retaining all its advantages, can be accomplished by providing to each resident a year-end credit or rebate for the sales tax paid on a given amount of purchases. For example, an exemption of \$300 of taxable purchases per person (i.e., a \$6 per taxpayer, spouse, and dependent credit computed at the 2 per cent rate) would likely remove the tax from some, if not all, of those items generally agreed to constitute the basic necessities of life. The annual revenue "cost" of adopting such a feature would be about \$16 million.

7. Elimination of most (i.e., those which are administratively feasible) of the exemptions from the retail sales tax of consumer-type services would enhance the revenue adequacy and equity features of the tax. The annual incremental revenue gain from extending the coverage of the tax to include these services is estimated at approximately \$16 million.

8. The retail sales tax deserves serious consideration for bearing an increased responsibility in the state-local revenue picture. If called upon to assume a larger role in the state's tax structure, effort should be made to reduce the excessive burden of the levy on low income groups.

I. Introduction

Retail sales and use taxes are now imposed by forty-two states and the District of Columbia. In the last year, Idaho, Massachusetts, New Jersey, New York and Virginia have introduced the tax. Minnesota is the only state having a population of more than 3 million not presently employing the levy. The other seven states without the tax are Alaska, Delaware, Montana, Nebraska, New Hampshire, Oregon and Vermont. State retail sales taxes currently cover 186 million citizens, more than 90 per cent of the nation's population. For the nation as a whole, retail sales and use taxes yield over \$6 billion annually, constituting the largest single source of state tax revenues. Another \$1 billion annually accrues to local governmental units (primarily in Illinois and California, and New York City).

Iowa's 2 per cent retail sales tax has figured prominently in the state's (and indirectly the local) tax structure since its adoption in 1934 as a "temporary" property tax relief measure.¹ For the 1964-65 fiscal year, the state retail sales and use tax produced \$95 million of revenue. By 1975, the present tax without any adjustments in rate or coverage is projected to yield \$122 million annually.

In recent years, the Iowa sales tax has consistently accounted for about a third of all state tax revenue. Because of its comparatively broad coverage, Iowa's tax ranks among the top ten state sales taxes in

¹The complementary use tax was added in 1937. Except for a temporary rate increase to 2.5 per cent in 1956 and 1957, the Iowa tax has been levied at 2 per cent from the date of its adoption.

terms of productivity as measured by per capita yield per one per cent of rate. Thirty-two of the forty-two sales tax states employ rates higher than Iowa's 2 per cent. The most common rate is 3 per cent, with the 5 per cent Pennsylvania levy at the upper range, and eight states (including Iowa) taxing at the lowest current rate of 2 per cent.

Table 1 shows the distribution of states by retail sales tax rates.

Table 1

STATE RETAIL SALES AND USE TAX RATES, 1966

<u>2 per cent</u>	<u>3 per cent</u>	<u>4 per cent</u>	<u>5 per cent</u>
Indiana	Arizona	Alabama	Pennsylvania
IOWA	Arkansas	Hawaii	
Louisiana	California	Maine	
Nevada	Colorado	Michigan	
New York	Connecticut (3 1/2)	Rhode Island	
North Dakota (2 1/4)	Washington, D.C.	Washington (4 1/5)	
Oklahoma	Florida		
Texas	Georgia		
Virginia	Idaho		
Wyoming (2 1/2)	Illinois (3 1/2)		
	Kansas		
	Kentucky		
	Maryland		
	Massachusetts		
	Mississippi (3 1/2)		
	Missouri		
	New Mexico		
	North Carolina		
	Ohio		
	South Carolina		
	South Dakota		
	Tennessee		
	Utah		
	West Virginia		
	Wisconsin		

Source: Commerce Clearing House, State Tax Reporter.

All states with retail sales taxes employ complementary use taxes on goods purchased outside the state and brought into the state by the

purchaser. In general, the tax applies only to those imported items which if purchased in-state would be subject to the retail sales tax.

Although the basic pattern of general retail sales taxes is well established, it is an ever changing pattern. The most conspicuous nationwide developments and trends in the field of retail sales taxation are:

1. Increasing reliance by state and local governments on retail sales taxation via new adoptions, rate increases and base extensions; and,
2. Increasing attention to relieving the excessive burden imposed by the tax on low income families.

Before proceeding to an appraisal of the Iowa levy, the following section presents a brief description of existing general state sales taxes with appropriate references to the Iowa statute.

II. The General Sales Tax Base²

Retail sales taxes differ widely in form and detail from one state to another with respect to such matters as the extent to which business purchases are taxable and the exemptions applicable to a variety of goods and services purchased by consumers. All sales tax statutes exempt or exclude some retail sales. On the other hand, all sales tax statutes apply to some transactions not normally considered "retail". The reasons for this diversity vary. Goods consumed in the manufacturing process, for example, are exempt entirely or partially by all state laws to avoid tax pyramiding, that is, the situation where a tax is levied on a tax and the result is a retail price increase greater than the

²A summary of state sales tax bases, with emphasis on exemptions in Iowa and neighboring states is provided in Appendix Table I.

amount of the tax. The same rationale has led to the exemption of such farm supplies as feed, seed, and fertilizer. Several states also exempt purchases of industrial machinery and fuel, and some states extend the exemption to farm machinery and equipment.

Revenue considerations and reaction to interstate competition all too frequently dictate the scope of state retail sales taxes. California, for example, exempts sales to the U. S. government although sales to state and local governments are taxed. The exemption reportedly arose from a fear that uniform treatment of government purchases might jeopardize the development of the aerospace industry. Similarly, Kentucky and Tennessee provide special retail sales tax treatment to machinery purchased for purposes of industrial expansion.

One of two rules or administrative principles are commonly employed to determine the taxability of inter-business purchases. The "physical-ingredient" rule is applied in the majority of states, including Iowa. It is the more restrictive of the two in its interpretation of exempt status. Under this rule, raw materials are excluded from taxation, but a manufacturer's purchases of machinery, fuel, and supplies are taxable. Thus, the tax applies to any purchase of an item not resold in the same form in which it was purchased or which does not become a "physical ingredient" of a manufactured, fabricated, or otherwise processed product. It is estimated that business purchases of intermediate products and services account for almost a third of total retail sales and use tax collections in Iowa.³

Ohio and several other industrial states employ a broader rule referred to as the "direct-use" test. Under its application, all purchases

³See below Table 6.

directly employed in the production of tangible personal property for sale are exempt. Thus, in addition to raw materials, a manufacturer's purchases of machinery, oil, fuel, utilities, catalysts, and other shop supplies fall in the tax exempt category. Purchases of office equipment and supplies are, however, taxable. Both rules understandably involve complex problems of statutory interpretation.

From the standpoint of revenue and equity considerations, the most important commodity exemption is food purchased for home consumption. The statutory exemption usually applies only to sales of "food consumed off the premises," that is, groceries. Inclusion of groceries makes the retail sales tax particularly burdensome on low income families. This equity aspect, however, must be weighed against the amount of revenue involved, and administrative and compliance inconvenience and cost. Table 2 lists the states with food and/or medicine purchases exempted. In general, the exemption of food for home consumption reduces the typical state sales tax base by between 20 and 25 per cent. Prescription drug purchases, on the other hand, provide a negligible portion of the base.

All states tax restaurant meals, but three states exclude low priced meals, below 50¢ or \$1.00, and one taxes them at half the normal rate. Nearly all states exempt school lunches, meals served to employees or in dormitories, and meals served by charitable organizations. Medicines are exempt by a number of states and the District of Columbia, but the exemption typically is only for prescriptions and prescribed prosthetic devices. The only other fairly common exemptions attributable to the notion that basic necessities of life should be free of tax are school-books and the domestic consumption of water, gas, and electricity. Wisconsin, Massachusetts and Pennsylvania do not tax clothing, and three states exempt a part of such purchases; children's and work

clothing below a specified price.

Every over-the-counter exemption not only diminishes the yield of the tax, generates demands for additional exemptions, and distorts consumer preferences, but also gives rise to manifold problems of interpretation, accounting, and auditing. The gains from any exemption must be set against the revenue loss and the attendant administrative problems. In those states providing comparatively liberal commodity exemptions, a higher tax rate is frequently the trade-off. Also, not infrequently, retailers are then compensated for the costs involved in collecting the tax. This compensation which is usually provided as a percentage of collections withheld by the retailer is as follows:⁴

Alabama	2%	Louisiana	2%	Pennsylvania	1%
Arkansas	2%	Maryland	2%	South Carolina	2%
Colorado	3 1/3%	Massachusetts	2%	Tennessee	2%
Florida	3%	Missouri	2%	Texas	1%
Georgia	3%	Nevada	2%	Virginia	3%
Illinois	2%	North Carolina	3%	Wisconsin	2%
Kentucky	2%	Ohio	2%		
		Oklahoma	3%		

From the standpoint of mitigating the inequity of a retail sales tax, the maximum gain can be achieved with the least administrative complications by providing a sales tax credit or rebate. The retail sales tax credit or rebate, pioneered by Indiana in 1963 and enacted subsequently by Colorado and Hawaii in 1965, and Massachusetts in 1966, provides a system for refunds to individuals of a portion (or all in some cases) of the retail sales tax payments. It is usually discussed and conceived as an alternative to the over-the-counter exemptions of certain commodity purchases, such as food and prescription drugs. As it is applied in Indiana, every resident is exempted from paying sales tax upon \$300 of

⁴See Appendix Table II for a listing of the full provisions.

taxable goods, with the exemption administered by means of a \$6 per capita year-end credit or rebate upon the filing of an income tax return. If the amount of the credit exceeds the income tax liability, or the income tax liability is zero, a refund is paid. For example, a taxpayer with spouse and dependent is entitled to \$18 in retail sales tax credits, the equivalent of \$900 in exempt purchases, regardless of income. The value of the credit is incorporated in the structure of withholding schedules provided Indiana employers under the personal income tax.

The frequent exemption of alcoholic beverages, cigarettes, and motor fuel is attributable to the special excises on those commodities. Whether the rationale is that a commodity should not be subject to more than one tax or that the special excise in question is so high as to prohibit any additional tax is conjectural. In any event, most states exempt purchases of motor fuel, at least fifteen exempt cigarettes, and nine states currently exempt alcoholic beverages from the retail sales tax. (Two other states exempt beer). The exemption of motor fuel customarily extends only to fuel subject to the state's motor fuel tax, that is, fuel used in motor vehicles on highways.

In addition to the substantial revenue loss, there are logical reasons for including these commodities in the retail sales tax base. Every exemption requires separate accounting by retailers and entails additional auditing work by the state collection agency. But more importantly, exemptions violate one of the chief virtues of the general retail sales tax, namely, economic neutrality. If applied uniformly to as many commodity and service purchases as is administratively feasible, it does not influence consumer expenditure patterns in contrast to the distorting effects of the selective sales taxes.

Table 2

EXEMPTION OF FOOD AND MEDICINE IN
STATE GENERAL SALES TAXES, 1966

<u>State</u>	<u>Tax Rate (per cent)</u>	<u>Food^a</u>	<u>Medicine^b</u>
California	3	X	X
Connecticut	3 1/2	X	X
District of Columbia	3	X	X
Florida	3	X	X
Maine	4	X	X
Maryland	3	X	X
Massachusetts	3	X	X
Michigan	4		X
New York	2	X	X
North Carolina	3		X
North Dakota	2 1/4		X
Ohio	3	X	X
Pennsylvania	5	X	X
Rhode Island	3	X	X
Texas	2	X	X
Wisconsin	3	X	X

X - exempt

Source: The Advisory Commission on Intergovernmental Relations, Tax Overlapping in the United States, July 1964.

^aFood exemptions usually apply to "food for human consumption off the premises where sold." Restaurant meals are taxable in all states, though meals costing less than a specified amount are exempt in some states.

^bThe exemption is usually applicable to medicine sold on prescription or compounded by druggists, and often to medical and dental aids or devices such as artificial limbs, eyeglasses, and dentures. Some states exempt patent medicines and household remedies.

Another consideration applies to motor fuel purchases because the revenue from the motor fuel tax is usually dedicated to highway construction, operation and maintenance. The widely-accepted rationale of the gasoline tax is that it is a "user charge," a device for metering the direct use of the highway facilities. The retail sales tax, on the other hand, is a general revenue measure imposed to meet the cost of all government services other than highways. This feature lends

support to the argument that the consumption of motor fuel should not be exempt from the general retail sales tax. If there is justification (e.g., sumptuary, benefits, etc.) for imposing specific taxes on selected commodities in the first place, there seems to be little cause to exclude them from the general retail sales tax. If it is felt that the aggregate tax on any single commodity is excessive, the more efficient policy would seem to be to reduce the rate of the special excise.

The retail sales tax base was originally construed to apply only to purchases of tangible personal property, but most states now tax selected services, primarily utilities, admissions, and transient lodgings. A majority of states tax the sales of electricity and gas, fifteen tax water, twenty-two tax intrastate telephone and telegraph services, and eight apply the levy to passenger transportation charges. In the absence of an explicit public policy objective for exclusion, a retail sales tax law should apply to the consumption of gas, electricity, and water because they are tangible personal property. It is significant that water purchases are exempt in most states, presumably as a "necessity," even though its use is positively correlated to income. Applying the sales tax to communication and transportation services frequently encounters the difficulties surrounding interstate commerce. To avoid unnecessary litigation problems, most state statutes explicitly apply only to intrastate utility transactions.

Other services frequently subject to retail sales taxes include admissions, newspapers, transient lodgings, and rental and leases of personal property. The growing use of lease-purchase and lease-rental arrangements and commercial leasing of machinery and vehicles has prompted the states to tax rentals in order to close this potential

loophole. The trend to include admissions in the sales tax base continues. In 1957, seventeen states taxed admissions; the number is now twenty-seven. Four additional states levy special admissions taxes. Typically, admissions to county fairs, school and charitable events are exempt.

Perhaps the most conspicuous extension of the scope of state retail sales taxes in recent years has been the inclusion in the base of transient lodgings, defined usually as rentals in hotels, motels, and rooming houses of less than thirty or ninety days. Five years ago only a few states taxed transient lodgings; now thirty states attempt to "export" a part of the tax burden to non-residents in this way.

Roughly half the states which have state sales taxes have extended their taxes (occasionally at different rates than apply generally) to selected types of business and personal service activities. In some cases advertising, contracting and similar services provided mainly to business organizations are taxed. For the most part, however, the services taxed are consumer services, those used largely by individuals rather than businesses, such as laundries, dry cleaning, garages, parking, repair shops and the like.

III. The Iowa Sales and Use Tax Base

The Iowa 2 per cent retail sales tax is imposed upon the gross receipts from all sales of goods, wares, or merchandise, unless specifically exempt, sold at retail in the state to consumers. The tax also covers the gross receipts from admissions and amusement devices, and from the sales of gas, electric, water, communications, and heat utilities. Among the list of items included in the base are cigarettes,

liquor, and beer, as well as building materials and receipts of hotels and motels.

Exemptions are extended to casual (i.e., noncurrent) sales, receipts from the sale of transportation services, and a wide range of items purchased by businesses.⁵ Materials incorporated into the processing of finished goods are also exempt, as is the cost of electricity, fuel, and chemicals employed in the processing itself. Other items specifically exempted include seed, feed, and fertilizer, and materials used for disease, insect and weed control.

Sales to governmental units are not subject to the tax. Exemption from the tax on admissions is allowed for fairs and for activities of educational, religious, and charitable institutions where the entire proceeds are expended on educational, religious, or charitable activities.

The complementary use tax is imposed on purchases of tangibles made outside the state which would otherwise be subject to the retail sales tax. However, the use tax is imposed on the sale of new automobiles and trailers in lieu of the retail sales tax. To avoid double taxation, purchases taxed at a rate of 2 per cent or more in other states are exempt. If these items are not taxed or are taxed at less than 2 per cent the user is required to pay the difference at a rate such that the total imposition will equal 2 per cent. One feature of the Iowa use tax departs from common practice. Industrial machinery and equipment not readily obtainable in Iowa are exempt if they are to be used in the processing of goods to be sold at retail. If these items were purchased instate, however, they would be subject to the full retail sales tax.

⁵Iowa applies in general the "physical ingredient" rule to determine the status of business purchases. See Appendix Table I for a listing of these selected exemptions.

Tables 3 and 4 show Iowa retail sales and use tax collections by type of vendor and by source for two selected fiscal years, 1955 and 1965. Although total collections increased over this decade by one third (due primarily to economic growth and minor tax base adjustments), the relative importance of the various categories display a marked degree of stability. The food category, for example, yielded 21.6 per cent of the total in 1955 and 22.9 per cent in 1965.⁶

Three major vendor categories predominate in sales and use tax collections: food, general merchandise (particularly hardware, implements and farm machinery), and the automotive group. Combined, they accounted for almost two-thirds of the total retail sales and use tax collections in fiscal 1965. Public utilities are also important (and efficient) sales tax collection agents of the State of Iowa.

If the use tax on new automobiles (which is actually a retail sales tax) is deducted from the total use tax collections, the levy raises currently about \$8 million or less than 10 per cent of the total retail sales and use tax collections. More than half of this is accounted for by the tax paid on mail order purchases. The relatively small

⁶Owing to the variety of products sold by modern retail outlets, the group totals will not exactly equal the collections on sales of specific commodities. For example, total collections reported by the food group include non-food sales by supermarkets, while some food would be sold by other retail groups such as general merchandise outlets and vending machines. This is the major reason why any attempt at application of the exemption of essential commodities at the "sales counter" works a hardship on merchants and consumers alike. In a casual survey of an Iowa supermarket the following partial list of non-food merchandise was found to be available: tobacco products, mops, brooms, deodorizers, clothes lines, pails, window cleaners, shoe polish, water softeners, wallpaper cleaner, books, hosiery, gloves, paper cups and dishes, light bulbs, hand tools, soft drinks and at least ninety-nine other non-food items.

Table 3

RETAIL SALES TAX COLLECTIONS IN IOWA, 1955
AND 1965, BY BUSINESS TYPE

Business Type	1955		1965	
	Amount (In thousands)	Per cent of Total	Amount (In thousands)	Per cent of Total
Food, except restaurants	\$11,864	21.6	\$17,412	22.9
Restaurants, cafes, lunch rooms	2,214	4.0	3,366	4.4
Apparel	2,513	4.6	2,987	3.9
General merchandise group:	14,182	25.9	19,283	25.3
Department and general stores	4,717	8.6	6,212	8.1
Hardware, implements, and farm machinery	4,444	8.1	5,141	6.8
Drug stores	1,634	3.0	2,743	3.6
Household appliance, electric stoves	1,440	2.6	2,226	2.9
Variety stores, toy shops	1,019	1.9	1,366	1.8
Other general merchandise	928	1.7	1,595	2.1
Furniture, fixtures and equipment	2,211	4.0	2,214	2.9
Motor vehicles, accessories, repairs	5,145	9.4	7,418	9.8
Lumber and building materials	5,785	10.5	7,153	9.4
Service group	1,520	2.8	2,055	2.7
Public utilities	4,490	8.2	8,073	10.6
All other, less refunds	4,950	9.0	4,597	8.1
Total, net of refunds	\$54,875*	100.0*	\$74,558*	100.0*

Table 4

USE TAX COLLECTIONS IN IOWA, 1955 AND
1965, BY SOURCE

	1955		1965	
	Amount (In thousands)	Per cent of Total	Amount (In thousands)	Per cent of Total
Consumers:				
Construction Contractors	\$ 293	2.8	\$ 500	2.9
Industrial	682	6.5	1,004	5.8
Retailers, wholesalers	400	3.8	392	2.3
Utilities	275	2.6	726	4.2
Other	229	2.2	760	4.4
Retail, including mail order	2,129	20.2	4,659	27.0
New motor vehicles	6,506	61.9	9,215	53.4
Total	\$10,514*	100.0*	\$17,256*	100.0*

Source: State Tax Commission

Note: Data for fiscal years ending June 30

*Detail may not add to totals because of rounding.

amount of use tax collected from consumers on over-the-counter purchases of household property for personal use suggests that policing and enforcement of the levy on transportable out-of-state purchases (especially in the case of border cities) are extremely difficult.

Over \$50 million of out-of-state industrial purchases were subject to the 2 per cent Iowa use tax in 1965. This figure does not include those items otherwise taxable but exempt because they were "not readily obtainable in Iowa." The magnitude of the subsidy to outstate producers and suppliers cannot be precisely determined, but it would seem that "ready availability" is as unneutral, obscure and unworkable a term for determining the taxable status of purchases as could be devised. The present practice erodes the tax base, raises complex administrative and compliance problems, and conceivably "costs" the State of Iowa and its local subdivisions substantially more than the gains to the purchasers because of the positive inducement to produce, stock, and supply these items from outside the state.

IV. An Appraisal of the Iowa Levy

The primary criteria for evaluating proposed and existing tax measures are adequacy, equity or fairness, and economic effects. Adequacy refers to the relative responsiveness of tax yield to economic growth. The equity guideline uses two standards: the treatment of the higher income groups compared to the lower income groups and the treatment of taxpayers (business and individuals) who are in similar circumstances. The economic effects are appraised from the standpoint of neutrality, that is, the extent to which a tax distorts the operations of the economy.

Revenue Adequacy. The retail sales and use tax presently accounts for about 30 per cent of state tax revenue in Iowa. A decade ago, it contributed 35 per cent of the total. Collections for selected years since the tax was adopted are shown in Table 5. As a percentage of state personal income, the yield has varied slightly from year to year, but with a gradual downward trend evident in recent years indicating that the yield lags behind advances in personal income.

Over the period 1950 to 1964, the income elasticity of the Iowa sales and use tax was 0.9, which means that retail sales tax collections rose 0.9 per cent for every 1.0 per cent increase in personal income.⁷ This is the lowest elasticity coefficient of any major Iowa tax. The

Table 5

IOWA RETAIL SALES AND USE TAX COLLECTIONS, TOTAL AND AS A PER CENT OF PERSONAL INCOME

Fiscal Year	Sales-Use Tax Collections (Thousands of Dollars)	Collections as a Percentage of Personal Income
1934-5	11,288	1.7
1941-2	21,190	1.1
1945-6	29,849	1.0
1950-1	60,588	1.8
1956-7	73,960 ^a	1.6
1959-60	68,209	1.3
1964-5	94,748	1.4

^aTax rate was 2.5 per cent in 1957.

Sources: Collections -- Annual Reports of State Board of Assessment and Review (1935) and State Tax Commission (1942-60); State Treasurer (1964); Personal income data -- U.S. Department of Commerce, Personal Income by States Since 1929 (Washington: 1956), pp. 140-41 for 1935-54; Survey of Current Business, July 1965, p. 10, for 1957-65.

result is not surprising, however, because as incomes rise consumers do not spend commensurate increases of their income on taxed items.⁸

⁷Income elasticity is computed as the percentage change in tax revenue divided by the percentage change in personal income.

⁸See, Personal Consumption Expenditures in the U.S., 1950-1962, Department of Commerce, Office of Business Economics.

Rather, increasing proportions of consumers' budgets are spent on nontaxable purchases, primarily services. It is for this reason that the majority of states have had to increase retail sales tax rates and/or extend its coverage to satisfy public service requirements.

Equity Considerations. The impact of the Iowa retail sales and use tax on businesses and households for fiscal year 1964-5 is presented in the row totals of Table 6. The impact (i.e., responsibility for the initial payment) of the 2 per cent tax falls on the buyer with the vendor serving merely as a collection agent for the state. The column totals in Table 6 show the estimated final incidence of the tax by major taxpayer group. They reflect calculation based on the shifting assumptions used in the incidence study (see Research Memorandum II, dated 5-2-66).

Table 6
IMPACT AND INCIDENCE OF IOWA RETAIL SALES AND
USE TAX BY TYPE OF TAXPAYER, 1964-5
(In millions)

Impact	Allocation of Burden (Incidence)				Total
	Iowa Consumers	Owners of Iowa Firms	Nonresidents	U.S. Treasury	
Households	\$58.5		\$3.0	\$ 6.9	\$68.4
Businesses					
Farm		\$5.0		1.2	6.2
Mercantile	6.5			5.3	11.8
Industrial		2.5	1.2	3.2	6.9
Totals	\$65.0	\$7.5	\$4.2	\$15.6	\$93.3

Source: See Research Memorandum II (5/2/66).

As indicated, Iowa households account for \$65 million, or two-thirds of the retail sales tax payments recorded for 1964-65. However, \$59 million

represented the net burden to the households' total tax bill because of the federal offset. To illustrate this point: if a family has sufficient income to place it in the 30 per cent bracket for federal income tax purposes, each dollar of Iowa retail sales tax reduces its federal income tax by 30 cents. The net additional burden of each dollar of Iowa retail sales tax is, therefore, 70 cents. The benefit of the offset is greater for higher income families and where the taxable items are a substantial proportion of the family's budget. It is nonexistent for taxpayers filing short forms with the standard deduction.

The incidence by income and major occupation group of the \$65 million allocated to Iowa consumers and the \$8 million allocated to resident owners of Iowa firms is shown in Table 7. Separate estimates are given for heads of household classified as wage or salary earner, self-employed, farmer, retired or otherwise unemployed. The figures in Table 7 give the estimated percentage of income (i.e., effective rate) at various levels of money income paid in the form of retail sales and use taxes in fiscal year 1964-5.⁹

The all-household incidence pattern (last column) reveals that the percentage of income (i.e., effective rate) absorbed by the present retail sales and use tax declines as income rises. In other words, the retail sales tax is regressive. As indicated, the lowest income groups pay at rates two or more times that applied to the higher income groups.

Little need be said regarding the present treatment under the sales tax of taxpayers who are similarly circumstanced. Because of its

⁹All the estimates for the below \$1,000 income group should be interpreted with caution. This is a heterogeneous group that includes individuals and families with temporarily low (or negative) incomes.

Table 7

INCIDENCE OF THE IOWA RETAIL SALES AND USE TAX
BY INCOME AND MAJOR OCCUPATION GROUP, 1964

Money Income (thousands of dollars)	Percentage of Income Paid in Tax				
	Wage and Salaried	Self Employed (non-farm)	Farm	Retired And Others	All Households
Under 1	3.1	5.5	(a)	2.8	5.8
1 - 3	1.9	2.4	4.0	1.8	2.4
3 - 5	1.5	1.8	2.4	1.5	1.7
5 - 7	1.3	1.3	1.8	1.3	1.4
7 - 10	1.2	1.2	1.4	1.2	1.2
10 - 15	1.1	1.0	1.1	1.1	1.1
Over 15	1.0	0.6	1.2	1.2	0.8

(a) Not calculated -- average money income negative.

Source: See Table 6.

application to only a portion of total consumption expenditures, two taxpayers otherwise identical could understandably pay widely different sales tax bills depending upon their preferences for taxed versus non-taxed items.

Economic Effects. The possible adverse effects of the retail sales tax that seem to produce most anxiety are those attributed to shifts of consumer purchases to out-of-state retailers, i.e., the loss of taxable sales due to the imposition of the sales tax or to changes in the sales tax rate or coverage. Unfortunately, empirical data are not available which would permit the actual measurement of the differential economic effects of the sales tax compared to alternative fiscal measures. However, what information is available combined

with informed judgment about the significance and likelihood of these effects appear to support the conclusion that any incremental loss to the state's economy from imposing the retail sales tax initially or to adjusting its rate or base is probably too small and uncertain to be a controlling factor in policy decisions.¹⁰ Thus, the evaluation of the Iowa sales tax should rest almost entirely on adequacy and equity considerations.

V. Improving Equity and/or Productivity

In the evaluation of the Iowa retail sales tax, it was found that the burden of the tax was distributed regressively among households arrayed by income group; that is, a larger percentage of the income of lower income groups was absorbed in sales tax liabilities than of higher income families. Also, mention was made of the fact that because of the exemption of many purchases, mostly services, the tax treats otherwise equally situated taxpayers unequally. Various devices are available for minimizing these inequities. One is the use of selected commodity exemptions. Food purchased for consumption at home is an example of a commodity which, as indicated earlier, is exempt in many states in order to reduce the excessive burden of the retail sales tax on low income families. Another is the per capita sales tax credit or rebate. A third, taken singly or in combination with one of the first two, is the extension of the sales tax base to encompass expenditures on consumer-type services.

¹⁰In fiscal 1955-56, the Iowa retail sales tax rate was increased to 2.5 per cent. After adjusting for the change in rate the increase in sales tax collections was the second highest of the decade.

From the standpoint of equity and administrative convenience, the following general observations are appropriate with regard to the retail sales tax credit or rebate versus over-the-counter commodity exemptions:

1. Because of the tendency of high income individuals and families to consume more expensive grades, forms or cuts of food, the dollar value of the food exemption increases with income.¹¹ The value of the retail sales tax credit, on the other hand, remains constant regardless of income.

2. The credit virtually eliminates the burden of the sales tax on low income groups.¹² The sales tax with home-consumed food exempted achieves proportionality in its burden distribution at a level of income somewhat above the lowest. Both varieties become regressive at high income levels, but the rate of the conversion is more rapid and the turning point is at a lower level of income under the food-exemption provision. In this way, the credit serves to reduce the preferential treatment accorded high income groups as a consequence of the exemption of many personal services (laundry, dry cleaning, appliance repair, travel, barber shop and beauty parlor services, and the like).

3. Over-the-counter exemption of food removes much of the regressivity of the retail sales tax, but with a high degree of arbitrariness and imprecision. Food consumption differs by income level, family size and age distribution, marital status, tastes, and the less obvious factors of urban versus rural residence and ethnic characteristics.

¹¹See, Income and Household Size -- Their Effects on Food Consumption, Marketing Research Report No. 340, U.S.D.A., Agricultural Marketing Service, Marketing Research Division.

¹²Objections to the possibility of refunding amounts in excess of total sales tax payments frequently neglect to consider the distributive effects of the forward shifting of retail sales taxes imposed on inter-business transactions. The credit provision, though admittedly rough, tends to temper the extremes of this additional discriminatory feature, since the credit privilege is extended only to individuals.

Consequently, expenditures for food are a crude measure for designing a specific pattern of retail sales tax burden distribution. The per capita credit is less capricious in its distribution than the food exemption.

Some additional, but perhaps less obvious advantages of the tax credit provision are:

- a. No question arises about the taxability of purchases of commodities;
- b. No separation of items into taxable or exempt groups is required at the grocery check-out lanes;
- c. The credit is available only to residents, while direct food exemption is available to non-residents also;
- d. Residents receive credit for taxes paid wherever they are, not just in the state of residence;
- e. The credit can be built into Iowa's income tax withholding tables, so the taxpayer receives it weekly or monthly and does not have to wait until the end of the year.

The credit provision is firmly entrenched and widely accepted in Indiana, Colorado and Hawaii. Because of the recency of the credit adoption in Massachusetts, it is premature to speculate on its operation and acceptance. In Colorado, the credit is \$7 per capita or, at the 3 per cent rate, the equivalent of approximately \$233 of exempt purchases per individual. As contrasted to the Indiana and Colorado provisions, which take into account only family size, the Hawaiian and Massachusetts credit provisions vary with family size and income. In Hawaii, the credit ranges from \$18 per capita for taxpayers with income of less than \$1,100 to 45¢ per capita for taxpayers with income of \$6,300 or more.

Colorado, Hawaii, and Massachusetts, it should be recalled, also have personal income taxes with graduated statutory rates.

The distribution of burden by income and major occupation group of Iowa's sales tax with two types of retail sales tax credits or rebates is presented in Table 8. Table 9 provides a basis for the comparison of the credit distributional pattern with that for the retail sales tax containing a provision for the exemption of food purchased for home consumption. The estimated revenue loss to the State of Iowa under both credit arrangements and the food exemption is approximately the same -- about \$16 million annually.

Table 8
ESTIMATED INCIDENCE OF IOWA RETAIL SALES AND USE TAX
AFTER DEDUCTION OF SALES TAX CREDIT

Money Income (thousands of dollars)	\$6 Credit Per Person	Variable Credit \$8.50 to zero above \$10,000
Under 1	(a)	(a)
1 - 3	1.6	1.1
3 - 5	1.3	1.2
5 - 7	1.0	1.2
7 - 10	1.0	1.0
10 - 15	0.9	1.1
Over 15	0.8	0.9

Source: See Table 6.

(a) Not calculated -- credit exceeds tax payment.

Table 9

ESTIMATED INCIDENCE OF IOWA RETAIL SALES AND USE TAX WITH
FOOD EXEMPTION BY INCOME AND OCCUPATION GROUP, 1964

Money Income (thousands of dollars)	Wage and Salaried	Self Employed (non-farm)	Farm	Retired and Others	All Household
Under 1	2.2	4.5	(a)	1.9	(a)
1 - 3	1.4	1.9	3.4	1.3	1.9
3 - 5	1.2	1.4	2.1	1.2	1.4
5 - 7	1.0	1.0	1.5	1.0	1.1
7 - 10	1.0	0.9	1.2	0.9	1.0
10 - 15	0.9	0.8	0.9	0.9	0.9
Over 15	0.9	0.5	1.0	1.1	0.8

Source: See Table 6.

(a) Not calculated -- average money income negative.

A comparison of the incidence patterns in Tables 8 and 9, however, shows that the credit reduces the net retail sales tax burden of low income groups more than the food exemption. In other words, for an equal cost to the State of Iowa the credit reduces the excessive burden of the retail sales tax more than does the food exemption. Experience elsewhere also suggests that the sales tax credit adds little to the administrative costs of the tax. The food exemption, on the other hand, leads to innumerable problems of definition and compliance.

Extension of the Sales Tax Base. Extension of the retail sales tax base to include selected consumer-type services is another means of enhancing the equity of the tax, increasing its income elasticity, and

at the same time generating additional revenues. As mentioned earlier, the purchase of services tends to rise in importance as a proportion of family budgets as family income rises. Thus, a retail sales tax which excludes consumer services is likely to be more regressive than one which includes services, that is, it is likely to absorb relatively larger fractions of the incomes of the lowest income families. Further, if, as the empirical evidence suggests, spending for services tends to rise more rapidly than spending for most of the items presently covered by the typical retail sales tax, the extension of the base would make sales tax yields more responsive to economic growth.

There is a logical case for concentrating mainly on consumer services. First, the retail sales tax is designed to be a tax on final consumption. Second, taxes on business purchases, whether of goods or of services, tend to be pyramided in prices, increasing the price of final products by more than the amount of the tax imposed at successive stages. And third, taxes on business purchases have an extremely uneven incidence among businesses and individuals.

The estimated revenue that would be generated in Iowa by extending the base to selected consumer services is shown in Table 10.¹³

The major reason for extending the tax to cover services is that it would tend to reduce many of the discriminatory features now prevalent in the retail sales tax. In general, the present situation tends to work like this: a consumer who purchases materials at retail for a "do-it-yourself" task pays a retail sales tax on the materials he requires; on the other hand, a consumer who hires the entire service pays no tax

¹³These estimates appear in John Michael Leyes, Iowa's Consumption Taxes: Retrospect and Prospect, Unpublished M.S. Thesis, Iowa State University, 1966.

Table 10

ESTIMATED REVENUES FROM EXTENSION OF IOWA RETAIL SALES

TAX TO INCLUDE SELECTED SERVICES, FISCAL 1964-5

(Thousands of dollars)

Services Provided by Retail Establishments		9,900
Personal Services:		
Laundries	888	
Beauty Shops	486	
Barber Shops	291	
Other	<u>407</u>	
	2,072	2,072
Auto Repair		2,084
Other Auto Services		596
Repair Services:		
Electrical	325	
Upholstery, Furniture	68	
Watch	14	
Miscellaneous	<u>383</u>	
	790	790
Taxi Services		188
Brokerage Fees		383
Bank Service Charges		<u>302</u>
Total		16,315

Source: See footnote 13

on the service and often pays none on the materials used by the seller of the service.

Aside from the avoidance (and consequent revenue loss) of retail sales tax payment on materials via the purchase of services, the exclusion introduces a major element of discrimination. Two families with the same incomes but one whose consumption pattern includes a large

amount of purchased services pays less in retail sales tax than the family whose consumption pattern includes relatively little service purchases. Persons who devote much of their incomes to the care and upkeep of their cars, their clothing and their appearance will find the retail sales tax less burdensome than persons who, instead, spend heavily for groceries, household supplies, books, and phonograph records, and the like.

Table 11 shows what the 1965 distribution of burden of the Iowa retail sales tax would have been if the base had been extended to cover certain selected personal services. The yield of the tax would have been approximately 20 per cent greater than actually realized, or total collections would have been between \$110-\$115 million for the same period. Interestingly, the revenue gains from the base extension would just about equal the revenue loss from the adoption of a retail sales tax credit. Thus, without any revenue change, the Iowa retail sales tax could be substantially improved in terms of responsiveness to economic growth and equity by the base extension and the credit adoption.

Table 11

ESTIMATED INCIDENCE OF IOWA RETAIL SALES AND USE TAX WITH BASE
EXTENDED TO INCLUDE SELECTED SERVICES, BY INCOME AND OCCUPATION GROUP, 1964

Money Income (thousands of dollars)	Percentage of Income Paid in Tax				
	Wage and Salaried	Self-Employed (non-farm)	Farm	Retired and Others	All Households
Under 1	3.6	6.6	--	3.2	--
1 - 3	2.2	2.8	4.3	2.1	2.7
3 - 5	1.8	2.1	2.7	1.8	2.1
5 - 7	1.6	1.6	2.0	1.6	1.6
7 - 10	1.5	1.4	1.6	1.4	1.5
10 - 15	1.3	1.2	1.2	1.3	1.3
Over 15	1.3	0.7	1.4	1.5	1.1

Source: See Table 7.

VI. Local Sales Taxes

The demands for additional revenue to relieve the burden of the property tax has led to experimentation with various types of local non-property taxes. The most important (dollarwise) of these is the local sales tax, which accounts for more than \$1 billion in annual revenue for the nation as a whole. Local sales taxes are now imposed by more than 2,000 local governments in some thirteen states, including eleven states with state sales taxes.¹⁴

In some states the taxes are independently administered by the local units. This arrangement seems to work reasonably well in large cities such as New York and Washington, D. C. In smaller cities, however, administrative practices and procedures leave much to be desired. Where the state also levies a retail sales tax, administrative and compliance activities are unnecessarily duplicated, and the compliance problems of retailers are compounded when the base of the state and local taxes differ. In addition, a local tax may encourage retail outlets to relocate outside the taxing limits.

These problems can be eliminated or at least minimized under a system of local supplements to an existing state retail sales tax. In Illinois, for example, municipalities have the option of adding a 0.5 per cent supplement to the 3.5 per cent state levy. Unincorporated areas have this option on a countywide basis. As of 1964, 1,170 municipalities and 68 counties in Illinois had exercised the option.¹⁵ The local supplement is collected by the state and returned to the local governments.

¹⁴Advisory Commission on Intergovernmental Relations, Tax Overlapping in the United States, 1964.

¹⁵Ibid.

If Iowa were to adopt a similar system of supplements, and if all counties and municipalities were to exercise the option, a rate of 0.5 per cent would generate an estimated \$11 million in revenue for municipalities of over 10,000 population. Towns in the 5,000 to 10,000 population size category would raise an additional \$2.5 million, and smaller towns and counties could expect to raise about \$6 million.¹⁶ If instead a 3 per cent retail sales and use tax would be imposed on a statewide basis for distribution to local units, the incremental yield would likely be about \$45 million.

¹⁶The estimates are based upon collection data for fiscal 1964-5. Iowa retail sales tax collections by counties, cities and towns for 1965 are provided in Appendix Table III.

APPENDIX TABLE I

TAX BASES -- SELECTED STATES

(Source: Commerce Clearing House)

ILLINOIS

Occupational Retail Sales Tax

Persons and Sales Subject to Tax.--Persons engaged in the business of repairing or selling tangible personal property at retail are subject to tax as are, after August 1, 1965, lease or rental receipts*.

*The leasing tax has been held unconstitutional in I.B.M. Corporation v. Korshak by the Circuit Court of Cook County, September 23, 1965.

Exemptions:

1. Sales protected by the Federal Constitution;
2. Sales to charitable, religious, and educational organizations;
3. Isolated or occasional sales by persons other than retailers;
4. Newsprint and ink;
5. Sales to federal, state, and local governments;
6. Occasional dinners of charitable, religious, or educational organizations;
7. Rentals or leases to persons for renting or leasing to others; and
8. Rentals or leases to governments, charitable, religious or educational institutions, and interstate carriers if the property involved is rolling stock.

Use Tax

Persons and Sales Subject to Tax.--The tax is imposed upon repairing and the privilege of using in this state tangible personal property purchased at retail, including, after August 1, 1965, lease or rental receipts**.

**The leasing tax has been held unconstitutional in I.B.M. Corporation v. Korshak by the Circuit Court of Cook County, September 23, 1965.

Exemptions.--The use tax does not apply to the following:

1. Organizations operated exclusively for charitable, religious, or educational purposes;
2. Property brought into the state for temporary use by a nonresident;
3. Property brought into the state for use as rolling stock in interstate commerce;
4. Property already taxed in another state, to the extent of the tax paid;
5. Temporary storage of property acquired and used outside the state;
6. Sales which would be exempt from the occupational retail sales tax;
7. Property acquired outside this state by a nonresident and used for at least 3 months before being brought into Illinois for use there, including property purchased in Illinois and delivered outside the state;
8. Used property moved to Illinois by a business formerly not operating in Illinois, provided the property has been bought and used in the business outside Illinois for at least 3 months;
9. Newsprint and ink;

APPENDIX TABLE I (continued)

10. Sales to federal, state, and local governments;
11. Occasional dinners at charitable, religious, or educational organizations;
12. Rentals or leases to persons for renting or leasing to others; and
13. Rentals or leases to governments, charitable, religious or educational institutions, and interstate carriers if the property involved is rolling stock.

Service Occupation Sales and Use Taxes

Persons and Sales Subject to Tax.--The tax is imposed upon all persons engaged in the business of making sales of service and upon the privilege of using in the state real or tangible personal property acquired as an incident to the purchase of a service from a serviceman.

Exemptions:

1. Retail sales taxable under the sales or use taxes;
2. Sales for the purpose of resale;
3. Sales as an incident to the rendering of service by any corporation, association or institution organized for charitable, religious, or educational purposes;
4. Sales to federal, state, and local governments;
5. Newsprint and ink;
6. Any business in interstate commerce or otherwise which may not be taxed under the Constitution and statutes of the United States;
7. Sales or use for demonstration in the regular course of business;
8. Interim use of tangible personal property;
9. Property physically incorporated into other tangible personal property which is sold in the regular course of business or which is transported in interstate commerce to destinations outside Illinois;
10. Property temporarily used in the state by nonresidents;
11. Property acquired outside the state for use as rolling stock moving in interstate commerce;
12. Property already taxed in another state;
13. Property temporarily stored in the state for use outside the state; and
14. Property acquired outside the state at least 3 months prior to its use in the state.

APPENDIX TABLE I (continued)

IOWA
Retail Sales Tax

Persons and Sales Subject to Tax.--A tax is imposed on gross receipts from all sales of: (1) Tangible personal property, consisting of goods, wares, or merchandise sold at retail in Iowa to consumers or users; (2) Gas, electricity, water, heat, and communication service, including those made by any municipal corporation in its proprietary capacity; (3) Tickets or admissions to places or amusement and athletic events; (4) Amusement devices and commercial amusement; and (5) Rentals of rooms, apartments, or sleeping quarters in hotels, motels, inns, etc.

Exemptions.--The following are exempt:

1. Property the state is prohibited from taxing under the constitution or laws of the United States or under the constitution or laws of this state;
2. Furnishing or service of transportation;
3. Admissions to state, county, and local fairs, and gross receipts from religious, educational, or charitable activities;
4. Property accepted as part consideration in the sale in Iowa of other property not in excess of the original trade-in valuation;
5. Sales to governmental agencies, including all divisions, boards, commissions, agencies, or instrumentalities of state, federal, county, or municipal government deriving disburseable funds from tax revenues;
6. Refunds are granted on taxes paid by contractors with tax certifying bodies;
7. Commercial fertilizer, agricultural limestone and materials and expendable chemicals, solvents and reagents used in processing personal property, except tools and equipment, used in disease, weed, and insect control or health promotion of plants or livestock produced as part of agricultural production for market;
8. Electricity or steam used in processing tangible personal property ultimately sold at retail;
9. Agricultural fuel;
10. Casual sales; and
11. Iowa gasoline and alcoholic beverage taxes paid.

Use Tax

Persons and Sales Subject to Tax.--An excise tax is levied on the use of tangible personal property purchased for use in this state and upon the use of property purchased from the federal government by the ultimate consumer.

Exemptions.--The following are not taxed:

1. Property subject to the sales tax except new motor vehicles;
2. Property used in interstate commerce;
3. Property, other than airplanes, beer, and cigarettes already subject to a special tax;
4. Property brought into the state by nonresidents for their use while within the state;
5. Property not readily obtained in Iowa and used in operating a street railway;
6. Property exempt from the sales tax under Sec. 422.45 (Sec. 423.4);
7. Sales of industrial materials and equipment owned by federal government within the state of Iowa, of a character not ordinarily readily obtainable within the state, if they would not be subject to use tax if they were sold outside of the state for use in Iowa;

APPENDIX TABLE I (continued)

8. Tangible personal property which becomes an integral part of other property to be sold at retail;
9. Fuel used in generating electric current;
10. Industrial materials and equipment not readily obtainable in Iowa and used directly in manufacturing or servicing property to be sold at retail; and
11. Chemicals, solvents, sorbents, and reagents used directly in processing personal property.

Property brought into Iowa on which a sales or use tax has been paid in another state equal to or in excess of the Iowa tax is not subject to tax in Iowa.

APPENDIX TABLE I (continued)

MISSOURI

Retail Sales Tax

Persons and Sales Subject to Tax.--A tax is levied on all sellers for the privilege of engaging in the business of selling tangible personal property or rendering taxable services at retail. The tax is imposed on the following sales (including lease or rental considerations): (1) Tangible personal property; (2) Admission to places of amusement, entertainment, recreation, games, and athletic events; (3) Electricity, water, and gas; (4) Telephone services and telegraph transmissions; (5) Rooms, meals, and drinks from places regularly offering such to public; (6) Intrastate tickets for railroads, sleeping, dining and express cars, boats, airplanes, buses, and trucks licensed by Public Service Commission engaged in transportation of persons; and (7) Renting or leasing tangible personal property unless the lessor or rentor paid the tax when purchasing the property. A tax is also imposed on the sale or use of motor vehicles and trailers, but not on the renting or leasing of such vehicles. A tax is imposed upon the rental of space for house trailers.

Exemptions.--The following sales are exempt:

1. Interstate and foreign commerce;
2. Nontaxable by state or federal constitutional restrictions;
3. Motor fuel;
4. Fuel used to produce taxable utility services;
5. Feed for poultry or livestock, and grain converted into foodstuffs which are ultimately subject to tax;
6. Seed, limestone, or fertilizer used for seeding, liming, or fertilizing crops which when harvested will be sold at retail or will be fed to livestock or poultry to be sold at retail;
7. Spray materials for use on crops, fruit trees or orchards, the crops of which are to be ultimately sold at retail;
8. Materials, manufactured goods, machinery and parts which, when used in manufacturing, processing, compounding, mining, producing, or fabricating become a component part of the new personal property created, when such property is intended to be sold for final use or consumption;
9. Materials, replacement parts, and equipment purchased for use directly upon, and for repair and maintenance or manufacture of, motor vehicles, watercraft, railroad rolling stock, or aircraft engaged as common carriers;
10. Machinery and equipment replacing other machinery used directly for manufacturing or fabricating a product intended to be sold ultimately for final use or consumption;
11. Machinery and equipment purchased to establish new or to expand existing manufacturing, mining, or fabricating plants in the state, if such machinery is used directly in manufacturing, mining, or fabricating a product intended to be sold ultimately for final use or consumption;
12. Tangible personal property which is used exclusively in the manufacturing or assembling of products sold to the U.S. government;
13. Animals or poultry used for breeding or feeding;
14. Newsprint used in newspapers;
15. Rental of films, records, or any type of sound or picture transcriptions;
16. Pumping machinery and equipment used to propel products delivered by pipelines engaged as common carriers;

APPENDIX TABLE I (continued)

17. Sales by or to religious, charitable, eleemosynary and penal institutions and relief agencies;
18. Sales to counties or other political subdivisions;
19. Sales to physicians, dentists, and veterinarians of property used in their professions; and
20. Materials used in the production of steel products.

The tax on motor vehicles shall not apply to motor vehicles on which the sales tax has been paid; vehicles brought into this state from another state which were registered and regularly operated in the other state at least 90 days prior to the time of registration in this state; vehicles acquired by registered dealers for resale; vehicles purchased, owned, or used by any religious, charitable, or eleemosynary institution; vehicles owned and used by religious organizations in transferring pupils to and from schools supported by such organizations; vehicles acquired by the applicant for a certificate to title therefor by gift or under a will or by inheritance; vehicles upon which the tax has been paid by the donor or decedent; vehicles owned or used by the state of Missouri or any other political subdivision; vehicles owned by an educational institution supported by public funds; and farm tractors. Permanent residents (6 months or longer) are exempt from the trailer camp tax.

When an article upon which the Missouri sales or compensating use tax has been paid is taken in trade against the purchase price of the merchandise sold and the difference between the trade-in allowance and the purchase price exceeds \$500, the tax is computed only on that portion of the purchase price in excess of the actual allowance made for the article traded in or exchanged.

Compensating Use Tax

Persons and Sales Subject to Tax.--A tax is imposed for the privilege of storing, using, or consuming within Missouri any article of tangible personal property purchased on or after August 29, 1959.

Exemptions.--The following property is exempt:

1. Not taxable by restrictions of state or federal government;
2. Subject to Missouri sales tax;
3. Exempt from the Missouri sales tax;
4. Subject to motor vehicle use tax;
5. Subjected to sales or use tax of another state, provided, if said tax of other state is less than Missouri tax, property shall be subject to tax equal to the difference;
6. Held by processors, retailers, importers, manufacturers, wholesalers, or jobbers solely for resale in regular course of business; and
7. Personal and household effects and farm machinery used while individual was resident of another state and brought into Missouri for own use as a resident of Missouri, or property brought into the state by a nonresident for use while temporarily in the state.

SOUTH DAKOTAOccupational Retail Sales Tax

Persons and Sales Subject to Tax.--Retailers pay a tax on the privilege of doing business based on gross receipts from: (1) retail sales of tangible personal property, conditional, credit, or otherwise; (2) furnishing or servicing of gas, electricity, water and communication service to consumers, including that sold by municipal corporations in their proprietary capacity; (3) tickets or admissions to places of amusement and athletic events; (4) operation of pin ball machines and other mechanical devices for amusement; and (5) engaging in a profession or business in which the service rendered is of a professional, technical or scientific nature, but not including veterinarians or persons engaged in the practice of the healing arts. Lodging establishments are subject to tax.

Exemptions:

1. Sales on which the tax is prohibited by the United States or state laws or constitution;
2. Furnishing or service of transportation;
3. Property used for performance of a contract of public works made before July 1, 1935;
4. Admissions to state, county, or local fairs or community operated celebrations or shows sponsored by Chambers of Commerce or similar non-profit corporations or associations and receipts of activities of organizations which are used for charitable, educational, benevolent or fraternal purposes;
5. Sales to United States or South Dakota or any of its political subdivisions or relief agencies;
6. Gasoline, motor fuel, use fuel subject to use fuel tax; alcoholic beverages, butter substitutes and cigarettes otherwise taxed or exempt;
7. Resale by retailers of used farm machinery;
8. Sales to educational and religious institutions;
9. Exchange of processed for unprocessed agricultural products;
10. Sales of commercial fertilizers, liquid or solid, if sold in a single sale of 500 pounds or more for use exclusively in agriculture;
11. Sales of seed legumes, seed grasses and seed grains in lots of 25 pounds or more;
12. Sales of livestock or live poultry not for final use or consumption;
13. Motor fuel, including kerosene, tractor fuel, liquefied petroleum gas and distillate used for agricultural, except residence heating and lighting, purposes.

Use Tax

Persons and Sales Subject to Tax.--An excise tax is imposed on the privilege of the use, storage and consumption in South Dakota of tangible personal property purchased on or after July 1, 1939. Contractors using tangible property in performing a contract must pay the tax unless the sales or use tax has already been paid on the property.

Exemptions:

1. Property subject to sales tax;
2. Motor Vehicles;

APPENDIX TABLE I (continued)

3. Property nontaxable by constitution of the United States or South Dakota or sold to federal, state or political subdivision government;
4. Gasoline, motor fuel, use fuel subject to use fuel taxation;
5. Butter substitutes already taxed;
6. Property brought into the state by nonresidents for use within the state;
7. Property, including containers, labels and shipping cases used in compounding or manufacturing the finished product to be ultimately sold at retail;
8. Sales to educational and religious institutions and hospitals operating as charitable or non-profit institutions;
9. Fuel used in creating power, light, heat, steam and gas;
10. Beer, liquor and cigarettes already taxed by the state;
11. Property used for repair and service by interstate carriers;
12. Drilling rigs.

WISCONSINSelective Sales and Use Tax

Persons and Sales Subject to Tax.--For the privilege of selling, leasing or renting, or using or consuming tangible personal property in the state, a tax is imposed on the following:

- (1) fermented malt beverages;
- (2) intoxicating liquors;
- (3) tobacco, tobacco products, smokers' supplies, except cigarettes;
- (4) motor vehicles, station wagons, trailers, semitrailers (excluding mobile homes, but including those taxable items contained in, attached to or included as part of mobile homes) road equipment, road machinery, mobile cranes and trench hoes, but excluding vehicles for the mass transportation of passengers;
- (5) aircraft;
- (6) radios, televisions, phonographs, sound records, musical instruments or any combination thereof (including parts, components and accessories); records and sheet music;
- (7) meals, food, food products and beverages for human consumption sold by restaurants and cafes for direct consumption on or off the premises (excluding such sales to employees of the restaurants or cafes), except when sold by nonprofit hospitals and religious, charitable or educational organizations;
- (8) recreational (except toys and games), sporting, hobby, and athletic goods and equipment, and accessories and parts therefor;
- (9) household furniture, furnishings, floor coverings, major and small appliances, power tools, outdoor garden and lawn equipment and tools, office furniture, furnishings, equipment, machines, appliances and floor coverings, commercial food service machines and equipment, tavern, restaurant, fountain and store furniture, furnishings, equipment, machines, appliances and floor coverings (tanks, pumps, compressors and equipment for retail marketing of petroleum products are exempt);
- (10) jewelry, whether real or imitation, articles made of precious metals and imitations, watches, clocks, opera glasses, marine and field glasses and binoculars, not including religious articles;
- (11) beach bags, billfolds, brief cases, camping bags, card and pass cases, cosmetic bags, garment bags, hatboxes, key cases, overnight bags, purses, handbags, sample or display cases, trunks, suitcases, toilet kits and wallets;
- (12) articles made of fur and articles of which fur is the component material of chief value;
- (13) commercial laundry, dry cleaning and pressing machines, conveyers, elevators, industrial trucks, commercial fans and unit heaters;
- (14) perfume, essences, toilet waters, cosmetics, hair oils and dressings and similar substances, except for baby care;
- (15) soda water beverages for consumption off the premises, bases, concentrates and powders to be reconstituted by the consumer to produce soft drinks, etc., and fruit drinks and ades not defined as fruit juices;

Tax is also imposed upon the following services:

- (1) furnishing of rooms or lodging to transients by hotels or motels; "Transient" means any person residing for a continuous period of less than one month in a hotel or motel;

APPENDIX TABLE I (continued)

- (2) admissions to places of amusement, athletic events and the furnishing, for dues or fees, of access to clubs; sales of admissions to motion picture theaters costing 75¢ or less are exempt;
- (3) sales of intrastate telephone service and toll charges for intrastate telephone calls;
- (4) laundry, dry cleaning, pressing and dyeing services, except when performed on or after August 15, 1963, on raw materials or goods in process destined for sale;
- (5) photographic services, processing, printing and enlarging film, except commercial advertising photography;
- (6) the repair, service, or maintenance of all items of taxable tangible personal property.

Use tax is imposed on the storage, use or other consumption in the state of the property subject to the sales tax.

Exemptions.--General exemptions:

1. Property which the state is prohibited from taxing under the constitution or laws of the U.S. or under the Wisconsin constitution;
2. Gross receipts from tangible personal property, except motor trucks, used exclusively in farming, dairying, agriculture, horticulture or floriculture, except that the purchaser of taxable tangible personal property is liable for the tax at the time any use other than the exempt business use is made of such property;
3. Property becoming an ingredient or component part of an article of property destined for sale, and the gross receipts from selling, performing or furnishing services thereon;
4. Sales by schools and colleges exempt from the income tax;
5. Aircraft sold as carriers of persons or sold to any foreign government for use outside the state, or to nonresidents who do not use the aircraft in the state; motor trucks, truck tractors, road tractors, buses, trailers and semitrailers and accessories, parts and supplies sold to common or contract carriers for use exclusively as common or contract carriers;
6. Sales pursuant to written contracts entered into before February 1, 1962, provided delivery is made within 90 days;
7. Occasional sales;
8. Charges for interest, financing or insurance where such charges are separately stated;
9. Tickets or admissions to nonprofit school, religious or charitable activities;
10. Property and services sold to or used by the state, any county, municipality, school or other political subdivision; nonprofit religious, charitable, scientific or educational association;
11. Lease or rental of property, if the sale of the property was subject to tax;
12. Motor vehicles sold to nonresidents;
13. Truck bodies sold to nonresidents;
14. Motor fuel used in pleasure boats;
15. Activities of state-aided county and district fairs.

The following are exempt from the sales tax:

1. Sales to the U.S., its agencies and instrumentalities;

APPENDIX TABLE I (continued)

2. Sales to a common or contract carrier, when property is shipped by the seller via the purchasing carrier under a bill of lading to a point outside the state;
3. Property purchased for use solely outside the state.

The following are exempt from the use tax:

1. Property subject to the sales tax;
2. Motor vehicles loaned by an automobile dealer to a school for driver training.

A credit is provided for sales tax paid to another state on property taxable in Wisconsin equal to the amount of tax paid to such other state. "Sales tax" includes use or excise taxes.

APPENDIX TABLE II

RETAILERS COLLECTION COST REIMBURSEMENT UNDER STATE SALES TAX LAWS

<u>STATE</u>	<u>SALES TAX RATE</u>	<u>RETAILERS COLLECTION COST REIMBURSEMENT</u>
Alabama	4%	5% on 1st \$100 of tax; 2% on collections over \$100; 3% on use tax
Arizona	3%	None
Arkansas	3%	2%
California	3% (1% city tax)	None
Colorado	3%	3-1/3%
Connecticut	3-1/2%	None
District of Columbia	3%-1% on Food	None
Florida	3%	3%
Georgia	3%	3% effective July 1, 1966 (increased from 2%)
Hawaii	4%	None
Idaho	3%	None
Illinois	3-1/2% (1/2% city tax)	2% or \$5, whichever is greater
Indiana	2%	None
Iowa	2%	None
Kansas	3%	None
Kentucky	3%	2%
Louisiana	2%	2% (As of June 14, 1966 legislation is pending to increase compensation from 2% to 3%)
Maine	4%	None
Maryland	3%	2%
Massachusetts	3%	2%
Michigan	4%	None

APPENDIX TABLE II (continued)

<u>STATE</u>	<u>SALES TAX RATE</u>	<u>RETAILERS COLLECTION COST</u> <u>REIMBURSEMENT</u>
Mississippi	3-1/2%	None (As of June 14, 1966 legislation is pending for 2% on first \$50 per month, 1% on next \$50 and 1/4% on balance up to \$150 per month)
Missouri	3%	2% on Sales Tax - 3% on Use Tax
Nevada	2%	2%
New Jersey	3%	None
New Mexico	3%	None
New York	2%	None
North Carolina	3%	3%
North Dakota	2-1/4%	None
Ohio	3%	2% of advance payment made by 18th day of month covered by return; 1% of payment received between 19th and last day of month covered by return; 1% on amount paid by due date.
Oklahoma	2%	3%
Pennsylvania	5%	1%
Rhode Island	4%	None
South Carolina	3%	3% if payment is less than \$100; 2% if tax is \$100, but less than \$1000; 1% if \$1000 or more, maximum \$5000 yearly per taxpayer.
South Dakota	3%	None
Tennessee	3%	2%
Texas	2%	1% if paid by due date. Additional 2% if prepaid by 15th of second month in quarter.
Utah	3%	None
Virginia	2% on Sept. 1, 1966 3% on July 1, 1968	3%

APPENDIX TABLE II (continued)

<u>STATE</u>	<u>SALES TAX RATE</u>	<u>RETAILERS COLLECTION COST REIMBURSEMENT</u>
Washington	4.2%	None
West Virginia	3%	None
Wisconsin	3%	2%
Wyoming	2-1/2%	None

Source: Institute of Distribution, New York (6-14-66)

APPENDIX TABLE III

RETAIL SALES TAX
COLLECTIONS BY COUNTIES, CITIES AND TOWNS
County Seats Indicated By *
Towns With Population Under 500 Indicated By **

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
ADAIR		
Greenfield*	456	\$ 136,661.30
Adair	161	37,162.45
Fontanelle	130	21,741.32
Under 500**	197	27,429.57
Non Permit	19	324.74
Rural	87	<u>3,956.36</u>
Total	1,050	\$ 227,275.74
ADAMS		
Corning*	463	\$ 110,519.78
Under 500**	132	6,990.89
Non Permit	9	102.10
Rural	115	<u>8,569.23</u>
Total	719	\$ 126,182.00
ALLAMAKEE		
Waukon*	575	158,409.16
Lansing	271	37,073.51
Postville	376	90,403.98
New Albin	129	18,658.98
Under 500**	122	8,773.32
Non Permit	73	1,312.52
Rural	138	<u>12,555.20</u>
Total	1,684	\$ 327,186.67
APPANOOSE		
Centerville*	969	\$ 275,108.27
Cincinnati	73	5,332.99
Moravia	148	16,761.84
Moulton	135	14,504.13
Mystic	94	7,350.07
Under 500**	109	5,382.11
Non Permit	48	844.90
Rural	138	<u>14,749.54</u>
Total	1,714	\$ 340,033.85
AUDUBON		
Audubon*	518	\$ 153,469.00
Exira	232	38,112.43
Under 500**	217	17,824.87
Non Permit	5	144.25
Rural	94	<u>6,346.14</u>
Total	1,066	\$ 215,896.69

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
BENTON		
Belle Plaine	388	\$ 117,925.30
Vinton*	628	205,751.98
Blairstown	115	25,959.82
Shellsburg	75	9,349.88
Van Horne	113	12,739.99
Atkins	63	8,925.39
Keystone	98	25,515.12
Norway	94	14,318.47
Urbana	80	10,334.99
Under 500**	274	34,445.52
Non Permit	50	715.96
Rural	<u>144</u>	<u>13,356.48</u>
Total	2,122	\$ 479,338.90
BLACK HAWK		
Waterloo*	5,263	\$ 2,822,012.80
Cedar Falls	1,422	534,718.82
Evansdale	399	236,258.29
Hudson	151	43,068.24
La Porte City	316	61,034.71
Dunkerton	99	14,533.71
Gilbertville	70	9,637.20
Under 500**	61	19,559.84
Non Permit	348	12,228.06
Rural	<u>433</u>	<u>68,974.69</u>
Total	8,562	\$ 3,822,026.36
BOONE		
Boone*	1,229	\$ 432,927.67
Madrid	275	77,656.54
Ogden	249	55,791.90
Under 500**	147	14,930.73
Non Permit	59	1,387.36
Rural	<u>187</u>	<u>23,633.26</u>
Total	2,146	\$ 606,327.46
BREMER		
Waverly*	689	\$ 241,868.49
Sumner	375	102,228.13
Tripoli	193	41,661.25
Denver	160	31,991.80
Janesville	81	10,889.65
Readlyn	138	26,080.72
Under 500**	152	14,262.10
Non Permit	86	2,866.19
Rural	<u>160</u>	<u>20,109.26</u>
Total	2,034	\$ 491,957.59

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
BUCHANAN		
Independence*	649	\$ 220,929.65
Jesup	213	41,661.43
Fairbank	103	19,849.04
Hazelton	79	14,495.84
Lamont	106	12,161.47
Winthrop	106	18,321.09
Under 500**	269	32,778.99
Non Permit	84	2,172.70
Rural	<u>127</u>	<u>25,501.86</u>
Total	1,736	\$ 387,872.07
BUENA VISTA		
Storm Lake*	1,087	\$ 406,590.78
Alta	210	46,844.82
Albert City	185	35,615.55
Marathon	95	11,333.96
Newell	204	29,392.19
Sioux Rapids	233	42,090.06
Under 500**	143	13,114.48
Non Permit	61	2,933.27
Rural	<u>194</u>	<u>16,608.54</u>
Total	2,412	\$ 604,523.65
BUTLER		
Clarksville	210	\$ 40,372.96
Greene	281	69,710.27
Parkersburg	257	54,475.67
Shell Rock	125	23,325.90
Allison*	187	64,456.11
Aplington	168	25,458.54
Dumont	130	23,863.25
New Hartford	106	14,653.20
Under 500**	81	8,224.79
Non Permit	109	1,278.04
Rural	<u>138</u>	<u>12,814.04</u>
Total	1,792	\$ 338,632.77
CALHOUN		
Lake City	329	87,491.83
Manson	272	68,847.94
Rockwell City*	442	99,150.17
Lohrville	161	13,908.92
Pomeroy	201	30,340.11
Under 500**	273	29,817.57
Non Permit	42	1,069.47
Rural	<u>91</u>	<u>3,320.08</u>
Total	1,811	\$ 333,946.09

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
CARROLL		
Carroll*	1,109	\$ 431,010.00
Coon Rapids	288	69,125.06
Manning	338	67,655.67
Breda	129	13,158.88
Glidden	189	39,804.59
Under 500**	467	63,533.74
Non Permit	75	1,876.84
Rural	<u>65</u>	<u>4,736.08</u>
Total	2,660	\$ 690,900.86
CASS		
Atlantic*	980	\$ 390,358.40
Anita	244	39,259.94
Griswold	270	51,613.32
Lewis	79	6,053.11
Under 500**	337	28,939.03
Non Permit	27	360.13
Rural	<u>200</u>	<u>19,197.63</u>
Total	2,137	\$ 535,781.56
CEDAR		
Tipton*	543	\$ 136,586.00
Durant	218	41,957.16
Mechanicsville	181	24,592.85
West Branch	209	31,155.97
Clarence	190	32,351.66
Lowden	171	24,435.69
Stanwood	151	21,743.12
Under 500**	132	16,245.58
Non Permit	47	693.46
Rural	<u>139</u>	<u>9,180.48</u>
Total	1,981	\$ 338,941.97
CERRO GORDO		
Mason City*	2,639	\$ 1,332,489.72
Clear Lake	691	215,587.94
Rockwell	123	16,875.45
Under 500**	328	41,547.66
Non Permit	95	7,709.36
Rural	<u>364</u>	<u>57,228.61</u>
Total	4,240	\$ 1,671,438.74
CHEROKEE		
Cherokee*	824	\$ 321,966.76
Marcus	241	43,670.62
Aurelia	163	21,677.51
Under 500**	248	28,598.63
Non Permit	48	1,183.98
Rural	<u>82</u>	<u>3,440.66</u>
Total	1,606	\$ 420,538.16

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
CHICKASAW		
New Hampton*	545	\$ 180,676.48
Nashua	246	53,020.92
Fredericksburg	182	27,592.83
Lawler	132	21,304.09
Under 500**	191	22,919.98
Non Permit	61	2,072.04
Rural	<u>127</u>	<u>12,756.87</u>
Total	1,484	\$ 320,343.21
CLARKE		
Osceola*	552	\$ 149,777.93
Murray	162	12,357.56
Under 500**	37	1,800.61
Non Permit	19	328.86
Rural	<u>86</u>	<u>16,501.38</u>
Total	856	\$ 180,766.34
CLAY		
Spencer*	1,216	\$ 529,068.09
Everly	129	22,453.21
Peterson	126	25,003.13
Under 500**	298	28,021.30
Non Permit	70	5,706.13
Rural	<u>223</u>	<u>49,119.61</u>
Total	2,062	\$ 659,371.47
CLAYTON		
Elkader*	338	\$ 104,859.96
Guttenberg	364	72,165.13
Monona	274	46,274.13
Strawberry Point	255	44,893.80
Edgewood	151	32,559.07
Garnavillo	109	18,382.40
Marquette	59	10,408.54
McGregor	279	26,161.31
Under 500**	347	32,258.19
Non Permit	78	1,364.60
Rural	<u>167</u>	<u>13,802.88</u>
Total	2,421	\$ 403,130.01
CLINTON		
Clinton*	2,540	\$ 1,175,356.82
De Witt	538	158,259.11
Camanche	174	35,217.79
Delmar	63	3,007.70
Grand Mound	126	8,826.83
Lost Nation	146	20,431.06
Wheatland	146	26,981.42
Under 500	383	49,684.33
Non Permit	138	2,889.03
Rural	<u>273</u>	<u>35,071.13</u>
Total	4,527	\$ 1,515,725.22

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
CRAWFORD		
Denison*	844	\$ 274,213.73
Charter Oak	135	29,173.92
Dow City	110	10,656.20
Manilla	158	27,281.38
Schleswig	169	28,233.00
Vail	87	9,636.97
Under 500**	268	27,523.27
Non Permit	59	1,116.96
Rural	<u>66</u>	<u>6,756.81</u>
Total	1,896	\$ 414,592.24
DALLAS		
Perry	782	\$ 285,486.25
Adel*	366	122,614.58
Dallas Center	135	25,853.44
Dexter	148	18,125.54
Redfield	147	26,529.69
Waukee	117	20,450.04
Woodward	150	21,269.82
Under 500**	391	47,403.15
Non Permit	82	1,262.15
Rural	<u>175</u>	<u>29,344.03</u>
Total	2,543	\$ 598,338.69
DAVIS		
Bloomfield*	504	\$ 128,639.36
Under 500**	148	14,410.59
Non Permit	32	788.30
Rural	<u>164</u>	<u>15,337.94</u>
Total	868	\$ 159,176.19
DECATUR		
Lamoni	231	\$ 47,144.20
Leon*	354	91,749.68
Under 500**	315	21,277.95
Non Permit	42	905.06
Rural	<u>33</u>	<u>1,996.75</u>
Total	975	\$ 163,073.64
DELAWARE		
Manchester*	624	\$ 224,107.98
Earlville	123	17,113.16
Edgewood	29	10,850.93
Hopkinton	133	22,466.31
Under 500**	458	52,133.38
Non Permit	57	1,930.46
Rural	<u>122</u>	<u>25,492.73</u>
Total	1,546	\$ 354,094.95

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
DES MOINES		
Burlington*	2,704	\$ 1,304,754.26
Mediapolis	261	54,396.58
West Burlington	120	35,264.66
Danville	110	22,683.27
Under 500**	22	2,069.13
Non Permit	113	4,001.07
Rural	<u>255</u>	<u>30,112.22</u>
Total	3,585	\$ 1,453,281.19
DICKINSON		
Milford	243	\$ 48,782.44
Spirit Lake*	500	137,665.06
Arnolds Park	191	33,862.28
Lake Park	195	39,543.50
Under 500**	280	43,439.69
Non Permit	149	8,382.10
Rural	<u>282</u>	<u>30,842.81</u>
Total	1,840	\$ 342,517.88
DUBUQUE		
Dubuque*	3,929	\$ 2,056,617.42
Cascade	260	55,304.33
Dyersville	462	164,410.28
Epworth	93	16,696.82
Farley	110	23,359.84
Under 500**	542	60,850.05
Non Permit	142	4,690.53
Rural	<u>317</u>	<u>93,038.24</u>
Total	5,855	\$ 2,474,967.51
EMMET		
Estherville*	850	\$ 306,482.33
Armstrong	216	41,482.62
Ringsted	106	27,206.17
Under 500**	112	6,890.96
Non Permit	36	1,418.11
Rural	<u>92</u>	<u>3,833.45</u>
Total	1,412	\$ 387,313.64
FAYETTE		
Oelwein	364	\$ 332,156.37
Fayette	211	32,635.26
West Union*	456	148,011.46
Arlington	124	29,468.85
Clermont	119	17,449.04
Elgin	134	21,028.66
Hawkeye	122	13,784.96
Maynard	92	22,387.50
Under 500**	289	23,459.00
(continued)		

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
FAYETTE (continued)		
Non Permit	84	\$ 2,005.39
Rural	<u>185</u>	<u>16,787.21</u>
Total	2,680	\$ 659,173.70
FLOYD		
Charles City*	992	\$ 368,878.16
Nora Springs	195	29,342.25
Rockford	200	31,396.46
Under 500**	319	35,873.32
Non Permit	56	1,419.34
Rural	<u>115</u>	<u>5,428.93</u>
Total	1,877	\$ 472,338.46
FRANKLIN		
Hampton*	714	\$ 270,252.39
Sheffield	225	40,350.14
Under 500**	377	46,052.41
Non Permit	38	1,430.82
Rural	<u>139</u>	<u>20,176.96</u>
Total	1,493	\$ 378,262.72
FREMONT		
Hamburg	318	\$ 66,477.85
Sidney*	235	34,264.03
Tabor	177	28,727.51
Under 500**	313	28,529.28
Non Permit	12	3,328.89
Rural	<u>143</u>	<u>16,484.20</u>
Total	1,198	\$ 177,811.76
GREENE		
Jefferson*	654	\$ 216,688.23
Churdan	112	16,593.83
Grand Jct.	203	40,626.46
Scranton	132	19,976.55
Under 500**	197	21,858.53
Non Permit	39	492.99
Rural	<u>115</u>	<u>6,292.84</u>
Total	1,452	\$ 322,529.43
GRUNDY		
Grundy Center*	395	\$ 117,459.46
Reinbeck	235	47,427.89
Conrad	158	33,001.16
Dike	126	23,262.79
Wellsburg	168	33,501.23
Under 500**	113	24,009.81
Non Permit	69	1,951.53
Rural	<u>91</u>	<u>10,424.10</u>
Total	1,355	\$ 291,037.97

APPENDIX III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
GUTHRIE		
Guthrie Center*	431	\$ 98,695.80
Panora	178	29,780.49
Stuart	234	52,759.50
Bayard	123	17,634.42
Casey	130	12,478.81
Under 500*	323	37,751.33
Non Permit	29	480.27
Rural	84	3,558.48
Total	1,532	\$ 253,139.10
HAMILTON		
Webster City*	972	\$ 333,588.67
Jewell	236	67,542.67
Stratford	176	31,655.74
Williams	102	13,485.26
Under 500**	394	53,351.53
Non Permit	50	1,215.29
Rural	130	8,703.61
Total	2,060	\$ 509,542.77
HANCOCK		
Britt	329	\$ 90,060.67
Garner*	342	105,476.74
Kanawha	129	35,441.52
Klemme	139	16,536.55
Under 500**	308	45,570.94
Non Permit	17	539.26
Rural	165	9,910.44
Total	1,429	\$ 303,536.12
HARDIN		
Iowa Falls	784	\$ 322,828.98
Ackley	294	67,681.50
Eldora*	501	126,890.35
Alden	146	14,271.39
Hubbard	179	43,044.79
Radcliffe	120	16,904.23
Union	136	23,379.14
Under 500**	228	24,122.90
Non Permit	105	1,954.07
Rural	270	21,836.59
Total	2,763	\$ 662,913.94
HARRISON		
Dunlap	275	\$ 53,502.30
Logan*	288	72,959.83
Missouri Valley	482	124,521.72
Woodbine	260	40,018.15

(continued)

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
HARRISON (continued)		
Under 500**	364	50,585.75
Non Permit	27	1,299.55
Rural	<u>97</u>	<u>13,173.94</u>
Total	1,793	\$ 356,061.24
HENRY		
Mt. Pleasant*	705	\$ 290,791.09
New London	219	47,199.81
Wayland	167	16,809.46
Winfield	200	45,956.56
Under 500**	261	31,832.87
Non Permit	51	1,089.07
Rural	<u>167</u>	<u>28,967.12</u>
Total	1,770	\$ 462,645.98
HOWARD		
Cresco*	613	\$ 188,406.60
Elma	174	27,047.63
Lime Springs	137	17,826.41
Riceville	48	8,703.71
Under 500**	146	15,814.09
Non Permit	48	1,379.92
Rural	<u>61</u>	<u>3,390.66</u>
Total	1,227	\$ 262,569.02
HUMBOLDT		
Humboldt	626	\$ 241,066.01
Dakota City*	76	12,035.01
Livermore	112	13,534.14
Under 500**	510	57,716.22
Non Permit	18	786.10
Rural	<u>43</u>	<u>2,254.55</u>
Total	1,385	\$ 327,392.03
IDA		
Holstein	309	\$ 63,512.65
Ida Grove*	485	124,971.23
Battle Creek	161	18,639.05
Under 500**	165	17,840.99
Non Permit	18	520.85
Rural	<u>35</u>	<u>1,513.43</u>
Total	1,173	\$ 226,998.20
IOWA		
Marengo*	421	\$ 112,284.23
North English	196	48,273.64
Williamsburg	282	70,473.32
Victor	159	34,183.89

(continued)

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
IOWA (continued)		
Under 500**	138	\$ 15,067.94
Non Permit	49	1,345.75
Rural	<u>350</u>	<u>95,275.48</u>
Total	1,595	\$ 376,904.25
JACKSON		
Maquoketa*	854	\$ 292,948.98
Bellevue	294	59,813.79
Preston	188	31,334.26
Sabula	111	18,276.86
Under 500**	390	39,346.45
Non Permit	68	1,759.32
Rural	<u>125</u>	<u>12,838.34</u>
Total	2,030	\$ 456,318.00
JASPER		
Newton*	1,372	\$ 539,492.51
Colfax	290	87,041.02
Monroe	269	48,301.78
Baxter	122	28,445.82
Kellogg	133	12,056.86
Prairie City	205	49,762.49
Sully	114	23,889.69
Under 500**	220	26,630.51
Non Permit	102	1,707.33
Rural	<u>208</u>	<u>12,548.56</u>
Total	3,035	\$ 829,876.57
JEFFERSON		
Fairfield*	1,060	\$ 407,596.16
Batavia	107	13,895.32
Under 500**	215	20,077.33
Non Permit	48	670.50
Rural	<u>143</u>	<u>5,184.74</u>
Total	1,573	\$ 447,424.05
JOHNSON		
Iowa City*	2,038	\$ 1,254,083.01
Coralville	175	97,359.56
Lone Tree	149	18,271.93
Oxford	142	19,906.34
Solon	144	20,211.08
Under 500**	200	40,597.77
Non Permit	95	3,736.02
Rural	<u>335</u>	<u>72,019.59</u>
Total	3,278	\$ 1,526,185.30

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
JONES		
Anamosa*	470	\$ 189,845.78
Monticello	556	171,402.82
Olin	140	24,355.06
Oxford Jct.	139	17,801.85
Wyoming	151	25,950.47
Under 500**	184	18,413.34
Non Permit	91	2,805.80
Rural	<u>174</u>	<u>21,287.58</u>
Total	1,905	\$ 471,862.70
KEOKUK		
Keota	239	\$ 35,142.45
Sigourney*	429	107,119.56
Delta	86	6,770.15
Hedrick	125	13,281.09
Richland	163	26,001.53
What Cheer	216	19,368.07
Under 500**	420	62,452.69
Non Permit	63	735.68
Rural	<u>174</u>	<u>7,455.13</u>
Total	1,915	\$ 278,326.35
KOSSUTH		
Algona*	780	\$ 297,829.33
Bancroft	162	34,975.24
Burt	110	14,939.30
LuVerne	95	11,066.65
Swea City	197	35,523.29
Titonka	141	23,675.57
Wesley	89	24,760.43
Whittemore	144	22,605.26
Under 500**	346	44,418.36
Non Permit	71	1,105.42
Rural	<u>153</u>	<u>14,723.40</u>
Total	2,288	\$ 525,622.25
LEE		
Ft. Madison*	1,262	419,268.95
Keokuk	1,669	541,007.76
Donnellson	185	35,169.16
Montrose	88	8,523.85
West Point	173	39,615.21
Under 500**	39	9,103.53
Non Permit	145	5,549.90
Rural	<u>473</u>	<u>69,106.32</u>
Total	4,034	\$ 1,127,344.68

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
LINN		
Cedar Rapids*	6,797	\$ 4,625,653.71
Marion	717	391,275.65
Center Point	180	26,563.04
Central City	185	35,330.19
Hiawatha	109	19,033.95
Lisbon	169	32,340.65
Mt. Vernon	286	92,195.99
Coggon	143	27,068.94
Fairfax	117	10,701.09
Springville	103	15,272.21
Walker	126	13,445.13
Under 500**	291	31,724.71
Non Permit	343	9,317.77
Rural	584	137,204.18
Total	10,150	\$ 5,467,127.21
LOUISA		
Columbus Jct.	240	\$ 67,948.47
Wapello*	310	73,491.25
Morning Sun	134	20,664.45
Under 500**	191	23,508.19
Non Permit	43	1,356.52
Rural	108	10,491.89
Total	1,026	\$ 197,460.77
LUCAS		
Chariton*	720	\$ 221,112.97
Russell	109	14,065.90
Under 500**	125	8,724.43
Non Permit	32	493.93
Rural	107	8,123.89
Total	1,093	\$ 252,521.12
LYON		
Rock Rapids*	468	\$ 127,648.07
George	200	41,711.49
Doon	84	13,209.31
Inwood	138	19,741.24
Larchwood	108	12,189.45
Little Rock	137	10,656.90
Under 500**	121	11,554.03
Non Permit	53	437.94
Rural	61	1,394.88
Total	1,370	\$ 238,543.31

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
MADISON		
Winterset*	568	\$ 153,997.61
Earlham	130	21,631.72
Under 500**	238	26,365.68
Non Permit	37	573.93
Rural	<u>118</u>	<u>16,326.94</u>
Total	1,091	\$ 218,895.88
MAHASKA		
Oskaloosa*	1,393	\$ 520,848.61
Eddyville	53	10,132.82
New Sharon	218	31,676.78
Beacon	20	1,292.95
University Park	13	57.69
Under 500*	253	20,414.39
Non Permit	77	2,292.03
Rural	<u>279</u>	<u>32,688.60</u>
Total	2,306	\$ 619,403.87
MARION		
Knoxville*	797	\$ 274,648.66
Pella	651	186,803.16
Pleasantville	148	30,068.43
Bussey	66	4,426.81
Melcher	123	11,692.57
Under 500**	83	4,185.34
Non Permit	98	1,483.65
Rural	<u>368</u>	<u>62,103.98</u>
Total	2,334	\$ 575,412.60
MARSHALL		
Marshalltown*	2,187	\$ 1,069,593.53
State Center	217	40,249.24
Albion	74	10,282.68
Gilman	78	17,701.27
Melbourne	134	15,505.50
Under 500**	308	22,844.78
Non Permit	87	1,736.29
Rural	<u>299</u>	<u>43,669.02</u>
Total	3,384	\$ 1,221,582.31
MILLS		
Glenwood*	404	\$ 117,123.86
Malvern	201	46,050.52
Emerson	103	9,748.04
Pacific Jct.	44	4,064.24
Under 500**	175	15,775.84
Non Permit	20	447.01
Rural	<u>86</u>	<u>6,060.77</u>
Total	1,033	\$ 199,270.28

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
MITCHELL		
Osage*	606	\$ 171,441.30
St. Ansgar	211	34,610.82
Riceville	198	28,569.10
Stacyville	138	19,397.67
Under 500**	140	10,028.07
Non Permit	48	1,249.73
Rural	<u>172</u>	<u>13,978.16</u>
Total	1,513	\$ 279,274.85
MONONA		
Onawa*	513	\$ 137,538.46
Mapleton	313	87,375.34
Ute	107	11,690.13
Whiting	90	12,063.91
Under 500**	332	32,834.44
Non Permit	63	1,318.94
Rural	<u>33</u>	<u>843.86</u>
Total	1,451	\$ 283,665.08
MONROE		
Albia*	637	\$ 169,260.67
Lovilia	134	11,688.01
Under 500**	42	3,085.12
Non Permit	38	760.44
Rural	<u>113</u>	<u>6,724.96</u>
Total	964	\$ 191,519.20
MONTGOMERY		
Red Oak*	832	\$ 313,000.79
Villisca	293	54,852.55
Stanton	117	18,839.48
Under 500**	148	13,715.27
Non Permit	18	273.76
Rural	<u>169</u>	<u>7,402.51</u>
Total	1,577	\$ 408,084.36
MUSCATINE		
Muscatine*	1,891	\$ 710,667.16
West Liberty	312	74,658.23
Wilton Jct.	270	110,859.84
Under 500**	181	25,689.15
Non Permit	81	3,191.67
Rural	<u>268</u>	<u>28,615.21</u>
Total	3,003	\$ 953,681.26
O'BRIEN		
Sheldon	631	\$ 204,827.58
Hartley	327	72,458.35
(continued)		

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
O'BRIEN (continued)		
Paullina	282	\$ 50,753.67
Primghar*	187	35,192.65
Sanborn	246	45,988.94
Sutherland	206	21,170.37
Under 500**	107	10,315.81
Non Permit	61	1,389.96
Rural	<u>159</u>	<u>12,292.60</u>
Total	2,206	\$ 454,389.93
OSCEOLA		
Sibley*	416	\$ 125,376.12
Ashton	133	11,655.42
Ocheyedan	152	16,975.88
Under 500**	168	26,504.83
Non Permit	34	412.30
Rural	<u>103</u>	<u>7,150.93</u>
Total	1,006	\$ 188,075.48
PAGE		
Clarinda*	758	\$ 236,063.50
Shenandoah	952	316,018.58
Essex	143	13,558.71
Under 500**	289	28,025.64
Non Permit	11	127.47
Rural	<u>112</u>	<u>8,258.73</u>
Total	2,265	\$ 602,052.63
PALO ALTO		
Emmetsburg*	558	\$ 174,571.57
Graettinger	194	26,390.12
Ruthven	187	27,636.49
West Bend	173	49,564.39
Under 500**	268	29,002.26
Non Permit	55	1,030.43
Rural	<u>48</u>	<u>9,690.13</u>
Total	1,483	\$ 317,885.39
PLYMOUTH		
LeMars*	829	\$ 297,481.88
Akron	244	46,192.33
Kingsley	197	37,637.00
Remsen	303	75,663.24
Merrill	135	12,268.27
Under 500**	246	24,401.74
Non Permit	25	551.79
Rural	<u>165</u>	<u>15,620.39</u>
Total	2,144	\$ 509,816.64

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
POCAHONTAS		
Fonda	190	\$ 32,747.25
Laurens	258	90,675.81
Pocahontas*	379	125,810.94
Gilmore City	132	23,784.20
Rolfe	170	30,812.29
Under 500**	217	22,089.65
Non Permit	43	713.81
Rural	<u>74</u>	<u>6,427.52</u>
Total	1,463	\$ 333,061.47
POLK		
Des Moines*	16,260	\$10,202,952.67
West Des Moines	770	321,205.10
Urbandale	46	7,956.72
Altoona	182	70,666.61
Ankeny	323	145,325.27
Windsor Hts.	47	16,777.42
Clive	21	8,882.47
Grimes	112	20,274.09
Mitchellville	129	14,246.52
Polk City	90	7,217.95
Under 500**	237	30,455.70
Non Permit	526	34,884.92
Rural	<u>358</u>	<u>297,585.68</u>
Total	19,601	\$11,178,431.12
POTTAWATTAMIE		
Council Bluffs*	3,179	\$ 1,461,206.24
Avoca	316	74,303.64
Carter Lake	113	15,392.35
Oakland	225	52,038.66
Carson	138	20,957.50
Neola	158	28,764.18
Walnut	145	18,508.17
Under 500**	499	66,248.03
Non Permit	118	2,868.53
Rural	<u>413</u>	<u>63,002.66</u>
Total	5,304	\$ 1,803,289.96
POWESHIEK		
Grinnell	826	\$ 283,356.99
Brooklyn	316	72,826.22
Montezuma*	316	69,441.23
Under 500**	245	24,880.98
Non Permit	47	891.18
Rural	<u>143</u>	<u>50,838.32</u>
Total	1,893	\$ 502,234.92

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
RINGGOLD		
Mount Ayr*	402	\$ 101,198.68
Under 500**	387	27,602.76
Non Permit	10	135.78
Rural	<u>31</u>	<u>580.60</u>
Total	830	\$ 129,517.82
SAC		
Sac City*	515	\$ 143,324.25
Lake View	271	54,685.16
Odebolt	286	53,320.81
Early	187	33,939.14
Schaller	168	23,415.05
Wall Lake	132	30,398.62
Under 500**	227	28,456.35
Non Permit	35	781.45
Rural	<u>150</u>	<u>11,515.30</u>
Total	1,971	\$ 379,836.13
SCOTT		
Davenport*	6,020	\$ 3,593,387.04
Bettendorf	977	657,892.79
Buffalo	77	22,024.55
Le Claire	125	27,553.13
Blue Grass	60	8,078.38
Eldridge	121	32,784.09
Princeton	98	15,213.09
Walcott	162	32,407.62
Under 500**	301	42,794.62
Non Permit	231	10,794.20
Rural	<u>423</u>	<u>102,089.03</u>
Total	8,595	\$ 4,545,018.54
SHELBY		
Harlan*	701	\$ 225,539.20
Elk Horn	119	32,283.03
Shelby	128	17,415.42
Under 500**	520	53,408.02
Non Permit	23	791.84
Rural	<u>95</u>	<u>6,751.97</u>
Total	1,586	\$ 336,189.48
SIOUX		
Hawarden	378	\$ 96,495.28
Alton	179	47,118.95
Hull	216	45,260.60
Orange City*	345	112,395.87
Rock Valley	339	94,639.43
Sioux Center	377	105,730.33

(continued)

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
SIOUX (continued)		
Boyden	109	\$ 19,041.05
Hospers	135	16,084.41
Ireton	111	21,584.86
Under 500**	181	14,862.42
Non Permit	94	2,392.09
Rural	<u>110</u>	<u>14,530.60</u>
Total	2,574	\$ 590,135.89
STORY		
Ames	1,580	916,197.14
Nevada*	487	178,308.88
Story City	267	64,671.04
Cambridge	92	14,039.30
Colo	74	12,384.93
Maxwell	148	22,618.67
Roland	101	16,308.54
Slater	126	14,842.02
Zearing	104	16,579.30
Under 500**	329	33,142.58
Non Permit	158	2,359.15
Rural	<u>283</u>	<u>35,918.54</u>
Total	3,749	\$ 1,327,370.09
TAMA		
Tama	461	\$ 104,978.83
Dysart	224	45,956.18
Toledo*	300	96,360.31
Traer	338	76,008.75
Garwin	95	10,920.75
Gladbrook	213	33,685.16
Under 500**	404	43,827.42
Non Permit	70	1,246.07
Rural	<u>82</u>	<u>7,199.14</u>
Total	2,187	\$ 420,182.61
TAYLOR		
Bedford*	376	67,776.22
Lenox	294	55,298.69
Clearfield	105	12,922.85
New Market	100	9,865.29
Under 500**	227	16,561.98
Non Permit	17	528.68
Rural	<u>99</u>	<u>5,217.57</u>
Total	1,218	\$ 168,171.28
UNION		
Creston*	1,033	\$ 330,498.93
Afton	195	28,891.54

(continued)

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
UNION (continued)		
Lorimor	89	7,972.83
Under 500**	124	6,156.19
Non Permit	11	302.52
Rural	<u>76</u>	<u>2,657.19</u>
Total	1,528	\$ 376,479.20
VAN BUREN		
Keosauqua*	247	\$ 41,649.73
Bonaparte	102	22,514.56
Farmington	218	28,569.24
Milton	139	12,944.27
Under 500**	300	29,429.69
Non Permit	35	374.21
Rural	<u>210</u>	<u>19,206.06</u>
Total	1,251	\$ 154,687.76
WAFELLO		
Ottumwa*	2,765	\$ 1,164,719.76
Eldon	203	39,649.41
Eddyville	135	12,913.41
Agency	88	8,771.98
Under 500**	146	15,207.36
Non Permit	204	4,658.71
Rural	<u>209</u>	<u>16,001.00</u>
Total	3,750	\$ 1,261,921.63
WARREN		
Indianola*	726	\$ 230,925.15
Carlisle	171	43,310.08
Norwalk	102	16,693.20
Milo	91	11,617.69
Under 500**	389	38,825.27
Non Permit	95	2,652.77
Rural	<u>152</u>	<u>20,033.79</u>
Total	1,726	\$ 364,057.95
WASHINGTON		
Washington*	866	\$ 330,943.46
Kalona	341	75,929.44
Brighton	126	15,308.46
Riverside	116	17,652.92
Wellman	284	47,257.55
Under 500**	222	18,802.53
Non Permit	85	1,013.54
Rural	<u>196</u>	<u>17,465.45</u>
Total	2,236	\$ 524,373.35

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
WAYNE		
Corydon*	312	\$ 86,166.44
Seymour	155	17,213.93
Allerton	131	15,689.71
Humeston	143	33,163.88
Under 500**	139	17,697.52
Non Permit	57	1,002.71
Rural	<u>63</u>	<u>4,120.51</u>
Total	1,000	\$ 175,054.70
WEBSTER		
Ft. Dodge*	2,886	\$ 1,407,335.93
Gowrie	209	35,957.62
Dayton	194	37,028.77
Lehigh	100	18,650.18
Otho	43	3,141.91
Under 500**	454	61,970.21
Non Permit	110	3,616.17
Rural	<u>376</u>	<u>75,866.31</u>
Total	4,372	\$ 1,643,567.10
WINNEBAGO		
Forest City*	428	119,654.24
Buffalo Center	250	58,092.50
Lake Mills	342	79,289.44
Thompson	132	40,258.52
Under 500**	180	18,117.67
Non Permit	43	925.53
Rural	<u>69</u>	<u>7,020.71</u>
Total	1,444	\$ 323,358.61
WINNESHIEK		
Decorah*	917	\$ 283,175.14
Calmar	182	37,014.76
Ossian	200	27,718.08
Under 500**	329	32,878.29
Non Permit	36	750.35
Rural	<u>256</u>	<u>25,617.22</u>
Total	1,920	\$ 407,153.84
WOODBURY		
Sioux City*	6,253	\$ 3,295,312.14
Moville	314	84,164.57
Anthon	144	33,633.61
Correctionville	217	25,088.81
Danbury	124	12,688.18
Sargent Bluff	104	17,363.40
Sloan	128	31,233.05
Under 500**	485	51,232.61
(continued)		

APPENDIX TABLE III (continued)

<u>COUNTIES & TOWNS</u>	<u>NO. OF RETURNS</u>	<u>AMOUNT OF TAX</u>
WOODBURY (continued)		
Non Permit	274	\$ 7,465.00
Rural	<u>184</u>	<u>16,000.48</u>
Total	8,227	\$ 3,574,181.85
WORTH		
Manley	199	\$ 31,842.23
Northwood*	331	75,356.80
Under 500**	381	39,875.05
Non Permit	21	263.77
Rural	<u>49</u>	<u>2,291.33</u>
Total	981	\$ 149,629.18
WRIGHT		
Clarion*	549	\$ 150,541.59
Eagle Grove	503	137,205.23
Belmond	442	126,784.64
Dows	233	30,877.02
Goldfield	106	20,398.23
Under 500**	149	22,921.66
Non Permit	53	1,778.76
Rural	<u>71</u>	<u>3,188.65</u>
Total	2,106	\$ 493,695.78
OUT OF STATE		
Non Permit	86	15,023.13
Permits	<u>1,620</u>	<u>236,001.93</u>
Total	1,706	\$ 251,025.06
PERMITS		\$ 3,910.50
REFUNDS TO TAX CERTIFYING BODIES		(-) 1,562,153.35
REFUNDS TO RELIEF AGENCIES		(-) <u>2,539.76</u>
GRAND TOTAL	244,799	\$76,121,814.78

Source: Research and Statistical Division, Iowa State Tax Commission.

OCT. - 4. 1966

Research Memorandum VI

GSISLTS
JAP
8/11/66

BUSINESS TAXATION IN IOWA

Summary and Conclusions

1. Business activity everywhere is a popular base for taxation, but the forms of state-local business taxes differ widely. The reason for the widespread use of the business enterprise as a source of state-local tax revenue is obvious: it is an efficient instrument for tax collections. It is, however, only an intermediary, because the real economic burden of business taxes (and for that matter all taxes) is borne by individuals either as consumers, income recipients or wealth holders. As intermediaries in the tax payment process, the popular notion of "ability to pay" as a rationale for business taxation has no relevance independent of the ability to pay or capacity of business' customers, owners, employees and landlords.

2. Business is an important consumer of state-local public services, and economic resources are sub-optimally allocated unless business costs and prices reflect the contribution of the public sector in the production of goods and services. It is necessary, therefore, to identify a form (or combination of forms) of business taxation which approximates the extent to which individual businesses benefit from public services.

3. The benefit principle of taxation as applied to business implies that the business community should not be the principal non-voting source of tax funds whenever additional public revenues are required, that engaging in interstate competition for industry via tax inducements to location is self-defeating and that the structure of business taxes is as important as the level of business taxation. To enhance a positive business climate is to determine business tax liabilities by application of clear cut rules, not by negotiation, and to minimize the need for frequent adjustments in the tax structure.

4. For all intents and purposes, the Iowa business tax "system" consists of a multiplicity of local property taxes imposed on real and personal property. Of the approximately \$400 million in total taxes collected from Iowa commercial and industrial businesses, three-quarters of the total is accounted for by the local property tax. The corporate net income tax, which currently yields just over \$7 million annually is a comparatively insignificant source of state revenue. Whatever adverse effects tax levels paid by Iowa firms may entail, they must rest almost entirely with the deficiencies inherent in the local property tax.

5. In its application to business, the local property tax is necessarily discriminatory. Certain firms employ more real and tangible property relative to other productive factors than other firms. Some firms can reduce inventories to accommodate tax assessment calendars, and others can not. Add to these obvious shortcomings the fact that industrial and commercial real and personal properties are almost impossible to assess in any uniform fashion and that the levy represents a fixed cost that must be borne irrespective of the profitability of the firm or its volume of activity, there is ample justification for restructuring the Iowa business tax system. In short, it is not the level of business taxes in Iowa that is irritating but the structure. To the extent that a more attractive business tax structure will contribute to an even more rapid economic growth rate, reliance must be placed on sources other than the property tax.

6. The present corporate net income tax could serve as the vehicle for an improved business tax system, but not without revision. As presently constituted, it reaches only a small portion of the corporate net income originating in the State of Iowa. And what net income is subject to tax is primarily of firms with extensive intra-state operations. Because of the deduction of federal income taxes and the single-factor sales allocation

formula, firms with equal sales and net profit pay widely differing tax bills simply because of the destination of their sales. If the sales are to out-of-state destinations, the entire income from such sales is exempt. It would seem difficult to defend the position that the benefits derived from the public services provided to business or the capacity or willingness of firms to support these services is a function solely of the destination of their sales. Yet, the present statute provides for just such an illogical rationale.

7. The conversion of the Iowa corporate income tax levy into a more reasonable and effective component of the business tax system could be accomplished simply by adopting a two or three factor formula with property and payrolls or property, payrolls, and sales weighted equally in place of the present single factor. In addition to the elimination of the gross unneutralities under the existing statute, the tax at the current rate and coverage would generate estimated additional revenues ranging from \$4-8 million annually.

8. Replacement of the present corporate net income tax and/or local tax on business personalty with a general business tax on gross margins (that is, gross receipts less purchases from other businesses) or on gross return to capital has several advantages. They would apply to all businesses, corporate and unincorporated enterprises, thereby removing the discrimination against the corporate form of business organization. With only a 1 per cent rate, they would yield between \$30-70 million annually. Perhaps most important, however, the gross margins levy comes closest to distributing its responsibility in a neutral fashion, i.e., irrespective of the firm's input mix. It does not discriminate against the profitable firm as the net income tax does, nor against the use of capital as does the property tax.

BUSINESS TAXATION IN IOWA

I. Introduction: Scope of the Analysis

The term "business tax" is not well defined in common usage. It may mean a tax levied on businesses as legal entities, taxes levied on the income or property of business owners, or both. For purposes of the present discussion a business tax is defined to be any tax which is levied directly on business rather than on individuals or consumers. Of course, any tax levied on business is obviously indirectly a tax on individuals.

Most of the sales and use taxes, the individual income tax, and cigarette taxes are excluded from consideration because they are, by statutory intent, levies upon consumers and individual incomes. Thus, the taxes considered here as being on business are: the property tax, corporation income tax, insurance premium tax, highway user taxes, and sales and use taxes on business purchases. Other taxes on business, such as the chain store and the corporate license fee, have been omitted from discussion since they are relatively minor. They are, however, dealt with in another research memorandum entitled, Other Sources of Revenue.

In the following paragraphs a brief discussion is presented on the level and incidence of Iowa taxes on Iowa business. Next, the rationale for taxing business and the effect of taxes on industry location are considered. This is followed by an analysis of the present taxes levied on Iowa businesses. Alternative forms of taxing the business enterprise are discussed in the final section.

II. Impact and Incidence of Business Taxes

Table 1 shows the estimated total taxes and the distribution of taxes

paid by Iowa businesses in 1964-1965. The table also gives the incidence (i.e., final burden) of these taxes.¹ The overwhelming bulk of taxes collected from business in the state is accounted for by the property tax. Next in importance are the sales and use taxes and motor fuel taxes. The corporation income tax is the least important tax on Iowa business, yielding only \$5.9 million in 1964-1965.

The overall yield from taxes imposed on businesses amounted to \$347.4 million in 1964-1965. Of course, the impact of a tax is not the same thing as its incidence. Nearly one-third of all taxes levied on businesses were passed on to the federal government, through the practice of allowing deductions for state and local taxes paid in the computation of federal income tax liabilities. Another sizeable proportion of taxes were passed on to consumers in the form of higher prices.

The taxes levied (impact) are shown in column 1 of Table 1. Columns 2-9 show the ultimate distribution (incidence) among various groups.

¹Estimates of non-property taxes are for fiscal 1964-1965. Property taxes are those levied in 1963, collectible 1964. For a discussion on incidence see: The Iowa State-Local Tax Structure--Equity Considerations, Research Memorandum II, 5/2/66.

TABLE 1
 IMPACT AND INCIDENCE OF ALL TAXES ON IOWA BUSINESS
 1964-1965
 (MILLIONS OF DOLLARS)

Type of tax	1	2	3	4	5	6	7	8	9
Type of tax	Total tax on business (impact)	Direct to consumers	Business to consumer	Business to stock- holders and proprietors	Business to non- residents	Business to United States Treasury	Farm operators	Iowa landlords	Owners of business realty
Sales and use	24.8		6.5	2.49	1.25	8.36	6.2		
Motor fuel	22.0		3.3	3.3	6.6	8.8			
Motor vehicle registration	15.9		2.4	2.4	4.0	7.1			
Insurance	10.3	6.0	1.2	0.8	0.4	1.9			
Corporate income tax	5.9		2.8	0.4	0.1	2.6			
Farm land	127.9				25.1	22.8	46.5	33.5	
Farm personal property	25.5					5.1	20.4		
Business realty and personalty	98.8		27.6	10.0	4.8	44.4			12.0
Public utilities	<u>49.5</u>	<u>10.0</u>	<u>9.4</u>	<u>3.5</u>	<u>1.8</u>	<u>24.8</u>			
Total	347.4	16.0	58.98	25.32	45.41	111.09	73.1	33.5	12.0

Source: Research Memorandum II (5/2/66)

III. Rationale for Taxing Business

Business taxes were defined as those imposts which are levied upon or collected from business, with the exception that taxes are excluded when the business is merely the collecting agent (e.g., retail sales tax). Although business taxes are, by definition, levied on businesses, they are ultimately paid by the customers, owners, or suppliers of the business. The issue then is under what circumstances is it appropriate to use the business enterprise as a means of taxing consumers, owners, or suppliers?

Before considering this issue, the question of what is meant by "appropriate" should be answered first. The amount and manner of taxation by any government--local, state, or federal--affects the achievement of many social and economic objectives. Hence, an answer to the question of whether a particular tax is "appropriate" should perhaps be based on considerations of the effects of the tax on the full range of social and economic objectives. However, the discussion here will be limited to a consideration of the effects of business taxation on the achievement of equity and neutrality in taxation.

Equity is used here to mean the acceptable distribution of tax burdens among various groups. Generally, equity has two aspects. The first, horizontal equity, is the proper treatment of those in like circumstances; that is, those with equal incomes should be taxed equally, as should those who receive equal benefits. The second aspect of equity, vertical equity, involves the proper treatment of those in unlike circumstances. Society has generally accepted the notion that those with higher incomes are relatively better off than those with lower incomes and should pay proportionately more taxes; hence, the justification for progressive taxes and the ability to pay principle.

A tax is said to be neutral if it permits resources to be allocated to uses which are consistent with consumer preferences. An example of an unneutral tax would be an excise tax on a particular commodity which distorts the price of the commodity relative to untaxed close substitutes. However, if there are reasons to believe that the market does not allocate resources in line with consumer preferences, or should not for reasons of social control, then the concept of neutrality loses its normative significance.

These guidelines (equity and neutrality) are employed in part because they are traditionally observed by economists and in part because these are desirable social objectives which state and local governments are most likely to affect.

The issue of when business taxes are "appropriate" can now begin by considering the case for which the argument for business taxation is strongest. Social costs (fire protection, sewage, etc.) to the community are generated by the presence and activities of a business--costs which should properly be borne by the owners of the business or consumers of the product. The government is the supplier of the services and levies a tax to cover their costs. In this case, it is proper to allocate these costs to the consumer in the form of higher prices and to owners as reduced incomes in the same manner as any other cost. The final distribution of the cost among consumers and owners depends on the market conditions in which the business operates. Under these circumstances, the tax is both equitable and neutral. Those receiving equal benefits are charged accordingly. Since the tax is a legitimate cost of production, it is neutral and produces no distortions in the allocation of resources.

Now, consider a situation in which the amount of the tax levied on the business is, by assumption, unrelated to the benefits it receives from the public service or the social costs generated by its presence in the community.

Recall, the tax must fall either on consumers, owners, or suppliers. However, by assumption, the tax bears no relation to benefits received by this group. There is considerable agreement in our society that equity requires that individuals in general be taxed according to benefits received and/or ability to pay, where ability or capacity is usually measured by income. Consequently, a business tax which does not correspond to benefits received can be considered equitable only if it can be shown that its final incidence on consumers, owners, or suppliers is appropriately related to their ability to pay. And, it is neutral only if it can be shown that it does not interfere with the efficient allocation of resources.

It is doubtful if any state and local taxes now employed in Iowa and not based on benefits received are either equitable or neutral. However, even if equity and neutrality are lacking, it does not necessarily follow that such taxes should not be used. In certain instances, they may be more equitable and neutral than available alternatives, or there may simply be no alternatives. For example, a business tax might be used, and historically has been used, when no direct means is available for taxing the incomes of certain groups. This is the case, especially with local governments, where constitutional restrictions limit the kinds of taxes employed. Consider the situation in which a local unit might wish to levy what amounts to a retail sales tax on consumers but has no constitutional authority to do so. The local government could accomplish roughly the same effect with a property tax on retailers. To the extent the tax is shifted forward in the form of higher consumer prices, the desired end is accomplished, although the effect will be that of a variable excise tax with consumers of more property-intensive products paying higher taxes relative to their total consumption expenditures. This tax is likely to bear no relation to the ability to pay of consumers. If the tax is not shifted forward, the problem of equity

is likely to be compounded. Nevertheless, this tax may be justified if suitable alternatives for directly taxing incomes are not available.

IV. Taxation and the Location of Industry

The topic of taxation and industrial location deserves attention because of the current concern with making Iowa's industrial climate more attractive. Essentially, two related questions will be considered here: (1) Under what circumstances would taxes affect location? and, (2) Should a state or locality try to promote a relatively favorable tax climate in order to attract business?

Earlier it was argued that taxes levied on the basis of benefits received reflect legitimate costs of production. In considering the impact of taxes on the location of industry, it seems appropriate to continue to treat them as costs of production. If production costs are a concern in decisions regarding industry location, then for those businesses which could practically select one of several areas, location will be influenced by the relative favorability of all costs, including taxes. Further, it is not taxes as costs which are alone relevant, but taxes and tax financed benefits which businesses receive directly from governments. Too much attention is often focused on the taxes themselves, and little attention is given to the quantity and quality of services received for tax payments. For example, a business might construct its own sewage treatment facilities and lower the community's taxes for sewage. The area might gain the reputation for low taxes. It should also gain the distinction of offering low public services. In this case, it is not clear that the business is better off now than it would be if it purchased sewage facilities through taxes. The construction of its own sewage facilities is as much a cost as any other production cost. The simple fact that a business pays higher

taxes than a similar business located elsewhere is not particularly relevant in the absence of information on their relative consumption of public services.

Finally, if all governments efficiently employ benefit taxation, the taxes reflect genuine social costs occasioned by the presence and operation of business. And, if businesses tend to locate in the area where costs are lowest, then the effect of a particular state's tax-benefit climate on industrial location is entirely appropriate--even if it causes business to locate elsewhere. If business tries to locate differently, real costs of production would increase and the community as a whole would suffer.

In recent years, a number of states have been engaged in efforts to attract industry, in part, by favorable taxation. It has been argued that taxes should equate with benefits received. The question is whether the fact that benefit taxation is not employed by other states dictates that Iowa consciously do likewise. Specifically, if other states extend favorable tax treatment to businesses, should Iowa do the same? This is a difficult question and cannot be treated fully here. In considering the use of favorable or preferential tax treatment or subsidies, however, it is well to determine if benefits accrue to other community members by virtue of an industry locating in an area. If benefits do accrue to individuals or groups within an area, it is only proper that the recipients of these benefits bear the subsidy. It is also necessary to determine whether the benefits justify the subsidy even if the individuals who pay for the subsidy also receive the benefits. Of course, determining benefits and the groups which receive them is no simple matter. In the absence of such determination, however, extending favorable treatment to business amounts to a capricious policy which is difficult to justify on any grounds.

TABLE 2

CORPORATION NET INCOME AS PER CENT OF TOTAL REVENUE
(THOUSANDS OF DOLLARS)

	1965			1964			1963		
	Corporation net income	Total revenue	Column 1 as per cent of column 2	Corporation net income	Total revenue	Column 4 as per cent of column 5	Corporation net income	Total revenue	Column 7 as per cent of column 8
Illinois	--	2,116,048	--	--	1,938,034	--	--	1,846,977	--
IOWA	5,887	660,390	0.89	5,017	613,005	0.82	4,664	553,378	0.84
Kansas	11,536	475,796	2.42	10,765	433,458	2.48	10,934	388,313	2.82
Minnesota	45,025	936,125	4.81	40,286	855,339	4.71	37,743	766,032	4.93
Missouri	13,333	902,515	1.48	10,750	832,400	1.29	10,450	734,238	1.42
Nebraska	--	242,298	--	--	242,443	--	--	214,921	--
South Dakota*									
Wisconsin	81,825	1,119,396	7.31	95,244	1,078,858	8.83	62,734	921,674	6.81
North Dakota	2,472	209,015	1.18	2,028	187,010	1.08	1,812	163,257	1.11
	1962			1961			1960		
	Corporation net income	Total revenue	Column 1 as per cent of column 2	Corporation net income	Total revenue	Column 4 as per cent of column 5	Corporation net income	Total revenue	Column 7 as per cent of column 8
Illinois	--	1,674,031	--	--	1,540,551	--	--	1,452,061	--
IOWA	4,486	526,738	0.85	4,559	513,240	0.89	3,807	526,688	0.72
Kansas	8,956	378,181	2.37	8,637	362,070	2.39	8,434	353,168	2.39
Minnesota	34,990	702,955	4.98	37,186	678,179	5.48	39,840	628,990	6.33
Missouri	12,000	701,422	1.71	12,000	602,382	1.99	10,000	587,514	1.70
Nebraska	--	197,439	--	--	203,749	--	--	182,125	--
South Dakota*									
Wisconsin	53,825	768,163	7.01	56,942	706,577	8.06	59,057	686,891	8.60
North Dakota	1,766	149,008	1.19	1,512	150,436	1.01	1,414	154,290	0.92

*South Dakota's corporation tax is limited to banks and financial corporations.

TABLE 3
CORPORATION INCOME TAX RATES, IOWA
AND SURROUNDING STATES

<u>State</u>	<u>Rate (per cent)</u>	<u>Comments</u>	
Illinois	0.00		
Iowa	4.00		
Kansas	4.50		
Minnesota	10.23		
Missouri	2.00		
Nebraska	0.00		
North Dakota	0-\$3,000	3	
	\$3,000- 8,000	4	
	\$8,000- 15,000	5	
	over \$15,000	6	
South Dakota	4.50	Bank and financial corporations only	
Wisconsin	0-\$1,000	2.0	
	\$1,000- 2,000	2.5	
	\$2,000- 3,000	3.0	
	\$3,000- 4,000	4.0	
	\$4,000- 5,000	5.0	
	\$5,000- 6,000	6.0	
	over \$6,000	7.0	

Source: Commerce Clearing House, Inc., State Tax Handbook
as of September 15, 1965, Chicago, 1965.

V. The Corporation Net Income Tax

The corporation income tax in Iowa is an insignificant source of revenue for the state. In 1965, the state collected over \$660 million in tax revenues. Of this amount, the corporation net income tax amounted to \$5.9 million or less than 1 per cent of the total. For the past several years, the yield has always been less than 1 per cent of total revenues. Table 2 shows the relative importance of the corporation income tax in Iowa and surrounding states for the period 1960-1965.

Illinois and Nebraska do not levy a tax on corporate income and South Dakota levies its corporation tax only on banks and other financial institutions. Wisconsin relies more heavily on the corporation tax than do the other states in the region, with more than 7 per cent of total revenue on the average accounted for by this source. The rates for each of these six states are shown in Table 3.

The corporation income tax in Iowa is estimated to yield something in excess of \$9 million in fiscal 1967. This will represent a marked increase in yield over the previous year. Two factors account for this rise. First, the rate was increased from 3 to 4 per cent. Second, the Iowa economy has been enjoying increases in income substantially above the national average for the past two years. Despite these factors, revenue from the corporation income tax expressed as a percentage of total revenues will still only be slightly in excess of 1 per cent. In other words, despite a seemingly impressive gain, the tax remains a minor source of tax revenue for the state.

The yield of the corporation tax is determined by its rate, the base, the efficiency of administration, and the extent to which corporations comply with the law. Two features of the Iowa corporation income tax limit its base: (1) income of specified corporations is exempt, and (2) the method by which taxable income is apportioned for multi-state firms for Iowa tax purposes.

Income exempt from corporation tax. The base of the corporation income tax is severely restricted because of exemptions. The most notable exemption is that of all national and state banks. Banks are currently taxed on their "bank stock" at the rate of 6 mills of actual value. In terms of revenue, a tax on the net income of banks at the current corporation rate would probably not raise significantly more revenue than the current levy now produces.

Federal law sharply limits the manner in which states can tax national banks. Banks can be taxed: (1) on bank shares but not at a rate higher than that applied to "other moneyed capital" in the hands of individual citizens in the state coming into competition with national banks, (2) on net income at a rate not to exceed that on other classes of corporations, (3) on net income from dividends to the stockholder, subject to the "other moneyed capital" provision, and (4) by a franchise tax measured by net income.

State banks in Iowa are taxed in the same way as national banks. A state cannot impose both a share tax and an income tax on national banks. Iowa's tax is a bank stock or bank shares tax. However, there doesn't appear to be any reason why banking corporations should not be taxed under the corporation income tax. If they were, the distribution of tax payments would probably be materially altered, also. The tax as it now stands is proportional to equity capital. However, substantial differences are likely to exist among banks with respect to income earned on equity capital. A tax on net income would, therefore, take into consideration differential earnings on bank equity.

Apportionment of interstate income. The major reason for the relatively low yield of the corporation income tax in Iowa is accounted for by the method by which multi-state income is apportioned for tax purposes. Most states which levy corporation taxes do so on the basis of either a two-factor formula (payroll and property) or a three-factor formula (payroll, property, and sales).

Iowa uses a single factor--sales--in determining taxable income. Generally speaking, a single-factor formula in itself might tend to restrict the base of the tax. However, the base of the Iowa tax is further restricted by the fact that income derived from sales made within the state only is subject to taxation.

Depending upon the market that corporations serve, the impact of the tax can be markedly different. For example, an Iowa firm with all its plant and payroll within the state, but selling exclusively in interstate markets, completely escapes the corporation tax. On the other hand, an Iowa-based firm selling exclusively to buyers within the state is taxed on its entire net income. Thus, the markets that Iowa-based corporations serve are of crucial importance in determining tax liability under the corporation tax.

Equity and economic effects. In light of the rationale developed earlier for the taxation of businesses, it is difficult to justify the Iowa corporation tax in its present form. If the tax is intended to be a levy for benefits received, it falls far short of this goal. That is, it is not plausible to argue that corporations conducting business within the state are the sole recipients of government services, while those businesses located in the state but selling in interstate markets receive none.

Apart from the issue of benefits received, the present tax may unduly affect resource allocation and growth patterns of different corporations. With respect to resource allocation, the tax discriminates against firms producing for domestic markets and favors those doing interstate business. The effect is much like the imposition of a differential excise tax on certain corporations. It inserts a wedge between the costs of production and the prices of products of the taxed corporation. Consumption patterns, returns to owners, and the compensation of employees and suppliers may be affected relative to the non-taxed firms.

The results of this reallocation probably also produce unintended effects with respect to ability to pay. Regardless of where the tax is shifted--and the incidence of this tax is by no means certain--it would only be by the sheerest coincidence if the tax fell equitably among consumers, owners, and suppliers. For example, even if the stockholders bore the ultimate burden of the tax, the chance that dividend income is of equal importance to total income of each stockholder is remote.

Differential growth patterns may also be affected. Firms incurring no taxes or smaller taxes could possibly enjoy growth rates in excess of the corporations serving domestic markets who pay on all their net income.

The tax, of course, can be viewed as a direct subsidy to "export-oriented" firms in that they receive benefits for which little or even no payments are made. In fact, the law is constructed in such a manner that there can be little doubt that it is, in fact, a subsidy to "export" firms, more particularly to manufacturing "export" firms. Table 4 shows the distribution of the corporation net income tax among industry groups for fiscal 1964. Utilities and retailers together accounted for about one-third of total corporation income taxes collected. Manufacturers paid \$606 thousand or approximately 13 per cent of total corporation taxes. On the other hand, manufacturing accounted for about one-third of all value added in the state. Taxes paid by all manufacturers expressed as a per cent of total value added in manufacturing were 0.0003. Thus, it would appear that manufacturing corporations as a group are relatively lightly taxed. No breakdown is available with respect to the value added of "export-oriented" manufacturing firms and their tax payments, but in all probability such a breakdown would reveal that many of Iowa's largest corporations in terms of value added pay little, if any, corporation taxes.

Even if the avowed purpose of the law is to subsidize certain corporations, presumably to attract interstate industry, the present method may not be desirable.

TABLE 4
CORPORATION INCOME TAX COLLECTIONS
FROM IOWA BUSINESS
FISCAL 1964

Type of Business	(1) Tax paid (thousands of dollars)	(2) Per cent of corporation income tax collections	(3) Tax paid as per cent of total tax collections from business
Construction	152.7	3.3	.043
Agriculture	28.9	.6	.008
Finance	132.3	2.8	.036
Manufacturers	606.3	12.9	.168
Newspapers	93.6	2.0	.026
Utilities	901.4	19.3	.251
Retailers	627.4	13.4	.174
Service	330.1	7.0	.091
Transportation	124.5	2.7	.035
Wholesalers	299.7	6.4	.083
Misc. & Unclassified	<u>1,385.4</u>	<u>29.6</u>	<u>3.85</u>
TOTAL	4,682.3	100.0	1.300

Source: Iowa State Tax Commission, "Annual Statistical Report for the Fiscal Year Ended June 30, 1964," Income Tax Division: Table I.

Industry, as a rule, is not distributed evenly over the state. Hence, the benefits of the subsidized industry do not accrue to all citizens of the state in an equal manner. Some communities, and people within communities, benefit more relative to other communities and people. Ideally, the groups which benefit by the location of a particular industry should bear the cost of the subsidy rather than the state as a whole.

Compliance. Present compliance with the corporation tax as it now stands is lower than it could be for several reasons. First, the Iowa State Tax Commission relies heavily on the records of the Secretary of State to determine which firms are carrying on trade and business within Iowa. Iowa law requires all foreign corporations transacting business in Iowa to obtain a Certificate of Authority from the Secretary of State. However, because sanctions against corporations which fail to comply with this law are weak, firms may fail to register and thereby avoid both the annual license fee and the corporation net income tax. Essentially two punitive measures can be taken against foreign corporations which do not obtain certificates: (1) the corporation cannot maintain any action as a plaintiff in a state court but may appear to defend; (2) the present law provides a basis for issuing an injunction restraining the corporation from transacting business in the state. However, the latter procedure is too costly and time consuming from the state's standpoint to be effective.

Second, a firm can make a sale to Iowa buyers but still not be legally considered as "transaction business" in Iowa. Section 496A.103 reads in part: ". . . a foreign corporation shall not be considered to be transacting business in this state . . . by reason of . . . soliciting or procuring orders whether by mail or through employees or agents or otherwise, where such orders require acceptance without this state before becoming binding contracts."

Presumably, then, a foreign corporation making actual sales in Iowa would not be subject to the Iowa income tax on these sales, if under 496A.103, it is

legally not "transacting business." From the Tax Commission's standpoint, under the present order it is difficult for that agency to be able to determine which firms escape the corporation tax by failing to obtain a Certificate of Authority and those which are deemed not to be "transacting business" within the confines of the law.

Finally, the Tax Commission devotes few resources to the enforcement of the corporation income tax. Administrative expenses allocable to the corporation income tax are approximately 0.1 per cent of total collections. On the other hand, over 1 per cent of personal income tax collections is allocated for auditing and enforcing. This suggests that if the present allocation formula is to be maintained, some consideration should be given to the possibility of changing the language of the law and/or the practices of the Tax Commission in order to obtain more complete compliance with the law.

VI. Property Taxes on Business

Property taxes are by far the single most important source of revenue for local governments in the state. In 1964, total assessed valuation of property amounted to more than \$5.5 billion. Taxes levied on the value of all property during 1964 (collectible 1965) totaled nearly \$470 million, or approximately 8 cents per dollar of assessed value.

The final net equalized taxable value of all business property in the state in 1964 was approximately \$4.2 billion. Table 5 shows the breakdown among various broad types of business property along with taxes levied in 1964 and taxes levied per dollar of assessed value. Not surprisingly, the largest share of total assessed business property was accounted for by the agricultural sector. Agricultural land and buildings and agricultural personal property were assessed at over \$2.4 billion in 1964. Commercial and mercantile property comprised the next highest category, totaling about \$738 million. Industrial and manufacturing real and personal property was assessed at \$295 million in 1964.

TABLE 5

TAXES LEVIED PER DOLLAR OF NET EQUALIZED TAXABLE VALUE BY TYPE OF
BUSINESS (TAXES LEVIED IN 1964 COLLECTIBLE IN 1965).

(IN THOUSANDS OF DOLLARS)

	1		2		3 = (2-1)
	Final net equalized taxable value in <u>1964</u>	Per cent total value	Taxes levied in <u>1964</u>	Per cent total taxes	Taxes levied per dollar assessed value
Ag. lands & bldgs.	2,101,535	50.53	130,536	41.92	.06211
Ag. personal property	<u>374,706</u>	9.01	<u>31,554</u>	10.13	.08421
Total agriculture	2,476,241	59.54	162,090	52.05	.06546
Commercial & mercantile lots and bldgs.	461,147	11.09	45,949	14.76	.09964
Commercial *personal property	<u>276,850</u>	6.66	<u>23,314</u>	7.49	.08421
Total commercial	737,997	17.75	69,263	22.25	.09385
Industrial & mfgr. plants real estate	213,244	5.13	20,503	6.58	.09615
Industrial & mfgr. plants personal property	<u>82,701</u>	1.99	<u>7,936</u>	2.55	.09596
Total Industrial & mfgr. property	<u>295,945</u>	7.12	<u>28,439</u>	9.13	.09610
Total (net of public utilities)	3,510,183	84.40	259,792	83.43	.07401
Public utilities	<u>648,600</u>	<u>15.60</u>	<u>51,606</u>	16.57	.07957
Total including utilities	4,158,783	100.00	311,398	100.00	.07488

*Includes grain, farm machinery, and livestock.

**Includes mercantile furnishings, merchandise, inventory, Hotel, Motel and apartment house furniture, and construction equipment.

Source: State Tax Commission, Tax and Valuation Report, 1964.

Total taxes and taxes levied on separate categories of business property are also shown in Table 5. Out of a total \$311 million levied on the Iowa business community in 1964, the agricultural sector accounted for \$162 million. Commercial and mercantile and utilities were taxed \$69 million and \$51 million, respectively. Taxes on industrial and manufacturing property amounted to just over \$28 million.

By way of contrast, Table 5 shows the assessed valuation of all business property in the state and each broad category as a per cent of the total. Also shown in the table are taxes levied on each class of business property as a per cent of total taxes levied. Agriculture, with 59 per cent of property valuation, paid 52 per cent of all property taxes on business in 1964. Commercial property constituted 17.8 per cent of the total, but paid 22.3 per cent of all taxes. Industrial and manufacturing property was assessed on 7.1 per cent of total business property and paid 9.1 per cent of the total business tax bill.

With the exception of agriculture, each broad category of business activity paid a per cent of total taxes in excess of their respective percentages of total assessed property values. In the case of agriculture, where the per cent of taxes levied is less than the per cent share of property values, the effect of the agricultural land tax credit is clearly seen. Taxes levied per dollar of assessed value are decidedly lower for agricultural land and buildings than for any other class of property.

Accuracy and uniformity of assessments. Since 1962 the Iowa State Tax Commission has published annual assessment/sales ratio studies for several types of urban and rural properties. From these ratios, estimates of the market value of certain classes of real property can be derived. Applying the tax levy against the market value gives an effective tax rate. Effective tax rates can be computed for each class of property and then used for comparisons.

The 1964 assessment/sales report gives ratios for residential, commercial, and farm lands and buildings. Since this section of the report is concerned

with business property taxation, the market value of residential real property is not considered. For 1964, the state-wide average assessment/sales ratio for commercial real property was 28.6 per cent. That is, commercial property--on the average--was assessed at 28.6 per cent of its market value. The assessment/sales ratio for farm land and buildings was 23.5 per cent.

When the assessed valuation of farm land and buildings and commercial realty is converted to market value by the use of the assessment/sales ratio, the market value of farm land and buildings is estimated at \$8.94 billion, while the market value of commercial property is \$1.61 billion. Dividing each of these figures into the taxes levied on each property class yields the effective tax rate. For farm land and buildings, the rate is 1.47 per cent, while for commercial property the rate is 2.86 per cent. These computations are summarized in Table 6.

Although there is considerable disparity between the effective rates, they should be interpreted cautiously. Assessment/sales ratios are constructed from actual sales of properties during the year. The ratios may be unduly influenced by the fact that the properties exchanged are not representative of the properties within the class. Also, the ratios may be based on only a small number of sales. In short, the ratios may be considerably biased. Nevertheless, the assessment/sales ratios are likely to present a clearer picture of the property tax impact than simple assessed valuations.

Assessment of industrial and manufacturing realty. A frequently voiced criticism of the real property tax in Iowa is that it weighs heavily upon industrial and manufacturing concerns and hence upon economic development. The limited sale of such properties, however, makes the construction of an assessment/sales ratio difficult. Moreover, statistics concerning the market value of land, plant, and equipment for this class of property are not available. Nevertheless, if a reasonably accurate picture of property taxes on business,

TABLE 6

EFFECTIVE PROPERTY TAX RATES ON BROAD CLASSES
OF REAL BUSINESS PROPERTY
1964 (COLLECTIBLE 1965)

	<u>Assessed value</u> <u>(billions)</u>	<u>Market value</u> <u>(billions)</u>	<u>Taxes levied</u> <u>(millions)</u>	<u>Effective tax</u> <u>rate (per cent)</u>
Agricultural land and buildings	2.102	8.940 ^a	131	1.47
Commercial and mercantile	.461	1.610	46	2.86
Industrial and manufacturing	.213	1.374 - 1.649 ^b	21	1.53 - 1.27

-263-

^aThe market values for agricultural land and buildings and mercantile lots and buildings were derived from state assessment/sales ratios.

^bThe market value of industrial and manufacturing real property for 1963 was estimated in several ways, yielding a range of values for real property excluding land. Methods employed in estimating are appended.

and differences among businesses is to be made, some estimate of the market value of industrial and manufacturing real property is necessary.

As a first approximation, the average state-wide assessment/sales ratio for all property can be applied to the assessed value of industrial and manufacturing realty. When this is done, an effective rate of 2.34 per cent results. This is higher than the effective rate on agricultural land and buildings, but below the rate on commercial property. The market value of industrial and manufacturing to which this effective rate applies is approximately \$881 million.

It is difficult to believe that the value of industrial and manufacturing plant, equipment, and land was as low as \$881 million for the entire state in 1964 since the value of depreciable assets in manufacturing exceeded \$1 billion in 1958. Consequently, independent estimates of this figure were constructed. Various estimates of this figure--while admittedly approximations--yield a range of estimates from \$1.374 billion to \$1.649 billion for 1963.¹ These estimates do not include the value of land, but only plant and equipment. Thus, the estimates for industrial and manufacturing realty are in all probability conservative.

If the estimates--\$1.374 billion and \$1.649 billion--are divided into taxes levied on industrial and manufacturing property in 1964, the effective rates become 1.53 per cent and 1.27 per cent, respectively. The former effective rate is about equal to that on agricultural land and buildings, while the resulting rate of 1.27 per cent is less than that on agricultural property and less than one-half the rate on commercial realty.

It should again be mentioned that the market value estimates of industrial and manufacturing realty are only approximations and therefore do not constitute "proof" that this class of property is underassessed relative to others. County

¹See Appendix A at the end of this paper.

and city assessors apparently exercise considerable discretion in classifying property for assessment purposes, and consequently some industrial and manufacturing property may be erroneously classified as commercial realty. If this is the case, the estimate of property values obtained above (\$1.37 billion-\$1.65 billion) may be higher than Tax Commission figures because of misclassification rather than underassessment.

No attempt was made to estimate the market value of industrial and manufacturing realty by county. However, the assessment of industrial and manufacturing realty and personalty, as reported by the property tax division of the State Tax Commission for 1963, reveals some interesting comparisons. For example, seven counties reported no industrial and manufacturing real property for 1963. Five counties had no industrial and manufacturing personal property listed for assessment. Four counties had neither real nor personal industrial and manufacturing property listed on the assessment roles.

It is entirely conceivable that some of these counties have no industrial and manufacturing property of any kind to report. However, two counties (O'Brien and Clayton), which reportedly had no industrial and manufacturing real property, reported industrial and manufacturing personal property. Moreover, according to the 1963 Census of Manufacturers these same two counties were reported to have total manufacturing employment of 877, with a combined value added of \$7.1 million and a payroll of \$2.3 million.

This situation does not necessarily support the contention that industrial and manufacturing property is underassessed or escapes assessment altogether. Rather, it may be that some property is misclassified by assessors.

Given the state's excessive reliance on property taxes, equity considerations require determination of the present distribution of tax payments among the several classes of business property. However, until the problem of misclassifying property is dealt with, a reasonably accurate picture of relative property tax loads is impossible to determine.

In dwelling on the problem of misclassifying certain properties, our intention is not to be overly critical of assessors. The job of assessor is a difficult one at best. Rapid technological change has made the practice of assessing certain properties even more difficult. It is too much to expect a county or city assessor to possess the expertise necessary to assess adequately complicated and highly specialized properties. The fact that some misclassification or even underassessment occurs is not surprising under the present circumstances.

The state might be well advised to consider the possibility of either centrally assessing industrial and manufacturing property or hiring experts in this field to assist local assessors.

Equity and economic effects. The business community receives many benefits for the payment of its property taxes. In a sense, it does approximate the benefits-received principle; however, it does so in a relatively imperfect manner. It is obvious that the assessment of property is highly subjective. As earlier mentioned, a substantial amount of property is either misclassified or underassessed. To the extent that underassessment occurs, it produces inequities among areas within the state and among classes of property. Also, the property tax is not truly "general," and its incidence is somewhat uncertain. If increased prices to consumers are not reflected in an increased quantity or quality of government services to the business, resources are likely to be misallocated. Finally, if the property tax is administered on the basis of benefit received, and if all property were accurately assessed, it is doubtful if each benefit, or the aggregate, is highly correlated with the assessed value of property.

The effect of the property tax, as it now stands, on the location of business is difficult to determine. While some areas have probably engaged in the practice of "competitive underassessment" in the hopes of attracting industry there is no conclusive evidence, one way or the other, that this has affected

location.

VII. Sales and Use Tax

For the most part, sales by business to other businesses are subject to the Iowa retail sales and use tax. Excluded under the sales tax are purchases used in the processing of tangible personal property intended to be sold ultimately at retail. Industrial materials and equipment not readily obtainable in Iowa and which are directly used in the actual fabricating, compounding, manufacturing, or servicing of tangible personal property intended to be sold ultimately at retail are exempt from the retail sales and use tax.

From an economic point of view, taxing most business purchases under the retail sales and use tax makes little sense. The cost of a typewriter is just as much a cost of doing business as the consumption of fuel. Yet, the former is taxed; the latter is not. The result of this is that what appears to be a single stage tax, in some cases, becomes a multiple stage tax. Businesses pay retail sales and use taxes on purchases not "directly" used in processing, thereby incurring costs which must be covered by the price of the final good. In turn, this final good is taxed at retail.

Sales and use taxes on business purchases are far from insignificant. The estimate of revenue from this source was \$25 million in 1965.

VIII. Insurance Premium Tax

In 1965, the insurance premium tax yielded revenue of approximately \$10 million. A rate of 2 per cent is levied on gross premiums less premiums returned to policyholders and dividends.

The tax is essentially equivalent to the insurance premium taxes of surrounding states (Illinois, Kansas, Minnesota, Missouri, North Dakota, and Wisconsin). The tax is probably shifted to consumers. There is little reason to expect that it is a significant factor in the location of business.

IX. Alternatives to Present Business Taxation in Iowa

A major conclusion of the preceding analysis of state and local taxation of business in Iowa was that present business taxes are non-neutral in their impact on resource allocation and inequitable in their impact on the customers and owners of Iowa businesses. This section considers two questions. First, are there alternative means of taxing Iowa business that would be more equitable and neutral than present taxation? Secondly, how would the distribution of levies be altered by adopting one or more of the proposed alternatives? More specifically, three possible modifications of the present tax system are examined:

1. Change to a two (payroll and property) or three (payroll, property, and sales) factor formula for allocating corporation net income.
2. Adoption of a value added tax as a partial or complete substitute for state and local taxation of business.
3. Adoption of a tax on the gross return to capital as a partial or complete substitute for present business taxation.

Two and three factor formulae. If business taxation is to be taxation on the basis of benefits received, a strong case can be made for including payroll and/or property in any formula for determining the amount of a corporation's income which is taxable by Iowa.¹ Any benefits or services provided by the state to the corporation are at least as likely to accrue to the corporation having property and payroll in Iowa as the corporation selling in Iowa. That is, all corporations producing and/or selling in Iowa seem likely to receive benefits from the state. Consequently, if the corporation income tax is to be retained, either a two or three factor formula would be more equitable and neutral than the present single sales-factor formula.

¹The present formula uses only a sales factor.

Although the two or three factor formula may be preferred on grounds of equity and neutrality to the present sales-factor formula, the question arises whether the two or three factor formula might be a barrier to the location of industry in Iowa. This question has been considered at several points in preceding sections of this paper. At this point, it seems sufficient to note that the two or three factor formula might be a greater barrier to the location of industry in Iowa than the sales-factor formula. However, before their presumed impact on the location of industry becomes a barrier to adoption of the two or three factor formulae, it is necessary to ask and obtain affirmative answers to two questions. First, should Iowa governments attempt to attract industry by favorable tax laws? And second, if so, is the favorable treatment of "export" corporations, implicit in the present corporation income tax laws, an appropriate means of inducing industry to locate in Iowa?

Satisfactory answers to these two questions are not presently available. However, an earlier discussion of the first question (p. 9 above) casts doubt on the legitimacy of any state government attempt to attract industry with favorable tax treatment. With respect to the second question, if a favorable industrial climate is to be fostered by state or local government activity, should not the costs and benefits of such a policy be made more explicit than is the case when the policy takes its present form of exempting export corporations from the corporation income tax? In view of the uncertainty about the desirability and feasibility of attracting industry by favorable tax treatment, an appropriate strategy might be to make changes which promote our objectives of neutrality and equity in business taxation until it can be shown more conclusively than at present that such changes and the objectives they promote should be sacrificed in order to attract industry.

An important implication of the preceding analysis is that uniform interstate taxation of interstate corporation income according to a two or three

factor formula would promote the objectives of neutrality and equity in business taxation. In addition, uniform taxation would lower the corporation's cost of complying with state laws and at the same time probably improve compliance.

Two and three factor formulae: yield and distribution among Iowa industries. This section considers the effect on taxes paid by Iowa-based industry of substituting a two factor (payroll and property) or a three factor (sales by destination, property, and payroll) formula for allocating corporate income for the present one factor (sales by destination) formula. The method used to estimate the income that would be subject to taxation under the two factor formula is described. Estimates of the taxes that would have been collected in 1962 are also presented and compared with actual 1962 collections. Estimates were made for 1962 rather than later years because of certain data limitations. However, the important consideration here is not simply the yield but the distribution of tax payments.

Direct measures of the income earned by corporations from their operations in Iowa are not available. The procedure used in this study to estimate corporation income by industry involved three steps:

I. Estimates of gross return to capital¹ on operations in Iowa were obtained for each of the following industry groups:

- a. Agriculture
- b. Mining
- c. Construction
- d. Manufacturing
- e. Trade (wholesale and retail)

¹As used in this study, gross return to capital is the sum of the following accounting magnitudes: amortization and depreciation charges, debt service charges, indirect business taxes, federal income taxes, and net income after federal taxes. That is, it is the gross return to capital--total receipts minus cost of materials and labor inputs.

f. Transportation, communications, and public utilities

g. Services

In addition, estimates of gross return to capital were made for each two-digit manufacturing industry operating in Iowa. For each of the industry groups, gross return to capital was estimated by subtracting participation income from gross value added.¹ For the two-digit industries in manufacturing, gross return to capital was estimated by subtracting total payroll from value added.²

II. Gross return to capital on all operations in the United States was estimated for each industry group and industry in the same way as the state estimates. Total corporate profits after federal taxes, for each industry and industry group, were obtained from Statistics of Income data.³ Corporate profits after federal taxes were then expressed as a percentage of gross return to capital to provide an estimate of the relationship between corporate income and gross returns.

¹Gross value added estimates for all industry groups except manufacturing were taken from: National Planning Association, State Projections to 1975, Regional Economic Projections Series--Report No. 65-II, 1965. Gross value added for manufacturing is from: United States Bureau of the Census, Annual Survey of Manufactures: 1964 General Statistics for Industry Groups and Industries, United States Government Printing Office, Washington, D. C., 1965.

Estimates of participation income were taken from Survey of Current Business, August, 1963, Table 70, p. 15.

²Estimates of value added and payroll in 1963 were obtained from Annual Survey of Manufactures: 1964, General Statistics for Industry Groups and Industries (cited in note 1, page 276).

Estimates of 1962 value added by two-digit industry were obtained by assuming that the per cent of total manufacturing value added originating in each two-digit industry was the same in 1962 and 1963. Similarly, estimates of 1962 payroll for each two-digit industry were obtained by assuming that the per cent of total manufacturing payroll accounted for by each industry was the same in 1962 as in 1963.

³United States Treasury, Internal Revenue Service, Statistics of Income, 1962: Corporation Income Tax Returns, United States Government Printing Office, Washington, D. C., 1965

TABLE 7

CORPORATE INCOME AFTER FEDERAL TAXES, GROSS VALUE
ADDED AND GROSS RETURNS TO CAPITAL OF IOWA INDUSTRIES, 1962

Industry	Corporate income after federal taxes		Gross value added		Gross returns to capital	
	(\$ million)	(Per) (cent)	(\$ million)	(Per) (cent)	(\$ million)	(Per) (cent)
Agriculture	.20	.04	1,125.8	15.36	194.9	6.47
Mining	2.90	.66	58.1	.79	38.7	1.29
Construction	12.60	2.87	317.4	4.33	110.5	3.67
Manufacturing	238.87	54.34	2,034.5	27.75	983.0	32.65
Food	36.48	8.30	583.8	7.96	276.4	9.18
Apparel	.68	.15	15.7	.21	5.2	.17
Lumber	2.34	.53	24.2	.33	8.9	.30
Furniture	2.47	.56	23.3	.32	10.8	.36
Paper	4.31	.98	35.8	.49	19.6	.65
Publishing	8.91	2.03	111.2	1.52	48.7	1.62
Chemicals	16.07	3.66	124.6	1.70	94.0	3.12
Leather	.14	.03	2.4	.04	.7	.02
Stone, clay, glass	10.10	2.30	87.9	1.20	54.3	1.80
Primary metal	8.20	1.87	94.8	1.29	47.4	1.57
Fabricated metals	8.23	1.87	92.2	1.26	39.0	1.30
Machinery (except elect.)	58.35	13.27	425.8	5.80	194.5	6.46
Electrical machinery	24.84	5.65	228.9	3.12	120.6	4.01
Transportation equip.	3.64	.83	23.0	.31	9.4	.31
Scientific instruments	2.48	.56	23.9	.33	8.9	.30
Misc. manufacturing	5.71	1.30	66.2	.90	24.3	.81
Transp., comm., and pub. util.	54.95	12.50	670.6	9.15	331.0	10.99
Trade	48.29	10.98	1,484.0	20.24	497.8	16.53
Finance	72.28	16.44	839.2	11.45	628.5	20.87
Services	9.51	2.16	801.4	10.93	226.5	7.52
TOTAL	439.60	99.99	7,331.0	100.00	3,010.9	99.99

Source: See text.

III. Multiplication of the estimate of gross return to capital (from step I) by the ratio of profits to gross return to capital (from step II) provided the estimate of corporation income after federal taxes. Estimates of gross return to capital, gross value added, and corporation income after federal taxes are presented in Table 7 for each classification of Iowa industry considered in this section.

An enumeration of the assumptions implicit in this method of estimating income seems appropriate. The procedure assumed that the ratio:

$$r = \frac{\text{corporation profits after federal taxes}}{\text{gross return to capital}}$$

for a given industry, is the same for Iowa as it is for the United States.

Recalling the definition of gross return to capital, this assumes that the ratio of corporation profit to

1. depreciation and amortization charges,
2. interest and debt service charges,
3. federal income taxes, and
4. indirect business taxes

does not vary geographically within an industry or industry group. Or, if there is variation in these ratios, the variation is off-setting. Clearly, these assumptions are more likely to be met, the larger is Iowa's share in the industry or industry group. Iowa's share in the output of most industries is relatively small; consequently, estimates of corporation income subject to taxation with a two factor formula may be erroneous. On the other hand, there is no readily apparent reason for expecting that the assumptions listed above are not valid.

Estimated yields and their industrial distribution. Table 8 presents estimates of corporation income tax collections for fiscal year 1962 under a two factor (payroll and property) formula. Since all the corporation income

TABLE 8

ESTIMATED YIELD OF IOWA CORPORATION INCOME
TAX WITH 2-FACTOR (PAYROLL AND PROPERTY) FORMULA

1962

Industry	Yield (\$ million)	Industry	Yield (\$ million)
Agriculture	.006	Manufacturing (contd)	
Mining	.09	Primary metals	.25
Construction	.38	Fabricated metals	.25
Manufacturing	7.17	Machinery (except elect.)	1.75
Food	1.09	Elect. machinery	.75
Apparel	.02	Transportation equip.	.11
Lumber	.07	Scientific instruments	.07
Furniture	.07	Misc. manufacturing	.17
Paper	.13	Trade	1.45
Publishing	.27	Trans., comm., public util.	1.65
Chemicals	.48	Finance	2.17
Leather	.004	Services	<u>.29</u>
Stone, clay, glass	.30	TOTAL	13.19

Source: See text.

originating from operations in Iowa is subject to tax under the two factor formula, tax collections by industry can be obtained by multiplying estimated corporate income after federal taxes by the 1962 tax rate, 3 per cent. Total collections are probably somewhat high because no adjustment is made for the fact that some profits earned by some firms classed in the finance group would not be taxable (insurance companies and banks). Even if the full amount of the collections from the finance sector are subtracted from total collections,

however, the residual, \$11.02 million, exceeds actual 1962 collections, \$4.42 million, by a substantial amount.

The yield with a three factor formula was estimated by using actual collections as an estimate of the yield due to the sales factor. Consequently, collections with the three factor formula are estimated by:

$$\frac{1}{3} (\text{actual 1962 collections}) + \frac{2}{3} (\text{Estimated collections with a two factor formula}).$$

The taxes paid by miscellaneous and unclassified firms were allocated proportionately to all classes except agriculture, utilities, and transportation. It was thought that firms in these three categories would probably be correctly classified. In addition, to obtain industry classifications which are roughly comparable, the following consolidations of industrial classifications were made.:

1. Manufacturers and Newspapers = Manufacturing and Mining in Table 9.
2. Utilities and Transportation = Transportation, Communications, and Public Utilities in Table 9.
3. Retailers and Wholesalers = Trade in Table 9.

Estimates of collections under the three factor formula are presented in Table 9. If collections from the finance sector are subtracted from total collections, the residual, \$8.76 million, exceeds actual collections, \$4.42 million, by \$4.34 million or about 100 per cent.

In summary, there appears no reason to expect that substituting a two or three factor formula for the present formula would result in revenue loss.

The distribution of liabilities among industries under the three formulae is also presented in Table 9. This distribution is approximate for at least two reasons. First, the industrial classifications used by the Iowa Tax Commission do not coincide exactly with classifications used in estimating the

TABLE 9

ESTIMATED YIELD OF CORPORATION INCOME TAX

WITH ALTERNATIVE INCOME ALLOCATION FORMULAS, FISCAL 1962

Class of Business	Present (sales destination) formula		2-Factor (payroll, property) formula		3-Factor (sales payroll and property) formula	
	Amount ^a (\$ million)	Per cent of total	Amount (\$ million)	Per cent of total	Amount ^f (\$ million)	Per cent of total
Agriculture	.033	.75	.006	.05	.015	.15
Construction	.23	5.20	.38	2.88	.33	3.21
Manufacturing and mining.	1.06 ^b	23.98	7.26	55.04	5.19	50.49
Retail	1.54 ^c	34.84	1.45	10.99	1.48	14.40
Transportation, communication and Public Utilities	.81 ^d	18.33	1.65	12.51	1.37	13.33
Finance	.22	4.98	2.17	16.45	1.52	14.79
Services	.53	11.99	.29	2.20	.37	3.60
Miscellaneous industries	4.42 ^e		13.19		10.28	

^aAmounts are average of fiscal years 1962-63.

^bIncludes manufacturing, natural resources, and newspapers in Table I of source (noted w).

^cIncludes retail and wholesale trade in Table I of source.

^dIncludes transportation and utilities in Table I of source.

^eMiscellaneous and unclassified amounts are allocated proportionately to all categories except agriculture, utilities, and transportation.

^fA weighted average of sales formula and two factor formula with two factor formula given the weight.

Source: Iowa State Tax Commission, Annual Statistical Report for the Fiscal Year Ended June 30, 1962-63; Income Tax Division; Table I.

yield due to the payroll and property factors. Secondly, much of the tax collected with the present formula had to be arbitrarily allocated to the various industries. Consequently, the estimates of the effects of the various income allocating formulae on the liabilities of the several industries are probably less reliable than the estimate of their effects on total collections.

In addition, substitution of a two or three factor formula for the present formula may radically alter the levies on a particular firm even though industry levies remain unchanged. For example, the comparison does not bring out the differential impact of the present and the two factor (payroll and property) formulae on tax liabilities of Iowa-based firms having a high per cent of their sales outside Iowa.

Despite these shortcomings, several conclusions about differences in the distribution of levies with alternative income allocation formulae can be made with some confidence.

1. Collections from manufacturing industries would represent a larger share of total collections if either a two or three factor formula were substituted for the present formula. The reason for this is the proportion of output which is exported from Iowa is greater for manufacturing than for other industries.

2. Collections from Iowa-based firms would represent a larger share of the total if either a two or three factor formula is adopted.

3. Wholesale and retail trade corporations would account for a smaller proportion of total collections if either a two factor or a three factor formula were substituted for the present formula (10.99 per cent for a two factor formula versus their present share of 34.84 per cent).

4. Collections from transportation, communications, and public utilities would represent a smaller share of total collections if either a two or three factor formula were substituted for the present formula.

5. The estimated share for finance, insurance, and real estate corporations under a two factor formula (16.44 per cent) is too high because no adjustment is made for the fact that insurance and bank corporations do not pay the tax. It is not possible to make a conclusive statement about the effect of the two or three factor formula on the relative share of payments that would be made by finance and real estate firms (excluding banks and insurance companies). However, because a large per cent of their sales are in Iowa, their relative share might be expected to fall with the adoption of a two or three factor formula.

Value added (VA) and gross return to capital (GRC) taxes. The first portion of this section briefly outlines the more important reasons why the value added and gross return to capital taxes are more appropriate mechanisms for accomplishing benefit taxation than are the major business taxes in current use (corporation income tax and tax on real and personal property). Then estimates of the industrial distribution of these taxes are presented and briefly discussed.

If it is accepted that business taxation is more nearly equitable and neutral the more closely it corresponds to benefit taxation, then a tax is appropriate to the extent that there is a positive correlation between the benefits received by business and the tax base. Businesses benefit from a variety of government services: police and fire protection, sanitation and transportation facilities, contract enforcement, water, and frequently, power supply, etc. In general, the services which are available to and used by businesses do not depend on the amount of profit or income received by the business. Rather, government-supplied services are more likely to be correlated with the scale of the business as measured by, for example, its receipts, property, payroll, or all three. And, in general, such services are available to a business regardless of its legal form: corporation, partnership, or individual

owner. For these reasons, a tax on value added or gross return to capital (value added minus wage and salary charges) would be a more appropriate means of benefit taxation than a tax on income. And, such a tax should be levied on incorporated and unincorporated enterprise alike. Hence, a value added or gross return to capital tax would be superior, from the standpoint of equity and neutrality, to the present corporation income tax.

Which of the two would be more appropriate would depend on whether the benefits from government services are more closely correlated with capital inputs (GRC tax) or capital and labor inputs (VA tax).

The major advantage of a VA or GRC tax over the corporation income tax was the fact that benefits received are likely to be more highly correlated with capital or capital and labor inputs than with income. Likewise, the value added tax may be preferred to the property tax if benefits are more closely related to labor and capital inputs than property inputs. However, both the property tax and the GRC tax imply similar assumptions about the distribution of benefits; that is, they both assume benefits to be correlated more or less with the capital input. The gross return to capital is a flow measure of the capital or property input; property value is a stock measure. Consequently, the GRC tax is not superior to the property tax because it implies a more plausible assumption about the distribution of benefits. Rather, the GRC tax is to be preferred because the base varies automatically with variations in the general price level or with variations in the market valuation of goods and services produced with business property. That is, the chief advantage of the GRC tax (as an alternative to the property tax) is that it utilizes a tax base which (1) is more elastic, (2) can be defined and measured with less subjectivity and uncertainty, and (3) can probably be measured with less expense than the property tax base. These advantages are also shared by the value added tax.

The chief drawback to the VA or GRC tax as substitutes for the property tax, at the local level is that some coordination among local governments would be necessary in administering the tax. Businesses operating in several counties or school districts would have to allocate the firm's total value added or gross return to capital among the several counties or school districts in which it operates. Coordination would be needed to ensure that firms report all VA or GRC to one governmental unit or another and to prevent firms from reporting VA and GRC to take advantage of intercounty differences in tax rates. There is no apparent reason why such coordination would not be possible.

A second, though relatively minor, problem is that of obtaining information needed to allocate VA or GRC among taxing districts. Many businesses would undoubtedly have records of: value of shipments (or sales), purchased inputs, and wage bills for each store or plant it operates. For such firms, the allocation of total VA or GRC among various counties would be no problem. If such records were not available, some formula for allocating VA or GRC would have to be devised. One possibility would be to assume that the proportion of a firm's VA or GRC generated in each district is equal to the proportion of its employment in the district. This formula assumes that value added or GRC per employee is the same in each establishment (plant, store, or office) operated by the firm.

The two preceding paragraphs have discussed what appear to be the major administrative problems that would be met by local governments using the VA or GRC tax. Their purpose has been to suggest that the problems are tractable and perhaps more tractable than problems met in equitable administration of the property tax. Consequently, these administrative problems should not be permitted to be obstacles to the institution of a VA or GRC tax at the local level if it is thought that such a tax is indeed more equitable and adequate than the present property tax.

Estimated distribution of gross return to capital and gross value added taxes among Iowa industries. The estimated distributions of levies from proportional taxes or gross return to capital and gross value added are given in Table 10 (columns 2 and 3). Relatively labor intensive industries would be liable for a larger share of payments with a value added tax than with a gross return to capital tax (e.g., agriculture, services, trade, construction). And, because both incorporated and unincorporated businesses are subject to these two taxes, there is a shift of tax liabilities from manufacturing and transportation, communications, and public utilities, to agriculture, trade, and services when either of the taxes is substituted for the corporation income tax.

In 1962, a 0.1 per cent tax on gross value added or a 0.2 per cent tax on gross return to capital would have yielded more than the present 4 per cent tax on corporate income.

TABLE 10

ESTIMATED DISTRIBUTION OF LEVIES OF ALTERNATIVE
BUSINESS TAXES

Industry	(1)	(2)	(3)
	Corporation income tax (payroll and property factors) (per cent of total levies)	Proportional tax on gross margins (per cent of total levies)	Proportional tax on gross value added (per cent of total levies)
Agriculture	.04	6.47	15.36
Mining	.66	1.29	.79
Construction	2.87	3.67	4.33
Manufacturing	54.34	32.65	27.75
Food	8.30	9.18	7.96
Apparel	.15	.17	.21
Lumber	.53	.30	.33
Furniture	.56	.36	.32
Pulp and paper	.98	.65	.49
Printing	2.03	1.62	1.52
Chemicals	3.66	3.12	1.70
Leather	.03	.02	.03
Stone, clay, glass	2.30	1.80	1.20
Primary metal	1.87	1.57	1.29
Fabricated metal	1.87	1.30	1.26
Machinery (excl. electrical)	13.27	6.46	5.80
Electrical machinery	5.65	4.01	3.12
Transportation equip.	.83	.31	.31
Scientific instruments	.56	.30	.33
Misc. manufacturer	1.30	.81	.90
Trade	10.98	16.53	20.24
Finance, comm., pub. util.	12.50	10.99	9.15
Insurance, real estate	16.44	20.87	11.45
Services	2.16	7.52	10.92
All industries	100.00	100.00	100.00

Source: See text.

ESTIMATED GROSS BOOK VALUE OF DEPRECIABLE ASSETS

IOWA 1963

NI = National Income; PI = Personal Income

I. Book Value (BV) derived from Value Added (VA) using

Iowa data from Census of Manufacturing.

$$\frac{BV_{58}^{Ia}}{VA_{58}^{Ia}} = \frac{1,087,147}{1,684,269} = .6455$$

$$\left(\frac{BV_{58}^{Ia}}{VA_{58}^{Ia}} \right) \cdot \left(VA_{63}^{Ia} \right) = BV_{63}^{Ia}$$

$$(.6455) (2,275,928) = \underline{\$1,469,111,000}$$

II. Iowa BV derived from U. S. data on Value Added, National Income (NI), and BV.

$$\left(\frac{NI_{58}^{U.S.}}{VA_{58}^{U.S.}} \right) \cdot \left(VA_{63}^{Ia} \right) = NI_{63}^{Ia} \quad (.7627) (2,275,928) = 1,735,850$$

$$\left(\frac{BV_{57}^{U.S.}}{NI_{57}^{U.S.}} \right) \cdot \left(NI_{63}^{Ia} \right) = BV_{63}^{Ia} \quad (.9505) (1,735,850) = \underline{\$1,649,925,000}$$

III. Iowa BV derived using data on personal income, national income, and BV.

$$\left(\frac{NI_{58}^{U.S.}}{PI_{58}^{U.S.}} \right) \cdot \left(PI_{58}^{Ia} \right) = NI_{63}^{Ia} \quad (1.4047) (1,029,000) = 1,445,436$$

$$\left(\frac{BV_{57}^{U.S.}}{NI_{57}^{U.S.}} \right) \cdot \left(NI_{63}^{Ia} \right) = BV_{63}^{Ia} \quad (.9505) (1,445,436) = \underline{\$1,373,887,000}$$

OTHER SOURCES OF STATE TAX REVENUE

Summary and Conclusions

(Note: This report covers the various sources of tax revenue for the State of Iowa that are not treated separately elsewhere in the tax study. It includes the system of highway user charges, the cigarette tax, the sale and taxation of alcoholic beverages, the inheritance tax, the chain store tax, and the equipment car tax.)

1. The bulk of the tax revenues of the State of Iowa and its local subdivisions is obtained from the general property tax, the retail sales and use taxes, the insurance premiums tax, and the personal income tax. These account for over two-thirds of all tax collections. The remainder, some 30 per cent, is provided by a wide assortment of levies and excises including those on wealth transfers at death and on the consumption of selected commodities, notably motor fuel, cigarettes and alcoholic beverages. The latter excise taxes are unneutral, discriminatory in their impact on consumers and producers, and, necessarily, highly regressive (see Research Memorandum II, Table 3, Column 6). Justification for the inclusion of these taxes as part of the Iowa tax structure varies with the nature of the taxable object or commodity.
2. The structure of highway-user charges determines the distribution of financial responsibilities for the support of the highway system among operators of different types of motor vehicles. The benefit principle provides the rationale for most of the legislation relating to the financing of highways, that is, the highways confer benefits upon an identifiable group which pays charges corresponding

approximately in proportion to the frequency of use. The willingness of users to pay for highway services is evidenced by the multi-million-dollar highway investment in Iowa.

3. It has been demonstrated in an earlier study (Financing Iowa's Highways, Public Administration Service: 1960) that Iowa's system of allocating highway costs to the various vehicle types is seriously deficient on both equity and efficiency grounds. In general, the owners of private passenger cars are overcharged for their use of the highway facilities relative to the owners of other motor vehicle types. To accomplish an optimal allocation, Iowa might consider the use of a charge on commercial vehicles which varies in proportion to mileage driven and is graduated by vehicle weight.

4. The diversion of a portion of retail sales and use tax collections to highway purposes (i.e., to non-general fund purposes) is contrary to the accepted rationale of highway user finance. It constitutes an unwarranted subsidy to a special class of Iowa residents -- owners of motor vehicles -- at the expense of all taxpayers.

5. With respect to the State's taxes on cigarettes and alcoholic beverages, they are supported on the grounds that excessive use of these commodities are detrimental to the economy and to society at large. This sumptuary motive, however, is belied by the revenue productivity of these levies which is assured by the very low price elasticity of demand for the taxed commodities. Given the fact that the consumption of such commodities is so widely indulged and accepted, and generally in moderation, there would seem to be at least some question regarding the moral censure of one part of the Iowa population.

6. The excises on cigarettes and alcoholic beverages are unneutral in the extreme. Because of the absence of a complementary levy on the consumption of

"other tobacco products," the present structure discriminates by type of tobacco consumption (one-third of all smokers utilize tobacco in non-cigarette form). The present 8 cents per pack cigarette tax is the equivalent of about a 30 per cent sales tax on the retail price of cigarettes. The "equal treatment of equals" would suggest an equivalent ad valorem tax on the retail price of "other tobacco products." Similarly, because the beer tax is imposed at a specific rate per barrel, the excise discriminates even among beer drinkers because it represents a widely varying fraction of the retail price. The in lieu (mark-up) taxes on alcoholic beverages do not have the same discriminatory feature because they are based on value rather than units. The higher the price of liquor, the larger the tax payments.

7. The Iowa estate and inheritance tax yields less than 2 per cent of total general revenue. Unlike the federal government and twelve of the states, Iowa does not impose a gift tax. Thus, the State's taxation of wealth transfers applies only to transfers at death which results in unneutralities of treatment among estates.

8. The chain store tax is not logically supportable either as a revenue measure or as a means of achieving social policy goals. It currently yields approximately \$37 thousand annually. The rationale of the tax rests upon a vague presumption that it is an aid to small retail businesses by imposing a special burden upon multi-outlet businesses. However, many single-outlet firms are large and therefore not taxed, while a large number of small businesses having two or more outlets are subject to the tax.

OTHER SOURCES OF STATE TAX REVENUE

I. Introduction: Purpose and Scope

This report presents a description and analysis of sources of Iowa governmental tax revenues which are not considered in detail elsewhere. The revenue sources include highway user charges, the taxation of tobacco products, the sale and taxation of alcoholic beverages, the inheritance tax, the chain store tax, and the equipment car tax. In general, the discussion focuses on the yield of each tax, interstate comparisons, economic effects, and equity issues.

The relative importance of each of the taxes considered in this report is shown in Table 1. Highway user charges are, by far, the most important. The least important, revenue-wise, are the chain store and equipment car taxes. These two levies account for less than one-tenth of one per cent of the total general revenue of the state government.

TABLE 1

SELECTED SOURCES OF REVENUE,
STATE GOVERNMENT OF IOWA, 1965

Tax Source	Amount (millions)	Per cent of total general revenue
Highway user	\$122.9 ^a	21.3
Tobacco	15.2	2.6
Alcoholic beverages	20.7 ^b	3.6
Inheritance	10.0	1.7
Chain store	*	**
Equipment car	<u>0.1</u>	<u>**</u>
Total general revenue	\$576.2 ^c	100.0

^aLess than \$100,000.

^{**}Less than 0.1 per cent.

^aDoes not include the sales and use tax allocations to the Road Use Tax Fund. Includes motor fuel tax and licenses.

^bIncludes liquor store profits, the 10 per cent allocation of sales to local governments, the 10 per cent occupation tax, and the beer tax.

^cIncludes all revenue of the state government except total liquor store revenue and insurance trust revenue. Includes liquor store profits and the 10 per cent of liquor store sales which is allocated to local governments.

Source: United States Department of Commerce, Compendium of State Government Finances, 1965.

II. Highway User Revenues

Description and yield. In 1965, revenues from the motor fuel tax amounted to \$65.7 million. Collections from the registration of vehicles totaled \$54.3 million, and revenues from operators' licenses were \$2.9 million. Combined, these sources of revenue accounted for 22.2 per cent of the state government's total general revenue.¹ By comparison with surrounding states, only Nebraska derived relatively more revenues from these sources than Iowa.² The difference between the two states is negligible (Table 2).

As shown in Table 3, revenues from fees and licenses have increased by about 60 per cent over the past decade. This increase has come about mainly through growth in the base rather than through changes in the schedule of fees. Over the same period, revenues from the motor fuel tax increased by about 50 per cent. Much of the increase in motor fuel tax collections is attributable to an increase in the motor fuel tax rate. An increase in the gasoline tax from four to five cents and the imposition of a complementary diesel fuel tax of 6 cents occurred in July, 1953. The rates were increased to six and seven cents, respectively, in July, 1955. Abstracted from the rate increases, motor fuel tax collections have increased by about 28 per cent rather than 50 per cent over the last decade.

Iowa currently imposes a tax on gasoline of seven cents per gallon and a tax on diesel fuel of eight cents per gallon. None of the states surrounding Iowa imposes a special tax on diesel fuel (Table 4). The tax on diesel fuel is higher in Iowa than is the tax on motor fuel in all the surrounding states, and the gasoline tax exceeds the rate in all the surrounding states except Nebraska.

¹In this section only the state's own sources of highway user revenues are considered. Other sources of highway revenue for the state include federal revenues.

²In addition to these revenues, 10 per cent of the retail sales tax and part of the use tax are allocated to highways.

TABLE 2

HIGHWAY USER REVENUES OF THE STATE GOVERNMENTS OF
IOWA AND SURROUNDING STATES, 1965

<u>State</u>	<u>Total^a general revenue</u>	<u>Motor fuel tax</u>	<u>Motor vehicle license</u>	<u>Operators' licenses</u>	<u>Total high- way user revenue^b</u>	<u>Per cent of total general revenue</u>
IA	576.2	65.7	54.3	2.9	122.9	21.3
Illinois	1,847.3	170.0	123.2	6.4	299.6	16.2
Wisconsin	999.0	84.9	49.1	3.0	137.0	13.7
Minnesota	863.6	79.2	48.9	1.9	130.0	15.1
South Dakota	164.3	17.1	8.4	0.4	25.9	15.8
Nebraska	229.4	47.5	7.0	0.5	55.0	24.0
Missouri	816.6	86.4	46.8	1.6	134.8	16.5

^aIncludes all state revenue except liquor store revenue and insurance trust revenue. In case of Iowa, however, liquor store profits and the 10 per cent of liquor store sales which allocated to local governments are included.

^bDoes not include revenue from appropriations of the general fund.

Source: United States Department of Commerce, Compendium of State Government Finances, 1965.

Nebraska's rate is 1/2 cent higher than Iowa's; two states impose a tax of five cents per gallon; and three have a tax of six cents per gallon. Because of rate differentials, Iowa prohibits trucks from bringing more than 20 gallons of gasoline or diesel fuel into the state.

The present auto registration fee in Iowa is based on value, age, and weight. In contrast, 20 other states charge a flat fee. The remaining states base their fees on weight, horsepower, or some combination of weight, horsepower, value, and age (Table 5).

The range of Iowa's registration fee extends from \$22 for a light-weight passenger car, \$38 for a medium-weight car, and \$70 for a heavyweight vehicle.¹

¹United States Bureau of Public Roads, Road User and Property Taxes on Selected Motor Vehicles, 1964.

TABLE 3

THE MOTOR FUEL TAX, VEHICLE LICENSE,
AND OPERATOR'S LICENSE, 1954-1965, IOWA

<u>Year</u>	<u>Motor fuel tax (millions)</u>	<u>Motor vehicle license (millions)</u>	<u>Operator's license (millions)</u>
1954	\$41.0	\$36.1	\$1.2
1955	44.2	38.3	1.3
1956	54.5	40.7	1.3
1957	55.2	42.0	1.3
1958	49.1	41.8	2.6
1959	55.5	43.1	2.6
1960	60.4	43.6	2.7
1961	57.6	43.2	2.7
1962	59.0	44.0	2.7
1963	61.6	45.3	2.8
1964	63.1	53.0	2.8
1965	65.7	54.3	2.9

Source: United States Department of Commerce, Compendium of State Government Finances.

TABLE 4

MOTOR FUEL TAX PER GALLON, IOWA
AND SURROUNDING STATES, 1965

	<u>Gasoline (cents)</u>	<u>Diesel fuel (cents)</u>	<u>Motor fuel (cents)</u>
IOWA	7	8	
Illinois	-	-	5
Wisconsin	-	-	6
Minnesota	-	-	6
South Dakota	-	-	6
Nebraska	-	-	7 1/2
Missouri	-	-	5

Source: Commerce Clearing House, State Tax Handbook, 1965.

TABLE 5

BASIS FOR REGISTRATION OF PASSENGER CARS

<u>Flat Fee</u>	<u>Empty Weight or Shipping Weight</u>			<u>Other</u>
Flat Fee Only: Alabama Alaska Arizona California Connecticut Kentucky Louisiana Maine Massachusetts Nebraska Nevada Ohio Oregon Pennsylvania Utah Vermont Virginia Washington Wisconsin Wyoming	Weight Groups: Delaware Florida Kansas Maryland Montana New Jersey North Carolina Tennessee West Virginia District of Columbia	Weight Groups and Age: Minnesota North Dakota South Dakota Weight Groups, Age, and Flat Fee: Mississippi Per Pound: Hawaii	100-Pound Intervals: Colorado Michigan New York Texas 100-Pound Intervals and Age: New Mexico 100-Pound Intervals Age, and Value: IOWA 500-Pound Intervals: Georgia South Carolina	Horsepower Groups: Illinois Indiana Missouri Factory Delivered Price and Age: Oklahoma
Flat Fee by Age: Idaho	Weight Groups: New Hampshire Rhode Island	<u>Gross Weight</u>		100 Pound Intervals and Horsepower: Arkansas

Source: United States Bureau of Public Roads, Road User and Property Taxes on Selected Motor Vehicles, 1964.

TABLE 6

TAX AND FEES
ON AUTOMOBILES IN STATES NOT HAVING
A PROPERTY TAX ON AUTOMOBILES

<u>State</u>	<u>Light weight</u>	<u>Medium weight</u>	<u>Heavy weight</u>
IOWA	41.98	75.98	123.16
New Hampshire	50.16*	82.59*	130.11*
Vermont	53.64*	73.14	83.09
New Jersey	29.98	52.98	72.16
New York	27.98	55.48	75.16
Pennsylvania	33.31	54.31	65.02
Michigan	25.58	50.23	64.31
Ohio	33.66	54.66	65.37
Wisconsin	35.98	53.98	63.16
Minnesota	35.93	67.38	124.36*
North Dakota	46.48*	74.48	113.66
South Dakota	19.98	63.48	102.66
Delaware	29.98	47.98	63.16
Florida	36.31	64.81	90.52
Tennessee	34.81	55.81	70.02
Louisiana	26.31	47.31	58.02
Oklahoma	50.90*	78.90*	127.73*
Idaho	37.48	55.48	64.66
New Mexico	32.48	61.48	84.66
California	51.31*	83.31*	133.02*
Oregon	29.98	47.98	57.16
Washington	60.48*	88.98*	146.45*

*Higher than Iowa.

Source: United States Bureau of Public Roads, Road User and Property Taxes on Selected Motor Vehicles, 1964, p. 45.

Since Iowa levies no property tax on passenger cars (though the portion of the fee which is based on value resembles a property tax) and many other states do, it is difficult to make meaningful interstate comparisons, particularly when part of the revenues from the property tax on automobiles in some states is used for non-highway purposes. However, if Iowa is compared with the 22 states which do not levy property taxes on automobiles, and if the gasoline tax and registration fees are combined, only 5 of the 22 states impose higher taxes on medium and large cars than Iowa. Four of these states tax medium-weight cars at higher levels than Iowa (Table 6).

The truck registration fee is presently based on gross tonnage and type of vehicle (see Table 8). For trucks, the fee ranges from \$25 at 3 tons or less up to \$265 at 12 tons. For trucks weighing more than 12 tons the fee is \$265 plus \$25 per additional ton. The tractor fee starts at \$40 on tractors of 6 tons or less and increases to \$235 on 12 tons. At heavier weights, the rate on tractors is \$235 plus \$25 per additional ton. The fee for trailers ranges from \$3 to \$80.

A comparison of the tax and fees on trucks in Iowa with other states which do not levy property taxes on motor vehicles is shown in Table 7. Iowa is in the upper half of the states in all weight classes and vehicle types. In general, Iowa ranks higher than the other states shown in taxes and fees on automobiles than it ranks in the tax and fees on trucks.

Evaluation. Once the level of highway costs has been determined, it is necessary to determine the manner in which these costs are to be allocated among beneficiaries. The purpose of this section is to evaluate how the structure of Iowa's highway-user charges compares with generally accepted notions of efficient cost allocation.

First, there is the issue of apportioning highway costs between highway users and non-users. Since non-users (primarily property owners) as well as users derive benefits from highways (through, say, lowering costs and prices or promoting economic development), they can be expected to bear part of the highway cost. In many cases, however, it is exceedingly difficult to measure the benefits received by non-users and to devise a tax structure which requires charges to be levied in proportion to benefits received.

It is possible, at the local level, to levy special assessments on people whose property is enhanced by the construction and improvement of streets and roads. Measuring individual benefits by non-users becomes more difficult, however, in the case of secondary roads and primary highways. Further, if there is an attempt to charge non-users, the fact must be considered that non-users bear at least part of

TABLE 7

ROAD USER TAX ON TRUCKS,
PRIVATE OPERATION IN IOWA AND OTHER STATES
NOT HAVING A PROPERTY TAX ON TRUCKS, 1964
(IN DOLLARS)

	<u>5,000 pounds</u> <u>gross weight</u>	<u>15,000 pounds</u> <u>gross weight</u>	<u>Single unit</u> <u>van truck,</u> <u>19,000 pounds</u> <u>gross weight</u>	<u>Single unit,</u> <u>3-axle dump</u> <u>truck, 40,000</u> <u>pounds</u> <u>gross weight</u>	<u>3-axle tractor-</u> <u>semi-trailer</u> <u>combination</u> <u>40,000 pounds</u> <u>gross weight</u>
IOWA	70.00	204.72	310.00	915.00	975.00
New Hampshire	87.53*	215.30*	294.14	885.60	891.08
Vermont	80.75*	256.03*	352.30*	987.50*	1,035.00*
New Jersey	76.00*	160.72	211.00	691.00	682.00
New York	70.00	159.72	215.00	837.50	1,167.00*
Pennsylvania	69.00	153.84	230.00	777.00	805.00
Michigan	64.50	172.92	225.00	903.75	788.10
Ohio	100.95*	203.59	278.35	1,122.10*	1,259.10*
Wisconsin	80.00*	249.72*	335.00*	925.00*	965.00
Minnesota	71.25*	147.72	204.00	893.65	934.15
North Dakota	74.00*	166.72	220.50	350.50	880.50
South Dakota	78.00*	300.22*	383.00*	1,323.00*	1,090.50*
Delaware	62.50	148.22	201.90	628.50	653.00
Florida	52.50	178.64	233.00	728.00	832.20
Tennessee	77.50*	223.84*	380.00*	960.00*	995.00*
Louisiana	62.50	178.84	260.00	765.00	858.00
Oklahoma	69.25	187.28	285.50	863.00	916.00
Idaho	67.50	124.72	269.25	954.00*	1,119.00*
New Mexico	60.50	165.62	194.60	682.10	678.90
California	103.35*	209.84*	278.00	1,000.00*	913.00
Oregon	55.00	215.22*	317.50*	958.50*	1,450.00*
Washington	105.90*	207.30*	307.90	1,297.90*	1,014.30*

*Higher than Iowa.

Source: Bureau of Public Roads, Road User and Property Taxes on Selected Motor Vehicles, 1964.

highway costs in any case because highway charges on commercial vehicles are to some extent passed on to consumers in the price of final products. It must be, therefore, demonstrated that there is something special or peculiar about highways

TABLE 8

SCHEDULE OF FEES: COMMERCIAL UNIT RATINGS

Gross Tonnage	Annual Truck Fee	1/2 Annual Truck Fee	Annual Tractor Fee	1/2 annual Tractor Fee	Maximum Gross Weight	
					Truck or Tractor - Trailer Combination	5% Overload-25% Overload
3 Tons	\$ 25.00	Not permitted	None issued	None issued	6300 Lbs.	7500 Lbs.
5 "	40.00	" "	None issued	None issued	10500 "	12500 "
6 "	70.00	" "	\$ 40.00	Not permitted	12600 "	15000 "
7 "	95.00	\$ 47.50	65.00	Not permitted	14700 "	17500 "
8 "	120.00	60.00	90.00	\$ 45.00	16800 "	20000 "
9 "	155.00	77.50	125.00	62.50	18900 "	22500 "
10 "	190.00	95.00	160.00	80.00	21000 "	25000 "
11 "	225.00	112.50	195.00	97.50	23100 "	27500 "
12 "	265.00	132.50	235.00	117.50	25200 "	30000 "
13 "	290.00	145.00	260.00	130.00	27300 "	32500 "
14 "	315.00	157.50	285.00	142.50	29400 "	35000 "
15 "	340.00	170.00	310.00	155.00	31500 "	37500 "
16 "	365.00	182.50	335.00	167.50	33600 "	40000 "
17 "	390.00	195.00	360.00	180.00	35700 "	42500 "
18 "	415.00	207.50	385.00	192.50	37800 "	45000 "
19 "	440.00	220.00	410.00	205.00	39900 "	47500 "
20 "	465.00	232.50	435.00	217.50	42000 "	50000 "
21 "	490.00	245.00	460.00	230.00	44100 "	
22 "	515.00	257.50	485.00	242.50	46200 "	
23 "	540.00	270.00	510.00	255.00	48300 "	
24 "	565.00	282.50	535.00	267.50	50400 "	
25 "			560.00	280.00	52500 "	
26 "			585.00	292.50	54600 "	
27 "			610.00	305.00	56700 "	
28 "			635.00	317.50	58800 "	
29 "			660.00	330.00	60900 "	
30 "			685.00	342.50	63000 "	
31 "			710.00	355.00	63200 "	
32 "			735.00	367.50	67200 "	
33 "			760.00	380.00	69300 "	
34 "			785.00	392.50	71400 "	
35 "			810.00	405.00	73500 "	

TRAILER UNIT RATINGS

Tonnage	Annual Fee	1/2 Annual Fee	Maximum Gross Weight	
Lbs.			5% Overload-25% Overload	
Trailer (Unlimited)	\$ 5.00	Not permitted	Unlimited	
Lbs.	3.00	Not permitted	1050 Lbs.	1250 Lbs.
" 1 Ton	10.00	Not permitted	2100 "	2500 "
" 2 Tons	20.00	Not permitted	4200 "	5000 "
" 4 "	30.00	Not permitted	8400 "	10000 "
" 6 "	40.00	Not permitted	12600 "	15000 "
" 8 "	50.00	Not permitted	16800 "	20000 "
" 10 "	60.00	Not permitted	21000 "	25000 "
" 12 "	70.00	Not permitted	25200 "	30000 "
" 14 "	80.00	\$ 40.00	29400 "	35000 "

SEMI-TRAILER UNIT RATINGS

Tonnage	Class Plate	Annual Fee
12 Tons	X	\$ 30.00
12 Tons	Y	60.00

e: Motor Vehicle Registration Division, State of Iowa.

which justifies support by non-users.¹

Because of the difficulties of measuring the benefits of highways accruing to non-users, and because of the suitability of gasoline taxes and motor vehicle licenses to the application of the user charge principle, highway costs have been assigned, for the most part, to highway users. This, in turn, raises the question of how costs should be allocated among the various classes of motor vehicle users.

The two primary factors which affect highway costs (excluding acquisition) are the weight, or weight per axle, of motor vehicles and distance traveled. The latter suggests that an allowance must be made for differences in the mileage efficiency of the various fuels. Thus, diesel fuel should be taxed at a higher rate than gasoline because gasoline-powered vehicles consume more fuel per mile than diesel-powered vehicles of the same weight. Depending on weight, gasoline-powered vehicles consume from 39 per cent to 66 per cent more fuel per mile than diesel-powered vehicles.² At the present time, Iowa's tax rate on diesel fuel is 8 cents per gallon, compared to 7 cents per gallon on gasoline. This is a factor of 1.14, compared to the factor of 1.39-1.66 noted above.

Even after an adjustment is made for the relative efficiency of different kinds of fuels, inequities would still exist in the allocation of highway costs. To the extent that fuel consumption does not rise proportionately with the weight of motor vehicles, heavier vehicles bear less of a burden of highway cost than lighter vehicles. This is the underlying rationale for graduated registration fees which vary directly with the weight of the motor vehicle.

Graduating registration fees for trucks on the basis of weight is not completely satisfactory because it fails to distinguish between trucks in a given weight class which use the highways more than others in the same weight class. That is, the

¹For a discussion of some attempts to measure non-user benefits from highways and some of the conceptual and practical problems which are involved, see Final Report of the Highway Cost Allocation Study, House Document No. 54, 87th Congress, 1st Session, January 16, 1961.

²Ibid., p. 204.

burden of a fixed registration fee schedule is heavier for a truck which travels fewer miles per registration period than other trucks in the same weight class. This has led several states to adopt a type of weight-mileage tax (i.e., a charge which varies by weight and miles traveled). Iowa might well consider undertaking a study to determine the feasibility of such a weight-distance charge.

The fees for passenger automobiles, it will be recalled, are based on the value of the car, and its age and weight. That portion of automobile fees which is based upon the value of the automobile is deductible for federal income tax purposes (i.e., it is treated like a property tax). Fees based on value, however, are not related to the highway costs occasioned by automobile traffic and, other things equal, it would not be desirable to confuse the property tax with the allocation of highway costs among highway users. However, it is not clear that there are meaningful variations in highway costs caused by automobiles of different weights (in contrast to trucks). "The important issues with respect to comparative tax payments lie between passenger cars and the heavier vehicle group."¹ This being the case, a choice has to be made between the simplicity of a flat fee for automobiles and the advantage of the feature of deductibility. In any case, the factors of weight and age might be dropped altogether.

As for the allocation of cost among the various types of vehicles, there is evidence of a need for adjustment. The 1960 highway study showed that "automobiles as a class are carrying more than their share of the user burden at present."²

Further, "the heavier truck-tractors and single-unit trucks are generally paying more than their share of responsibility"³ The proposed charges and actual charges for vehicle groups are shown in Table 9.

¹Ibid., p. 16.

²Public Service Administration, Financing Iowa's Highways, 1960, p. 53.

³Ibid.

TABLE 9

COMPARISON OF USER RESPONSIBILITY AS DETERMINED BY THE
INCREMENTAL STUDY WITH PRESENT LICENSE FEES
REPRESENTATIVE VEHICLE GROUPS
STATE OF IOWA, 1960

Type of Vehicle by Weight in Pounds	Proposed Group Charge		Adjusted Per Unit Vehicle Responsibility		Present Fee Schedule	
	Amount (\$1,000's)	Per Cent				
Automobile	\$72,347	57.35	\$	\$ 20	\$	\$ 27 ^{a/}
Motorcycle	68	0.05		4		5
<u>Single-Unit Trucks</u>	29,723	23.56				
- 6,000	12,542	9.94		21		25
- 12,000	8,943	7.09		126		70
- 18,000	4,766	3.78		125	\$ 95 -	155
- 24,000	2,719	2.15		138	190 -	265
- 30,000	220	0.17	\$150 -	164	290 -	340
- 36,000	187	0.16		206	365 -	415
- 48,000	346	0.27	220 -	225	440 -	540
<u>Truck Tractors</u>	12,850	10.19				
- 12,000	445	0.35		3,251 ^{b/}		40
- 24,000	2,477	1.96	708 -	722	65 -	235
- 36,000	1,231	0.98	412 -	435	260 -	385
- 48,000	2,161	1.71	384 -	388	410 -	535
- 60,000	4,739	3.76	447 -	449	560 -	585
- 84,000	1,797	1.43	403 -	482	710 -	1,010
<u>Inter-City Buses^{c/}</u>	849	0.67				
- 12,000	91	0.07		417	40 -	70
- 18,000	168	0.13		1,929	95 -	155
- 24,000	260	0.21		2,794	190 -	265
- 38,000	330	0.26		2,755	290 -	440
<u>Trailers</u>	9,619	7.62				
- 24,000	598	0.47		338		30
Over 24,000	9,021	7.15		797		60
<u>Trailers</u>	703	0.56				
- 1,000	586	0.46		9		3
- 2,000	51	0.04		9		10
- 4,000	26	0.02		9		20
- 8,000	19	0.02		13		30
- 16,000	12	0.01		24		40
- 24,000	8	0.01		55		60
- 32,000	1	--		87		80

Note: Figures are rounded to even dollars.

^{a/}Average.

^{b/}Excessive amount caused by great amounts of travel on roads less able to support heavy weights.

^{c/}Cost responsibility for inter-city buses is higher than comparable trucks of similar weight because of greater amounts of travel.

Source: Public Administration Service, Financing Iowa's Highways, 1960, p. 54.

Financing highways from the general fund. Ten per cent of the retail sales tax collections and all the use tax imposed on new motor vehicles are allocated to the Road Use Tax Fund.

In fiscal 1965, this diversion amounted to \$17 million (\$7.8 million from the sales tax and \$9.2 million from the use tax).

Financing highways partly from the general fund can be construed as an attempt to assess non-users for the benefits they derive from highways. But even if it is accepted that non-users should be charged for highways services, it would be difficult to justify the sales tax on the basis of benefits received.

It might be argued that 10 per cent of the sales tax collections represents the approximate tax collections from the sale of automobiles, and this plus the use tax on automobiles are levies on highway users and should, therefore, be used to finance highways. It must be recognized, however, that the retail sales tax is a tax on consumption to finance general government services, and the purchase of an automobile is one part of consumption expenditures. It so happens that the use of the automobile requires additional public outlays which some other consumption expenditures do not, and a charge must be levied to finance these additional outlays. Charges which are required to finance products or services which automobile ownership and operation necessitates should not be confused with taxes which are levied on consumption to finance general government services. To put the issue in perspective, suppose that highways were provided only by private enterprise and that the use of highways could be purchased (say through a system of tolls) so that no taxes would be required for highways. Clearly, in this case there is no justification for exempting automobiles from the general sales tax to finance general government services. Because private enterprise cannot "sell" most highways and streets economically and efficiently, the government undertakes this function, and the tax is the price paid for the use of highways. The fact that a "price" must be paid for the use of highways does not justify an exemption of the automobile

from a tax on consumption to finance general government services. If additional revenues are required for highways, an adjustment can be made in the gasoline tax or registration fee.

III. The Taxation of Tobacco Products

Description and yield. In 1965, revenues from the cigarette tax amounted to \$15.2 million. With the tax rate increase from 5 cents to 8 cents a pack in 1965, revenues from this source are estimated at \$24 million for 1966.

The cigarette tax is highly inelastic with respect to price changes. Thus, when the cigarette tax was increased by 33 per cent in July, 1959, taxable cigarette sales in fiscal 1960 were 295.5 million packs compared to 295.9 million packs in fiscal 1959.¹ In the same period, tax revenues from this source increased from \$8.3 million to \$11.5 million. Beginning in fiscal year 1964, the tax rate was increased by 25 per cent, and though taxable sales fell from 319 million packs to 305 million packs from fiscal 1963 to fiscal 1964,² revenues increased from \$12.1 million to \$14.5 million. (The decline in sales is probably attributable primarily to the United States Government's report linking cigarette smoking and cancer.)

Further increases in the rate of taxation on cigarettes in Iowa are restrained somewhat by prevailing rates in surrounding states. Three of the surrounding states tax cigarettes at the same rate as Iowa (8 cents); one state taxes at a higher rate; and two at a lower rate (Table 10). In addition, Iowa's 2 per cent retail sales tax rate adds about 5 cents to carton lot sales. Two neighboring states also have a sales tax which applies to cigarettes. Illinois' sales tax adds 8 cents to carton lot sales and Missouri's adds 7 cents. A 1 cent increase in tax per pack would probably increase revenues by about \$2.5 million, and a rate increase of 2 cents per pack would likely increase revenue by something in excess of \$4 million.

¹Tobacco Tax Council, Cigarette Taxes in the United States, Vol. X, 1961.

²Ibid., Vol. XIII, 1964.

While revenues from the cigarette tax increase with increases in the tax rate, yields from this source are not responsive to economic growth. That is, purchase of cigarettes does not vary much with income changes. Further, the fact that the tax is based on units rather than price means that the tax collections do not respond to changes in the price level. Consequently, if an adjustment is made for intermittent tax rate changes (i.e., if the current tax rates are applied to cigarette sales in the past), cigarette tax collections would have increased only \$3 million over the last decade (Table 11). Because of tax rate changes, actual collections increased \$8 million.

TABLE 10
THE CIGARETTE TAX IN IOWA
AND SURROUNDING STATES, SEPTEMBER, 1965

	Cigarette tax (cents per pack)			Sales tax rate	Sales tax adds to carton lot sales (1964)
	I ^a	II ^b	III ^c		
Iowa ^d	8	10	--	2.0%	5
Illinois	--	--	7	3.5%	8
Wisconsin	10	20	--	3.0%	none
Minnesota ^e	8	16	--	none	none
South Dakota	8	17	--	2.0%	none
Nebraska	--	--	8	none	none
Missouri	--	--	4	3.0%	7

^aCents per pack of cigarettes weighing 3 lbs. per 1,000 cigarettes or less.

^bCents per pack of cigarettes weighing more than 3 lbs. per 1,000 cigarettes.

^cCents per pack.

^dIn addition, 7.5 mills per 50 papers and 1 1/2 cents per 50 tubes.

^eAlso, 10 per cent of wholesale price of tobacco products.

Source: Commerce Clearing House, State Tax Handbook, 1965.

Tobacco Council, Cigaret Taxes in the United States,
Vol. XIII, 1964.

TABLE 11

ADJUSTED AND UNADJUSTED
CIGARETTE TAX REVENUES, IOWA, 1954-1965

	<u>Unadjusted</u> <u>(millions of dollars)</u>	<u>Adjusted*</u> <u>(millions of dollars)</u>
1954	7.3	12.2
1955	7.0	11.7
1956	7.1	11.9
1957	7.3	12.2
1958	7.6	12.7
1959	8.3	13.9
1960	11.5	14.4
1961	11.7	14.7
1962	12.0	15.0
1963	12.1	15.2
1964	14.5	14.5
1965	15.2	15.2

*Adjusted for rate changes.

Source: Office of State Comptroller.

Evaluation. The taxation of cigarettes is supported by the notion that excessive use of the product imposes certain costs on society and therefore its use ought to be controlled or, failing this, the person purchasing the product ought to compensate society for the social cost of smoking. Presumably, the imposition of tax rates at high enough levels restricts the use of tobacco or compensates society for whatever social cost is involved in the use of tobacco (e.g., the revenues from cigarette taxes cause other taxes to be lower).

However, within relevant price ranges the demand for cigarettes is not significantly affected by price changes so that the objective of curtailing use is not

wholly accomplished. (There is some price, of course, which would significantly curtail use, but then at that price the extra private cost may exceed social cost, i.e., society could be more than compensated for the social cost of smoking.) Indeed, the fact that the cigarette tax is highly inelastic with respect to price is undoubtedly one of the reasons for the use of the tax. That is, it can reasonably be assured that a tax increase on cigarettes will increase revenue. Further, the tax is administratively feasible and can be collected at relatively low cost. As a result, the state and federal cigarette taxes amounted to 46 per cent of the retail price in Iowa in 1964.¹

In addition to the social cost argument, one must weigh the argument that the tax is regressive (see Table 12). Lower income groups pay proportionately more cigarette taxes than higher income groups.

Iowa, like 17 other states, discriminates among classes of smokers by taxing only cigarettes. The relative importance of revenue from the taxation of other tobacco products varies considerably among the states which have such taxes (Table 13). In North Dakota, revenues from this source amounted to 3.1 per cent of total tobacco taxes, and in South Carolina revenues from the taxation of "other tobacco products" were 15 per cent of total tobacco taxes.

The difference among the states in the relative importance of revenues from other tobacco sales is due partly to differences in tax rates and the number of other products taxed. In 1964, 2 states taxed only cigars; 1 state taxed cigars and smoking tobacco; 2 states taxed cigars, smoking tobacco, and chewing tobacco; and 12 states taxed cigars, smoking tobacco, chewing tobacco, and snuff.

The tax on other tobacco products is imposed on units sold, or as a per cent of the factory, wholesale, or retail price. In some states, the cigar tax varies directly with the price of the product, which, unlike the cigarette tax, allows people in lower income groups to reduce their tax burden by purchasing lower priced cigars.

¹Tobacco Tax Council, Cigaret Taxes in the United States, Vol. XIII, 1964.

TABLE 12

PER CENT OF MONEY INCOME AFTER TAXES
SPENT ON TOBACCO PRODUCTS IN THE URBAN U. S., 1961

<u>Income Class</u>	<u>Per Cent</u>
Under \$1,000	2.6
1,000 - 1,999	1.9
2,000 - 2,999	2.3
3,000 - 3,999	2.1
4,000 - 4,999	2.0
5,000 - 5,999	1.8
6,000 - 7,499	1.7
7,500 - 9,999	1.4
10,000 -14,999	1.1
15,000 and over	0.7

Source: Consumer Expenditures and Income, Urban U. S., 1960-61, BLS Report No. 237-38,
April 1964, U. S. Department of Labor.

TABLE 13

STATES WHICH TAX BOTH CIGARETS AND OTHER TOBACCO PRODUCTS
(Fiscal year ending June 30, 1964)

<u>Cigaret taxes</u>		<u>Other products taxed*</u>	<u>Other tobacco taxes</u>		<u>Percentage of total tobacco taxes from:</u>		
<u>Gross amount</u>	<u>Net collections</u>		<u>Gross amount</u>	<u>Net collections</u>	<u>Cigarets</u>	<u>Other tobacco products</u>	<u>State</u>
19,167,662	\$ 17,730,093	CSChSn	\$ 1,846,735	\$ 1,709,065	91.2	8.8	Ala.
3,773,817	3,585,126	CSChSn	563,904	535,709	87.0	13.0	Ariz.
27,238,675	26,432,997	C	753,826	731,214	97.3	2.7	Ga.
2,060,334	2,060,334	CSChSn	294,335	294,335	87.5	12.5	Hawaii
31,173,071	28,371,225	CS	1,640,688	1,493,222	95.0	5.0	La.
29,421,618	28,153,726	CSChSn	1,019,842	994,345	96.6	3.4	Minn.
15,785,006	14,206,506	CSChSn	1,492,786	1,343,507	91.4	8.6	Miss.
4,913,343	4,650,030	CSChSn	360,144	350,002	93.2	6.8	N. H.
4,525,871	4,299,578	CSChSn	142,496	140,226	96.9	3.1	N. D.
19,447,900	18,671,395	CSCh	2,441,040	2,343,539	88.8	11.2	Okla.
11,131,519	10,574,944	CSChSn	1,964,385	1,866,167	85.0	15.0	S. C.
27,273,009	26,153,447	CSChSn	1,015,440	973,303	96.4	3.6	Tenn.
91,893,627	89,812,139	CSCh	7,425,654	7,425,654	92.5	7.5	Tex.
5,031,344	4,846,258	CSChSn	179,658	179,658	96.6	3.4	Utah
4,017,751	3,873,481	CSChSn	248,591	243,621	94.2	5.8	Vt.
15,399,423	14,630,945	C	540,085	513,120	96.6	3.4	Va.
20,424,028	19,914,874	CSChSn	1,612,091	1,612,091	92.7	7.3	Wash.
32,678,004	\$317,967,143		\$23,541,700	\$22,743,778	93.4	6.6	Total

Taxes in the United States,

The rate of tax in states which apply the tax to the wholesale price ranges from 10 per cent to 25 per cent (Table 14).

If the social cost argument has any relevance at all, it is difficult to justify a discriminatory treatment of cigarette smokers. It may be that there are different social costs involved in the use of different types of tobacco, but this argues for differential tax rates rather than the exclusion of some types of tobacco altogether. Moreover, estimates of the additional yield from a comprehensive levy on all tobacco products range in excess of \$1 million, depending on the rates and bases applied to "other tobacco products."

TABLE 14

STATE TOBACCO TAX RATES^a
As of September 1, 1964

State	Cigarettes (per package of 20)(b)	Cigars (per 1,000)	Smoking tobacco	Chewing tobacco and snuff
Alabama	6¢	\$1.00-\$13.50	(c)	.75¢ per ounce(d,e)
Alaska	8	-	-	-
Arizona	2	\$1.00-\$10.00	1¢ per ounce	.25¢ per ounce (f)
Arkansas	6	-	-	-
California	3	-	-	-
Colorado	3	-	-	-
Connecticut	6	-	-	-
Delaware	5	-	-	-
Florida	8	-	-	-
Georgia	8	\$1.50-\$20.00	-	-
Hawaii	-	20% of wholesale price	-	-
Idaho	7	-	-	-
Illinois	4	-	-	-
Indiana	4	-	-	-
Iowa	6	-	-	-
Kansas	6	-	-	-
Kentucky	2.5	-	-	-
Louisiana	8	\$1.20-\$40.00	(g)	-
Maine	6	-	-	-
Maryland	6	-	-	-
Massachusetts	6(h)	-	-	-
Michigan	7	-	-	-
Minnesota	8	10% of wholesale price	-	-
Mississippi	9	\$1.80-\$25.20	1 1/8¢ for each 5¢ or fraction of retail price	9/16¢ for each 5¢ or fraction of retail price
Missouri	4	-	-	-
Montana	8	-	-	-
Nebraska	6	-	-	-
Nevada	7	-	-	-
New Hampshire	-	15% of retail price	-	-
New Jersey	8	-	-	-
New Mexico	8	-	-	-
New York	5	-	-	-
North Dakota	7	10% of wholesale price	-	2¢ per 1 1/4 ounce (e,i)
Ohio	5	-	-	-
Oklahoma	7	\$3.50-\$20.00	25% of factory price	20% of factory price (j)
Pennsylvania	8	-	-	-
Rhode Island	8	-	-	-
South Carolina	5	\$1.00-\$10.00	1¢ for each 5¢(e)	1¢ each 3.ounce (e)
South Dakota	6	-	-	-
Tennessee	7	\$1.00-\$13.50	5% of retail price	-
Texas	8	\$1.00-\$15.00	25% of factory list price(j)	-
Utah	8	-	-	-
Vermont	8	20% of wholesale price	-	-
Virginia	3	\$1.00-\$13.50	-	-
Washington	7	25% of wholesale price	-	-
West Virginia	6	-	-	-
Wisconsin	8	-	-	-
Wyoming	4	-	-	-

Continued

Footnotes to TABLE 14 (Page 312)

- (a) In addition to these rates, there are special taxes on wholesalers and retailers.
- (b) Rate on most common size. Many states use graduated rates based on size or weight.
- (c) Range from 1¢ on package of 1-1/8 ounces or less to 3¢ on first 2 ounces plus 2¢ for each additional ounce or fraction thereof.
- (d) Applies to chewing tobacco only; snuff taxed at rates ranging from 1/2¢ on package of 5/8 ounces or less to 4¢ on first 6 ounces plus 1¢ for each additional ounce.
- (e) Rate applies to base and any fraction thereof.
- (f) Applies to chewing tobacco only; snuff taxed at 1¢ per ounce.
- (g) Rates range from 1¢ on first 5¢ of selling price to 4¢ on first 15¢ plus 1-1/3¢ for each additional 5¢ of selling price.
- (h) Rate increases to 8¢ per package, effective January 1, 1965.
- (i) Applies to snuff only; chewing tobacco taxed at 10% of wholesale price.
- (j) Does not apply to snuff.

Source: Tax Foundation, Inc., Facts and Figures on Government Finance, Thirteenth Edition, 1964-1965.

IV. The Taxation and Sale of Alcoholic Beverages

Description and yield. Iowa is one of 16 states which derives revenue from state-operated liquor stores. Revenues from this source include liquor store profits and 10 per cent of liquor store sales. Five per cent of liquor store sales is allocated to cities and towns on the basis of population, and another 5 per cent is used to reimburse local governments for the loss of revenue from the property tax exemption granted to veterans. There is also a 10 per cent tax on gross receipts from the sale of alcoholic beverages by the drink, which became effective in July, 1963, after liquor by the drink was legalized. The tax on beer amounts to \$2.48 per barrel of 31 gallons (see Table 15).

The relative importance of each of these sources of revenue over the past decade is shown in Table 16. Data for interstate comparisons are presented in Table 17. Revenues available to cities and towns have increased by about 40 per cent over the period, while liquor store profits have increased by about 80 per cent. Beer tax collections have remained virtually unchanged.

Evaluation. The taxation of alcoholic beverages is defended on the grounds that excessive use of the products imposes certain social costs on society (loss of work, automobile accidents, etc.), and therefore its use ought to be restricted. The sale of alcoholic beverages through a state monopoly system is an attempt to exert even greater social control over the sale and use of the products.

The extent to which taxes or marked-up prices restricts the use of alcoholic beverages varies among the states. In some states the demand for liquor appears to be price elastic and in other states it is price inelastic. Aside from statistical discrepancies, the different experiences among the states indicate that such factors as moonshining and purchases from neighboring states are more important in some states than others.¹

¹The latest elasticity estimate for the United States as a whole is -0.79, by Julian Simon, "The Price Elasticity of Liquor in the U. S. and a Simple Method of Determination," Econometrica, Vol. 34, No. 1 (January, 1966). For the various experiences among the states see Karl Marx, "Tobacco, Alcoholic Beverages, and Pari-Mutuel Taxes," Report of the Commission on Revenue, State of Illinois, 1963, pp.729-734.

TABLE 15

BEER TAX RATES IN IOWA
AND SURROUNDING STATES, 1964

	<u>Tax Per Gallon (cents)</u>
IOWA	08.0
Illinois	06.0
Wisconsin	03.2
Minnesota	10.3 ^a
North Dakota	25.8 ^b
Nebraska	08.0
Kansas	12.0 ^c
Missouri	4.5

^aThis rate applies to beer with an alcoholic content over 3.2%. A tax of 5.2 cents per gallon applies to beer with an alcoholic content of 3.2% or less.

^bApplies to beer with an alcoholic content of over 3.2%. At rate of 25.8¢ applies to beer with an alcoholic content of 3.2% or less.

^cApplies only to beer with an alcoholic content over 3.2%.

Source: Commerce Clearing House, State Tax Handbook, 1965.

TABLE 16

REVENUES FROM THE TAXATION AND
SALE OF ALCOHOLIC BEVERAGES, 1954-1965

Year	Allocation to towns and cities (thousands dollars)	Liquor store profits (thousands dollars)	Occupation tax (thousands dollars)	Beer tax (thousands dollars)	Total
1954	3,740	4,500		3,233	11,473
1955	3,746	4,000		3,214	10,960
1956	3,746	5,000		3,189	11,935
1957	3,758	4,500		3,122	11,380
1958	3,836	5,000		3,072	11,958
1959	4,120	6,550		3,095	13,765
1960	4,332	6,500		3,235	14,067
1961	4,436	6,500		3,246	14,182
1962	4,484	7,000*		3,266	14,750
1963	4,460	6,800		3,301	14,561
1964	4,978	7,225	3,000	3,413	18,696
1965	5,210	8,103	3,939	3,442	20,694

*Beginning in 1962, \$3,750,000 was appropriated to the Liquor Control Commission for operating expenses. In 1962 and subsequent years, profits transferred to the General Fund were higher by that amount. These profits, therefore, over-state the "burden" on purchasers of liquor and the revenues derived from liquor store operations. The figure above for liquor profits is net of the appropriation for operating expenses.

Source: Annual Report of Iowa Liquor Control Commission, and Office of State Comptroller.

TABLE 17

PER CENT OF TOTAL GENERAL REVENUE
FROM THE TAXATION ON SALE OF ALCOHOLIC BEVERAGES,
IOWA AND SURROUNDING STATES, 1965

	Total General Revenue ^a (millions dollars)	Alcoholic Beverages (millions dollars)	Per Cent
IOWA	576.2	20.7	3.6
Illinois	1,847.3	48.0	2.6
Wisconsin	999.0	18.3	1.9
Minnesota	863.6	22.0	2.5
South Dakota	164.3	3.5	2.1
Nebraska	229.4	4.9	2.1
Missouri	816.6	10.8	1.3

^aIncludes all state revenue except liquor store sales and insurance trust revenue. In the case of Iowa, however, liquor store profits (not sales) and the 10 per cent allocation of sales to towns and cities are included.

Source: U. S. Department of Commerce, Compendium of State Government Finances, 1965; Office of Iowa State Comptroller.

TABLE 18

PER CAPITA REVENUE FROM ALCOHOLIC BEVERAGES,
IOWA AND SURROUNDING STATES, 1965

<u>State</u>	<u>Per capita revenue</u>
IOWA	\$7.50
Illinois	4.50
Wisconsin	4.54
Minnesota	6.19
North Dakota	5.60
Nebraska	3.29
Missouri	2.39

Source: United States Department of Commerce, Compendium of State Government Finances, 1965, and Table 1 for Iowa.

It does not necessarily follow, however, that tax rates¹ on alcoholic beverages are higher in Iowa. States which control the sale of liquor through a monopoly system derive more liquor revenue per capita on the average than private license states. The higher revenue in the monopoly states is apparently not due to an ability to charge prices higher than they would be under conditions of competition. In fact, the price of liquor is generally lower in the monopoly states. The combination of higher revenue and lower prices in monopoly states is due to such factors as having lower costs of operation (e.g., fewer outlets, less excess capacity) and being able to purchase liquor at a lower wholesale price.²

¹The net income from state-operated liquor stores is actually in lieu of taxes.

²Julian L. Simon, "The Economic Effects of State Monopoly of Packaged-Liquor Retailing," The Journal of Political Economy, Vol. LXXIV, No. 2 (April, 1966).

While a state monopoly system tends to increase revenues, there is no evidence that a state monopoly system, other things equal, discourages the consumption of liquor. If allowance is made for other determinants of liquor consumption (e.g., income levels), per capita consumption in monopoly states is not significantly different from private license states.¹ Thus, the argument that the private sale of liquor over-stimulates consumption has no basis in fact.

V. Death Taxes

Description. Iowa has both an estate tax and an inheritance tax. The estate tax is an imposition on the right to transfer property at death and is levied on the entire estate net of expenses, indebtedness, exemptions, etc. The gross estate estimated for tax purposes is the same as that determined for the federal estate tax, and the net estate is determined by deducting all allowable expenses provided by the federal law. A tax credit for state estate taxes is allowed against the federal estate tax liability, and Iowa's estate tax is structured so that the federal tax credit is the total amount due Iowa. The total estate tax liability, therefore, does not exceed the amount which would be paid to the federal government in the absence of the state levy. Further, the estate tax is credited with whatever inheritance tax is paid to Iowa, so that the state estate tax does not result in any additional tax on the estate.

The inheritance tax is imposed on the right to receive property, and it is levied on the share of the estate received by each beneficiary. In an attempt to prevent tax avoidance, the inheritance tax is imposed when property is transferred in contemplation of death or when a transfer is to take effect upon the death of the donor. Unless the contrary can be proven, property which is transferred three years prior to death is presumed to have been transferred in contemplation of death. The tax is also imposed on property which is transferred prior to death,

¹Ibid., pp. 192-193.

but the donor reserves the right to a lifetime income from the property. Further, if property is passed to someone with an understanding that the property be given to or shared with someone else in order to avoid taxes by a direct transfer, the property is taxed at the highest possible rate.

The exemptions, brackets, and marginal tax rates differ according to the relationship of the heirs to the decedent. The current rate structure is as follows:

Class A Heirs ¹		Class B Heirs ²		Other Beneficiaries	
Bracket	Rates	Bracket	Rates	Bracket	Rates
0 - 5,000	1%	0 - 12,500	5%	0 - 50,000	10%
5,000 - 12,000	2%	12,500 - 25,000	6%	50,000 - 100,000	12%
12,500 - 25,000	3%	25,000 - 75,000	7%	100,000 and up	15%
25,000 - 50,000	4%	75,000 - 100,000	8%		
50,000 - 75,000	5%	100,000 - 150,000	9%		
75,000 - 100,000	6%	150,000 and up	10%		
100,000 - 150,000	7%				
150,000 and up	8%				

There are exemptions only for Class A heirs. The exemptions are as follows:

Husband or wife	\$40,000
Child	15,000
Mother or father	10,000
Lineal descendant	5,000

Evaluation. For those who believe that taxes ought to be related to ability to pay, the taxation of gratuitous transfers of wealth is justified on the grounds that the beneficiary of a transfer enjoys an increase in economic well-being. Considering the relative importance of death taxes in the overall tax structure of states, the ability-to-pay principle cannot be a significant factor in the adoption of such taxes (see Table 19). Further, death taxes are not strictly related to ability to pay because they do not take into consideration the difference in economic circumstances among heirs.

¹Husband or wife, child, father or mother, lineal descendant.

²Brother, sister, son-in-law, daughter-in-law, and step children.

In addition to the ability-to-pay principle, it is argued that death taxes are a useful device to prevent undesirable concentrations of wealth and to promote equality of opportunities. In some cases, death taxes may have the opposite effect. Owners of business enterprises might have to sell their business to other firms in order to avoid having to pay taxes by liquidating the estate. In other cases, estates may be liquidated at death and sold to holders of considerable wealth.

To the extent that care is taken to provide for liquidity in order to pay death taxes, there may be a reduction in the availability of funds for "venture"

TABLE 19

INHERITANCE TAX AS A PER CENT
OF TOTAL GENERAL REVENUE, IOWA
AND SURROUNDING STATES, 1965

<u>State</u>	<u>Per Cent</u>
IOWA	1.8
Illinois	1.8
Wisconsin	2.1
Minnesota	1.6
South Dakota	0.8
Nebraska	0.1
Missouri	0.9

Source: U. S. Department of Commerce, Compendium of State Government Finances, 1965.

investment and capital formation. There will also be a reduction in the potential rate of capital accumulation to the extent that the tax absorbs funds which would otherwise be used for business investment.

Like most other states, Iowa does not tax gifts. There is an incentive, therefore, to avoid death taxes by giving property away before death. To the

extent that the federal gift tax discourages this avenue of avoidance, the absence of a gift tax at the state level is not a serious problem. Nevertheless, death taxes do discriminate against people who, because of early death or ignorance, do not manage to give their property away while alive.

VI. The Chain Store Tax

An occupation tax is imposed on firms which conduct business through a system of chain stores and sell personal property at retail. The tax is graduated by the number of stores and is as follows:

<u>Number of stores</u>	<u>Tax on each store</u>
Between 2 and 10	\$ 5
Between 11 and 20	15
Between 21 and 30	35
Between 31 and 40	65
Between 41 and 50	105
In excess of 50	155

The law also provides for a number of exemptions from the tax, including non-profit cooperative associations, hotels, and persons selling coal, ice, lumber, grain, feed, agricultural seeds, fertilizer, twine, and building materials if the sales of such products in the state exceed 95 per cent of the person's total sales in the state.

The presumed rationale for taxing chain stores is that there are inequities between chain stores and other merchants in the application of the property tax. It is contended that chain stores pay relatively fewer property taxes than other merchants because (1) they (chain stores) have relatively smaller inventories and a high rate of turnover, (2) they are able to shift inventory stocks among taxing districts between assessment dates, and (3) they fail to give assessors adequate information because of central bookkeeping practices carried on somewhere outside the taxing jurisdiction.

The argument has also been made that chain stores have an "unfair" economic advantage over other merchants because they are able to obtain discounts with large purchases. A tax presumably restores "competition" between chain stores and other merchants. Carried to its logical conclusion, this argument suggests that the government ought to impose discriminatory taxes on all firms with cost differentials in order to "equalize competition." The argument also implies that consumers should not benefit from the lowest possible price.

Regardless of the merits of taxing chain stores, the revenues from this source are negligible. In fiscal 1965, they amounted to \$37.1 thousand, which was .005 per cent of total general revenue (see Table 20). Chain store tax collections by taxpayer classification appear in Table 21.

TABLE 20
REVENUES FROM THE CHAIN STORE TAX
1954-1965

<u>Year</u>	<u>Revenue</u> <u>(Thousands of dollars)</u>
1954	31.9
1955	32.8
1956	31.3
1957	40.3
1958	20.8
1959	30.1
1960	31.8
1961	32.8
1962	33.9
1963	34.4
1964	37.4
1965	37.1

Source: State Comptroller.

TABLE 21

CHAIN STORE TAX COLLECTIONS, BY BUSINESS TYPE
FISCAL YEAR ENDING JUNE 30, 1965

<u>Business Type</u>	<u>Permits</u>	<u>No. of Stores</u>	<u>Tax Collections</u>
Drug Store	42	114	\$ 360.00
Food Store	102	633	6,467.25
Furniture, Radio, TV, and Undertaking	59	299	4,107.95
General Merchandise	39	466	12,105.00
Hatcheries	6	21	75.00
Lumber, Hardware, Paint, and Building Material	42	159	985.35
Motor Companies	59	206	1,743.05
Oil Companies	99	400	6,285.10
Restaurants	32	02	257.42
Wearing Apparel	09	377	2,098.05
Unclassified	<u>190</u>	<u>622</u>	<u>2,970.00</u>
Totals	759	3,547	\$ 37,454.97

Source: Tax Commission.

VII. Equipment Car Tax

For every freight line and equipment car company there is deducted the actual value of all cars locally assessed. Sixty per cent of the difference is assessed to the company and taxed at a rate by the State Tax Commission which is equated, as nearly as possible, to the average rate in the state. Revenues from this source are allocated to the General Fund. The tax applies to companies engaged in operating, furnishing or leasing cars which are not otherwise listed for taxation.

The equipment car tax is a very minor source of revenue. In 1965, it amounted to .02 per cent of total general revenue.

TABLE 22

REVENUES FROM THE EQUIPMENT CAR TAX
1954-1965

<u>Year</u>	<u>Revenue</u> <u>(Thousands of dollars)</u>
1954	101.3
1955	102.6
1956	101.4
1957	106.1
1958	110.6
1959	109.8
1960	113.4
1961	127.7
1962	124.2
1963	116.7
1964	111.5
1965	114.8

Source: State Comptroller

THE INDIVIDUAL INCOME TAXSummary and Conclusions

1. Iowa's individual income tax yielded some \$60 million in fiscal 1965. It ranks, in terms of revenue productivity, as the second most important source of general purpose state tax revenue. Under present tax rates and provisions, individual income tax collections are expected to increase annually by approximately 8 per cent. Assuming the continuation of this growth rate, collections will more than double by 1975 and the tax will become the single most productive source of general purpose state tax revenue.

2. Aside from its yield responsiveness to economic growth, the individual income tax has the major advantage of being well suited to adjustment to the taxpayer's economic capacity. Unlike the property tax and typical retail sales tax, the burden distribution of the income tax can be predetermined by taking into account income levels, family size, age, employment status, source of income, and other indices of the ability of the individual to contribute to the support of government.

3. As to equity considerations--concerning the treatment of the higher income groups compared to the lower income groups--the individual income tax is the only significant non-regressive component in the present Iowa State-local tax structure. The statutory graduated rates, however, overstate the effective progressivity of the levy. Because of the broad deduction provisions, particularly the deductibility of all federal income taxes paid, the distribution of effective tax rates (i.e., tax liabilities as a percentage of household income) is only nominally progressive. Thus, the substitution of a proportionate rate structure with personal credits and no

or limited deductibility of federal income taxes for the present provisions would involve no loss of progression.

4. The recent enactment of a withholding system or pay-as-you-earn basis under the Iowa income tax should prove to enhance the equity, efficiency, and revenue adequacy of the levy. Withholding has already improved income tax enforcement and taxpayer compliance.

5. The combined impact of federal deductibility on the absolute tax yield, on the responsiveness of the yield to economic growth, and on the distribution of burden of the individual income tax suggests that the provision be modified. It presently "costs" the State of Iowa (i.e., other sources of revenue) over \$15 million annually, with the majority of the 30 per cent revenue "loss" accruing to the benefit of taxpayers in the higher income brackets. A maximum deduction of \$200 per taxpayer would "save" the State some \$12 million per year.

6. Regarding the effects of the individual income tax on the State's economy, it is important to realize that such effects cannot be properly evaluated in isolation. It is the differential effects of the income tax compared to those of alternative revenue measures, primarily property and sales taxes, which are significant. In this context, the income tax as a fiscal device is clearly superior to the property tax and on par with the sales tax. All three of these levies are permitted as an offset against federal taxable income thereby serving to reduce whatever, if any, adverse economic effects are associated with the State-local imposts.

7. The possible use of the individual income tax as a direct source of local government revenue should be restricted to supplements (piggy-back) to the State levy encompassing areas no smaller than counties which are relatively self-contained trading and economic areas.

I. Introduction

Iowa adopted the individual income tax in 1934. Initially, the statutory tax rates ranged from 1 per cent of taxable income under \$1,000 to 5 per cent of taxable income over \$4,000. Personal credits in lieu of exemptions were provided at \$6 per taxpayer and \$2 per spouse and dependent. Presently the graduated schedule of statutory tax rates ranges from 0.75 per cent for the lowest taxable income bracket to a high of 3.75 per cent at the top end of the income scale.¹ Personal credits are now \$15 per taxpayer and spouse and \$7.50 for each additional dependent.

Income tax collections expressed as a percentage of State personal income have increased from 0.3 per cent in 1935 to 0.9 per cent in the most recent year for which comparable data are available. This development has occurred even though rates have been reduced several times and personal credits increased.² It is accounted for by the substantial growth in the level of income of taxpaying units.

Over time, collections from the individual income tax have increased some 8 per cent annually. At this "natural" growth rate, and assuming a 4 per cent annual increase in the income of Iowans, the yield of the individual income tax will exceed \$130 million by 1975. The relative responsiveness of income tax yields to economic growth is a noteworthy characteristic. Estimates suggest that income tax revenues will rise by 1.4 per cent for each 1.0 per cent rise in income. In large part, this relatively high "elasticity coefficient" is explained by the graduated rate structure and personal credit provisions.

¹A surtax of 0.75 per cent applies to taxable incomes in excess of \$9,000.

²The basic rate and credit provisions were last changed in 1953.

II. Interstate Comparisons

Individual income tax collections for 1965 in total and as a percentage of total state tax collections are shown in Table 1. There are five states in the seven state North Central Census Region which impose broad-based individual income taxes. Thirty-three states in all currently employ the levy.

The importance of the income tax as a source of revenue to the states differs considerably. For all the taxing states, it provides 22 per cent of the total collections. Oregon receives just about one-half of its tax revenue from this source, and Minnesota, one-third. For Iowa, the proportion is 17.4 per cent.

Selected Provisions. Variations in the structural provisions of income tax statutes are primarily responsible for the differences in relative per capita revenue yields among the states. The tax rate provisions, exemption levels, and the extent of the deductibility of federal income taxes appear to be the most crucial factors. Tax rate schedules for each of the thirty-three taxing states, together with special features are given in Appendix Table I.

The highest statutory top-bracket rate of 12 per cent is imposed by Minnesota, Delaware, Hawaii, and North Dakota assess at a top rate of 11 per cent. Three per cent is the highest first-bracket rate, applied in Colorado, North Carolina and Oregon. Statutory rates, however, are only the first step in comparing actual rate structures in the income tax states. As earlier mentioned, the provisions relating to personal exemptions and deductions, especially of federal income taxes from the state tax base, serve to reduce taxable income. To examine meaningfully the composite impact of the different structural provisions, tax liabilities were computed for a hypothetical married couple claiming two dependents at selected income levels. Tax liabilities were then translated into "effective rates" by relating them to individual adjusted gross income (i.e., income after business deductions but before personal exemptions and other allowable deductions). The end results, presented in Table 2, give a more accurate description of the degree of actual

TABLE 1

STATE TAX COLLECTIONS, TOTAL AND PERSONAL INCOME TAXES, BY STATES, 1965
(Dollar amounts in thousands)

State	Total	Personal income tax	
		Amount	Per cent of total
Alabama	\$ 414,370	\$ 46,216	11.2
Alaska	44,019	16,123	36.6
Arizona	236,965	14,562	6.1
Arkansas	217,361	17,922	8.2
California	3,132,171	410,466	13.1
Colorado	263,175	59,946	22.4
Connecticut	390,537	--	--
Delaware	120,946	42,183	34.9
Florida	762,402	--	--
Georgia	548,388	64,270	11.7
Hawaii	154,804	38,550	24.9
Idaho	92,213	23,862	31.3
Illinois	1,218,689	--	--
Indiana	648,646	123,253	19.0
IOWA	331,286	57,554	17.4
Kansas	265,261	33,084	12.5
Kentucky	391,496	56,827	14.5
Louisiana	581,272	23,515	4.0
Maine	117,735	--	--
Maryland	527,531	140,281	26.6
Massachusetts	674,981	219,751	32.6
Michigan	1,328,571	--	--
Minnesota	519,469	173,901	33.5
Mississippi	266,301	8,912	3.3
Missouri	503,804	57,117	11.3
Montana	79,560	16,657	20.9
Nebraska	115,222	--	--
Nevada	75,193	--	--
New Hampshire	54,044	2,128 ^{a/}	3.9
New Jersey	543,550	8,361 ^{b/}	1.5
New Mexico	188,445	16,219 ^{c/}	8.6
New York	2,862,288	1,131,731	39.5
North Carolina	687,992	136,351	19.8
North Dakota	82,080	7,956	9.7
Ohio	1,035,887	--	--
Oklahoma	357,571	26,484	7.4
Oregon	278,800	135,890	48.7
Pennsylvania	1,554,546	--	--
Rhode Island	124,622	--	--
South Carolina	309,492	43,359	14.0
South Dakota	64,182	--	--
Tennessee	433,872	6,862 ^{a/}	1.6
Texas	1,187,247	--	--
Utah	147,520	22,511	15.3
Vermont	63,205	18,724	29.6
Virginia	477,605	142,064	29.7
Washington	601,586	--	--
West Virginia	241,360	20,706	8.6
Wisconsin	732,354	272,849	37.3
Wyoming	47,920	--	--
U. S. total	26,104,036	3,642,167	14.0
Total for 33 States with broad-based personal income taxes	16,448,231	3,624,816	22.0

Footnotes on next page

^a/Tax on income from dividends and interest only.

^b/"Commuters' tax;" applies only to income earned in New Jersey by residents of New York.

^c/Includes an unsegregable amount from corporation income taxes.

Source: U. S. Bureau of the Census, State Tax Collections in 1965 and Federal-State Coordination of Personal Income Taxes, Advisory Commission on Intergovernmental Relations (October, 1965).

progression contained in the state income taxes.

For a married couple with two dependents, the Iowa income tax does not impose any tax liability until the taxpayer earns \$5,500. At that level, the "effective rate" is 0.9 per cent. By way of contrast, the same couple with the same income has an "effective rate" of 2.3 per cent if its residence is Minnesota, or over 2 1/2 times the amount of income absorbed by the Iowa tax. As indicated in the fifth column of Table 2, the taxpayer in Iowa would not be subject to an "effective rate" in excess of 2 per cent until his income approached \$10,000. Between \$10,000 and \$25,000 of income, the Iowa ratios of tax liability to adjusted gross income increase from 2.1 per cent to 2.4 per cent, that is, by 14 per cent. Income, on the other hand, is increased by 150 per cent. In short, though the Iowa individual income tax is the only significant progressive element in the State-local tax system, its distribution of tax burdens can hardly be considered an excessive extension of the principle of progressive taxation.

All states employing general income taxes provide for personal and dependency allowances. In the great majority of states, these allowances take the form of deductions from adjusted gross income. Since they are deducted before the statutory rates are applied, income is removed from the top bracket. As a consequence the tax-saving value of the personal exemption provisions varies with the income brackets. For example, Mississippi allows a taxpayer exemption of \$5,000. At the 3 per cent top rate, the exemption is

TABLE 2

EFFECTIVE RATES OF STATE PERSONAL INCOME TAXES FOR SELECTED ADJUSTED GROSS INCOME LEVELS, MARRIED COUPLE WITH TWO DEPENDENTS, BY STATE, DECEMBER 31, 1965

State	Adjusted gross income classes						
	\$2,500	\$3,500	\$5,500	\$7,500	\$10,000	\$17,500	\$25,000
Alabama	--	--	.3	.8	1.4	2.1	4.4
Alaska	--	.7	1.5	1.9	2.2	2.6	3.2
Arizona	--	--	.3	.6	.9	1.4	1.9
Arkansas	--	--	.4	.9	1.3	2.0	2.5
California	--	--	.1	.3	.5	1.0	1.6
Colorado ^{a/}	-1.1	-.7	.3	.9	1.5	2.4	3.2
Delaware	--	.3	.8	1.3	2.2	3.8	4.8
Georgia	--	--	.1	.5	1.0	2.2	3.1
Hawaii ^{a/}	-3.2	-1.0	1.9	3.1	4.2	4.9	5.8
Idaho	--	--	.6	1.4	2.2	3.2	4.0
Indiana ^{a/}	-1.0	-.1	.7	1.0	1.3	1.6	1.7
IOWA	--	--	.9	1.5	2.1	2.2	2.4
Kansas	--	.5	1.0	1.2	1.8	1.9	2.4
Kentucky	--	--	.8	1.7	2.3	2.7	3.1
Louisiana	--	--	--	.1	.4	.8	.9
Maryland	--	--	1.0	1.4	1.9	2.0	2.2
Massachusetts	--	--	.9	1.3	1.7	1.6	1.7
Minnesota	.4	.8	2.3	3.3	4.1	4.8	5.6
Mississippi	--	--	--	--	.5	1.1	1.6
Missouri	--	*	.4	.7	1.0	1.4	1.7
Montana	--	.2	.7	1.3	1.9	2.9	3.6
New Mexico	--	.3	.6	.7	.8	.9	.9
New York	--	--	.8	1.5	2.2	3.5	5.0
North Carolina	--	.5	1.3	2.0	2.9	3.6	4.4
North Dakota	--	.2	.4	.6	1.2	2.7	3.8
Oklahoma	--	*	.3	.4	.7	1.1	1.6
Oregon	--	.7	1.7	2.5	3.3	3.7	4.4
South Carolina	--	--	.5	1.0	1.5	2.7	3.8
Utah	--	.4	1.1	1.7	2.4	3.1	3.4
Vermont	.2	.7	1.8	2.7	3.7	4.3	4.9
Virginia	--	.5	1.0	1.5	2.3	2.8	3.3
W. Virginia	--	.3	.6	.7	.8	1.0	1.2
Wisconsin	.8	1.5	2.3	2.9	3.7	4.5	5.6
Federal tax	--	2.0	6.7	9.2	11.1	13.3	16.1

Note: In computing income taxes, it was assumed that all income was from wages and salaries and earned by one spouse. For State tax computations the optional standard deduction was used except for the \$17,500 and \$25,000 income classes where it was assumed that deductions are itemized. For Federal tax computations (other than the \$17,500 and \$25,000 A.G.I. classes) the following percentages of A.G.I. were used for estimated deductions: 16% through the \$7,500 A.G.I. class and 14% for the \$10,000 class. In computing the State tax at the \$17,500 income level, itemized deductions were assumed to be \$2,640, excluding the State personal income tax. For those States that allow deduction of the Federal income tax, the itemized deductions were assumed to be \$2,850 in computing the Federal tax liability, (addition of estimated State income tax less certain deductions not allowed for the Federal tax); except that where the State individual income tax is itself deductible for State income tax purposes, the actual State tax liability was added to the \$2,640 for both Federal and State tax computations. The comparable State and Federal estimated itemized deductions used in computing the tax at the \$25,000 level are \$3,475 and \$3,843, respectively. New Hampshire and Tennessee are excluded since their personal income taxes apply only to interest and dividend income;

also excluded is the New Jersey "commuters' income tax." Data for Nebraska are not available. "Effective rates" are computed as the ratio of tax liability to adjusted gross income (i.e., income after business deductions but before personal exemptions and other allowable deductions).

* Less than .05 percent.

a/ Negative rates result from credits allowed for sales taxes paid on food (Hawaii also allows a credit for each dependent who is a student). If the credit exceeds the tax liability, the taxpayer can apply for a refund.

Source: Reproduced from Federal State Coordination of Personal Income Taxes, Advisory Commission on Intergovernmental Relations (October 1965), p. 99.

"worth" \$150. The Kansas \$600 exemption is "worth" \$39 at the top income bracket, to which a 6.5 per cent rate is applied.

In Iowa and five other states (Arkansas, Idaho, Kentucky, Minnesota, and Wisconsin), the personal exemption is provided in the form of a tax credit (i.e., deduction from tax liability) rather than the usual deduction from income. In contrast to the varying "tax-saving" value of the deduction for personal exemptions, the value of the tax credit remains fixed or constant, regardless of the income bracket of the taxpayer. The personal exemption provisions for each of the income tax states are given in Table 3. Also included are the additional exemptions provided by the states for dependents, the elderly, and blindness. Needless to say, the level of the personal exemption or credit has significant effects on tax yield and on the degree of progressivity and of responsiveness to economic growth of the income tax.

As the data in Table 3 indicate, state personal exemptions typically mirror the federal provisions both as to levels (\$600) and coverage of spouse, dependents, and special categories. Iowa is among the relatively few states granting exemptions substantially higher than the federal counterpart. The lowest taxpayer allowance is \$370, which is incorporated in the Wisconsin statute in the form of a \$10 tax credit.

There is considerable uniformity among the states in the allowance of a standard optional deduction and of deductions for specified itemized

TABLE 3

STATE INDIVIDUAL INCOME TAXES: PERSONAL EXEMPTIONS, DECEMBER 31, 1965

State	Personal exemption		Additional exemption on account of --		
	Single	Married (joint return)	Dependents	Age ^{1/}	Blindness ^{1/}
Alabama	\$1,500	\$3,000	\$300	.....	.....
Alaska	600	1,200	600	\$600	\$600
Arizona	1,000	2,000	600	1,000	500
Arkansas ^{2/}	17.50 ((1,750)	35 (3,250)	6 (333)	.....	.....
California	1,500	3,000	600	.....	600
Colorado ^{3/}	750	1,500	750	750	750
Delaware	600	1,200	600	600	600
Georgia	1,500	3,000	600	600	600
Hawaii	600	1,200	600	600 ^{4/}	5,000
Idaho ^{5/}	600	1,200	600	600	600
Indiana ^{3/}	1,000	2,000 ^{6/}	500	500	500
IOWA ^{2/}	15 (1,500)	30 (2,333)	7.50(333)	15 ^{7/}	15 ^{7/}
Kansas	600	1,200	600 ^{8/}	600	600
Kentucky ^{2/}	20 (1,000)	40 (2,000)	20 (1,111)	20 (1,000)	20 (1,000)
Louisiana	2,500 (50)	5,000 (100)	400 (8) ^{8/}	.....	1,000 (20) ^{10/}
Maryland	300	1,600	800 ^{11/}	800	800
Massachusetts ^{12/}	2,000	2,500-4,000	400 ^{8/}	.....	2,000
Minnesota ^{2/}	19 (1,050)	38 (1,683)	19 (541)	13 ^{13/}	13 ^{13/}
Mississippi	5,000	7,000	.....	.....	.....
Missouri	1,200	2,400	400	.....	.....
Montana	600	1,200	600 ^{14/}	600	600
Nebraska ^{14/}	600	1,200	600 ^{14/}	600	600
New Mexico	600	1,200	600 ^{14/}	600	600
New York ^{15/}	600	1,200	600 ^{14/}	600	600
North Carolina	1,000	2,000 ^{16/}	300	.....	1,000
North Dakota	600	1,500	600	600	600
Oklahoma	1,000	2,000	500	.....	.....
Oregon	600	1,200	600 ^{17/}	18 ^{18/}	600 ^{18/}
South Carolina	800	1,600	800 ^{19/}	800	800
Utah	600	1,200	600 ^{20/}	.....	600
Vermont	500	1,000	500	500	500
Virginia	1,000	2,000	200 ^{20/}	600	600
West Virginia	600	1,200	600 ^{21/}	600	600
Wisconsin ^{2/}	10 (370)	20 (740)	10 (402)	5 ^{21/}	.....
District of Columbia	1,000	2,000	500	500	500

- 1/ In most States an identical exemption is allowed for a spouse if she meets the age and blindness conditions. In Massachusetts the deduction is allowed against business income only. In Hawaii the \$5,000 blindness deduction is allowed in lieu of the personal exemption.
- 2/ Personal exemptions and credits for dependents are allowed in the form of tax credits which are deductible from an amount of tax. With respect to personal exemptions, the sum in parentheses is the exemption equivalent of the tax credit assuming that the exemption is deducted from the lowest brackets. With respect to the dependency exemptions, the sum in parentheses is the amount by which the first dependent raises the level at which a married person or head of family becomes taxable.
- 3/ In addition to the personal exemption deductions, a sales tax credit is provided. See table.
- 4/ Individuals establishing residence in Hawaii after the age of 65 are subject to tax on income from Hawaii sources only (the tax is imposed on the entire taxable income of resident individuals, estates, and trusts).

- / In addition to the personal exemption deductions, a \$10 tax credit is allowed for each personal exemption.
- / Each spouse is entitled to the lesser of \$1,000 or adjusted gross income.
- / Single person, \$833; married couple, \$1,167.
- / The exemption is allowed for students regardless of age or income.
- / The exemptions and credits for dependents are deductible from the lowest income bracket and are equivalent to the tax credits shown in parentheses.
- / An identical exemption is allowed for a spouse or for a dependent.
- / The exemption is allowed for students regardless of age or income, and an additional credit of \$800 is allowed for each dependent 65 years of age or over.
- / The exemptions shown are those allowed against business income, including salaries and wages: a specific exemption of \$2,000 for each taxpayer. In addition, a dependency exemption of \$500 is allowed for a dependent spouse who has income from all sources of less than \$2,000. In the case of a joint return, the exemption is the smaller of (1) \$4,000 or (2) \$2,000, plus the income of the spouse having the smaller income. For nonbusiness income (annuities, interest, and dividends) the exemption is the smaller of (1) \$1,000 or (2) the unused portion of the exemption applicable to business income. Married persons must file a joint return in order to obtain any nonbusiness income exemption. If a single person, or either party to a joint return, is 65 years of age, the maximum exemption is increased from \$1,000 to \$1,500. No exemption is allowed against nonbusiness income if income from all sources for a single person exceeds \$5,000 and for a married person exceeds \$7,500.
- / An additional tax credit of \$20 is allowed for each taxpayer or spouse who has reached the age of 65. Additional tax credits for the blind: unmarried, \$20; married, \$25 for each spouse.
- / Effective January 1, 1967 (subject to referendum).
- / In addition to the personal exemptions, the following tax credits are granted: Single persons, \$10; married taxpayers and heads of households, \$25.
- / An additional exemption of \$1,000 is allowed a married woman with separate income.
- / A credit of \$1 is allowed for each \$100 actually contributed by the taxpayer as partial support of a person who could qualify (except for the chief support requirement) as a dependent. The credit shall not exceed \$6.
- / A tax credit of \$12 is allowed for each taxpayer or spouse who has reached the age of 65. A blind taxpayer and his spouse (if also blind) are allowed an additional \$600 exemption plus a tax credit of \$18 each.
- / The exemption is extended to dependents over the age of 21 if they are students in an accredited school or college.
- / Exemption for one dependent of unmarried person is \$1,000, if dependent is father, mother, son, daughter, sister or brother.
- / Single person, \$185; married couple \$402.

Source: Same as Table 2.

expenditures. Generally all business expenses are deductible, as well as those nonbusiness items which are deductible under the federal income tax. Several states have, however, introduced minor differences in their deduction provisions. Minnesota, for example, allows a limited deduction for personal political campaign expenses and political contributions. Alabama and Oklahoma provide for limited deductibility of outlays incurred in the construction of fallout shelters. But the major difference between the federal and state deductibility provisions is in the treatment of taxes, particularly federal income taxes.

The federal law permits the deduction of state income taxes paid. Nineteen states (including Iowa), also provide for the deduction of all or a limited amount of federal personal income taxes in the computation of state tax liability. The impact of the provision for the deduction of federal income tax on state tax returns is significant on tax yields and on the distribution of burden under the state income taxes. Suffice to say here that with the graduated federal tax rate structure, and this deductibility provision, taxpayers at the lower end of the income scale contribute a proportionately larger share of the total state income tax collections. These implications are discussed in further detail in the next section.

III. Iowa's Individual Income Tax

The Iowa taxing statute defines taxable net income as adjusted gross income for federal tax purposes, plus interest on state bonds, less interest on federal bonds, and minus allowable deductions. Under present law, there are six major categories of deductions, and each has its counterpart in the federal income tax. There is first the allowance for extraordinary personal expenditures, e.g., medical expenses, fire losses, etc. Second, there are deductions for contributions to charitable, religious, scientific, and educational organizations. The third category provides for the deduction of taxes paid (except the Iowa income tax). Fourth, a miscellaneous

group includes deductions for such nonbusiness items as union dues. The fifth is the optional standard deduction of the lesser of 5 per cent of income or \$250. And the last, is the deduction provided on all returns for federal income taxes paid.

To arrive at tax liability, the statutory rate structure is applied to taxable net income. From the computation of tax liability, the taxpayer is allowed to deduct a personal credit of \$15 (\$30 for married couples filing joint returns) and dependency credit of \$7.50 to arrive at tax due. Additional credits are provided for persons over 65 years of age and for the blind.

The extent of conformity between the Iowa tax and the Federal Internal Revenue Code is substantial. In essence, the Iowa tax defines net income (before personal exemptions) for State purposes as federal net income (also before exemptions), with only minor modifications, notably the treatment of interest on government securities. The advantages of such conformity in terms of the convenience of taxpayers' compliance and of the efficiency of tax administration and enforcement are widely acknowledged. In 1962, Iowa entered into agreement with the Internal Revenue Service for the cooperative exchange of tax records and related information. It is one of twenty-nine states out of thirty-three with broad-based individual income taxes now working with the federal government in the field of tax administration.

The Iowa legislature, along with the governing bodies of Arkansas and Kansas, established the withholding system beginning in 1966. General withholding, applicable to both residents and nonresidents is now operative in all states but three which impose the individual income tax. A list of the states requiring collection of income taxes at the source, and the year in which the practice was adopted, is contained in Table 4. The experiences of other states suggests that increases in revenue ranging from 10 per cent to 25 per cent will likely result from the improved taxpayer compliance produced by the introduction of withholding.

TABLE 4

WITHHOLDING OF STATE PERSONAL INCOME TAXES

State	Withholding required	Year effective	Periodicity of employer returns
Alabama	X	1956	Quarterly
Alaska	X	1949	do
Arizona	X	1954	do
Arkansas	X	1966	do
California	<u>1/</u>	--	Annually
Colorado	X	1954	Quarterly
Delaware	X	1949	do
Dist. of Col.	X	1956	do
Georgia	X	1960	do
Hawaii	X	1957	Monthly <u>2/</u>
Idaho	X	1955	Quarterly
Indiana	X	1963	do
IOWA	X	1966	do
Kansas	X	1966	do
Kentucky	X	1954	do <u>3/</u>
Louisiana	X	1961	do <u>4/</u>
Maryland	X	1955	do
Massachusetts	X	1959	Quarterly <u>5/</u>
Minnesota	X	1961	do
Mississippi	--	--	--
Missouri	X	1961	Quarterly
Montana	X	1955	do <u>6/</u>
Nebraska	X	1967 <u>7/</u>	do
New Mexico	X	1961	Monthly
New York	X	1959	do
North Carolina	X	1959	Quarterly
North Dakota	--	--	--
Oklahoma	X	1961	do
Oregon	X	1948	do <u>3/</u>
South Carolina	X	1959	do
Utah	X	1959	do
Vermont	X	1951	do <u>3/</u>
Virginia	X	1963	do
West Virginia	X	1961	do <u>9/</u>
Wisconsin	X	1962	do

X Denotes "yes;" -- denotes "no" or "not applicable."

1/ Withholding applies to nonresidents only.

2/ The Director of Taxation may grant permission to employers with an annual liability to pay over withheld income taxes not exceeding \$200 to make returns and payments on a quarterly basis.

3/ Except that employers withholding income taxes amounting to \$100 or more per month are required to remit on or before the 15th of the following month.

4/ At the request of the employer, the Collector of Revenue may permit a withholding tax return to be submitted and the tax to be paid on a monthly basis.

5/ Except that returns and payment of taxes withheld by any employer who can reasonably expect that taxes withheld will exceed \$600 for the calendar year are due monthly.

6/ If total quarterly taxes withheld are less than \$10, an employer may make an annual return.

7/ Subject to referendum.

Footnotes continued on next page.

Footnotes to Table 4 (Continued)

- 8/ Except that where the amount withheld is at least \$200 per calendar month or exceeds \$600 per calendar quarter, employers are required to report monthly.
- 9/ The Tax Commission may by regulation provide for returns and payment on the 15th day of each month for employers withholding taxes of \$100 or more for the preceding calendar month.

Source: Same as Table 2.

IV. The Iowa Income Tax

Tax Returns and Tax Liabilities. In the most recent year for which detailed data are available (1963), over 300,000 returns were filed under the Iowa personal income tax. Taxable returns, however, accounted for only 70 per cent of this total. The remainder, or 30 per cent, were filed, but contained no positive tax payment due. Tables 5, 6, and 7 present data on number of returns filed by adjusted gross income classes, tax paid and marital status.

Most of the taxable returns, 82 per cent, were returns of married persons, as shown in Table 7. Single persons accounted for 18 per cent of the total taxable returns. In the aggregate (Table 5) more taxable returns were filed from the low to middle income brackets of \$3,000 to \$7,000 than from any other; 62 per cent of the total. And, the largest number of taxable returns contained payments of between \$50 and \$100. It is interesting to note the number of returns with adjusted gross income over \$15,000 but containing no positive income tax liability. For the highest recorded income bracket (i.e., \$25,000 and over), some 55 returns listed no tax due. These results are attributable primarily to combined effect of deductibility of the federal income tax liability and the tax credits.

Effective Rates. The overall distributional pattern of Iowa's personal income tax for 1963 is provided in Table 8. Effective rates (i.e., tax payments as a percentage of adjusted gross income), as given in column 3, rise from an infinitesimal amount for those with incomes under \$1,000 to a maximum of 2 per cent for those with incomes over \$15,000. The figures in column 2 show the percentage of the total tax paid by each income group. About half the total tax payments are the responsibility of taxpayers with incomes between \$5,000 and \$10,000.

In Tables 9 and 10, the effective rates by income and occupation groups are given. On both joint and separate returns, retired persons have lower tax

TABLE 5

TOTAL NUMBER OF INCOME TAX RETURNS BY INCOME AND TAX PAID, 1963

Adjusted Gross Income	State Income Tax Paid									Total Returns
	None	Less than \$10	\$10-\$25	\$25-\$50	\$50-\$100	\$100-\$200	\$200-\$500	\$500- \$1,000	\$1,000 & Over	
Under \$ 1,000	37,137	55	4	2	2	--	--	--	--	37,200
\$ 1,000 - \$ 2,999	152,263	46,672	20,469	358	25	16	4	--	--	219,807
3,000 - 4,999	48,074	26,823	66,576	77,104	13,068	26	2	--	--	231,673
5,000 - 6,999	4,919	2,772	11,367	43,503	103,259	10,171	6	--	--	175,997
7,000 - 9,999	1,149	211	505	2,272	33,309	66,909	1,455	--	--	104,810
10,000 - 14,999	257	34	57	124	570	13,843	17,508	2	--	32,400
15,000 - 24,999	76	4	9	17	76	318	10,585	1,465	1	12,551
25,000 and Over	55	1	6	3	9	45	658	4,390	1,046	6,213
Total Returns	243,930	76,572	98,993	123,383	150,318	90,333	30,318	5,857	1,047	820,651

Note: Does not include returns with income not reported.

Source: Data tapes of individual tax records made available by the Iowa State Tax Commission.

TABLE 6

NUMBER OF INCOME RETURNS OF SINGLE PERSONS BY INCOME AND TAX PAID, 1963

Adjusted Gross Income	State Income Tax Paid									Total Returns
	None	Less than \$10	\$10-\$25	\$25-\$50	\$50-\$100	\$100-\$200	\$200-\$500	\$500- \$1,000	\$1,000 Over	
Under \$ 1,000	12,493	17	9	--	1	--	--	--	--	12,512
\$ 1,000 - \$ 2,999	39,813	20,565	10,593	190	8	4	1	--	--	71,174
3,000 - 4,999	2,748	2,812	14,385	22,050	5,038	16	--	--	--	47,049
5,000 - 6,999	316	97	297	2,044	14,836	2,461	1	--	--	20,052
7,000 - 9,999	109	17	131	104	975	5,862	214	--	--	7,312
10,000 - 14,999	31	8	10	16	40	554	1,161	--	--	1,820
15,000 - 24,999	12	0	0	3	9	44	529	80	--	677
25,000 and Over	8	1	2	0	1	9	744	174	41	310
Total Returns	55,530	23,517	25,319	24,407	20,908	8,950	1,980	254	41	160,906

Note: Does not include returns with income not reported.

Source: Data tapes of individual tax records made available by the Iowa State Tax Commission.

TABLE 7

NUMBER OF INCOME RETURNS OF MARRIED PERSONS BY INCOME AND TAX PAID, 1963

Adjusted Gross Income	State Income Tax Paid									Total Returns
	None	Less than \$10	\$10-\$25	\$25-\$50	\$50-\$100	\$100-\$200	\$200-\$500	\$500- \$1,000	\$1,000 & Over	
Under \$1,000	24,644	38	3	2	1	--	--	--	--	24,688
\$ 1,000 - \$ 2,999	112,450	26,107	9,876	168	17	12	3	--	--	143,633
3,000 - 4,999	45,326	24,011	52,191	55,054	8,030	10	2	--	--	184,624
5,000 - 6,999	4,603	2,675	11,070	41,459	88,423	7,710	5	--	--	155,945
7,000 - 9,999	1,040	194	474	2,168	32,334	60,047	1,241	--	--	97,498
10,000 - 14,999	226	26	47	108	530	13,294	16,347	2	--	30,580
15,000 - 24,999	64	4	9	14	67	274	10,056	1,385	1	11,874
25,000 and Over	47	0	4	3	8	36	584	4,216	1,005	5,903
Total Returns	188,400	53,055	73,674	98,976	129,410	81,383	28,238	5,603	1,006	659,745

Note: Does not include returns with income not reported.

Source: Data tapes of individual tax records made available by the Iowa State Tax Commission.

TABLE 8

PERSONAL INCOME TAX PAYMENTS, BY INCOME GROUP, 1963

Income	State Income Tax Payments		
	Amount (\$000) (1)	As Per cent of Total (2)	As Per cent of Income (3)
Under \$ 1,000	(a)	(b)	(b)
\$ 1,000 - \$ 2,999	537	1.2%	.1%
3,000 - 4,999	4,813	11.0	.5
5,000 - 6,999	10,331	23.5	1.0
7,000 - 9,999	11,876	27.1	1.4
10,000 - 14,999	6,747	15.4	1.3
15,000 - 24,999	4,740	10.8	2.0
25,000 and Over	4,850	11.0	2.0
Total	43,894	100.0	1.1

Note: Excludes delinquent taxes paid in fiscal year 1964.

(a) Less than \$500.

(b) Less than .05%.

Source: Iowa State Tax Commission, Income Tax Division.

liabilities than self-employed persons and wage and salary earners with the same income (except in the highest income group). There are two reasons for this. First, persons over 65 have been allowed an additional personal tax credit of \$15 (\$30 on a joint return if both spouses are over 65). Second, the Iowa income tax law follows the federal provisions in allowing all medical expenses of persons over 65 as deductions, while allowing only these expenses in excess of 3 per cent of income for returns of persons under 65 years of age.

Federal versus State Adjusted Gross Income. Aside from problems resulting from changes in residences within the taxpaying year, the major difference in definition of adjusted gross income between the state and federal level is that interest on state and local bonds is excluded from the federal tax base while it is included in the state base; on the other hand, interest from federal bonds and securities is included in the federal tax base but excluded from the state tax base. It is estimated that the amount of interest earned annually

TABLE 9

AVERAGE EFFECTIVE RATE OF STATE INCOME TAX
ON JOINT RETURNS, 1963, BY INCOME AND OCCUPATION GROUPS

Adjusted Gross Income	Wage and Salary Earners	Nonfarm Self-employed	Farmers	Retired Person
Under \$ 1,000	0 %	0 %	0 %	0 %
\$ 1,000 - \$ 2,999	(a)	(a)	(a)	(a)
3,000 - 4,999	.3	.3	.3	.1
5,000 - 6,999	.9	.8	1.1	.7
7,000 - 9,999	1.3	1.4	1.7	1.3
10,000 - 14,999	1.7	1.9	2.1	1.9
15,000 and Over	2.0	2.2	2.3	2.3
Total	1.2	1.3	.9	.6

(a) Less than .05%.

Source: Iowa State Tax Commission, data tape, 1963 returns.

TABLE 10

AVERAGE EFFECTIVE RATE OF STATE INCOME TAX,
ON SINGLE RETURNS, 1963, BY INCOME AND OCCUPATION GROUPS

Adjusted Gross Income	Wage and Salary Earners	Nonfarm Self-employed	Farmers	Retired Person
Under \$ 1,000	(a)	0 %	(a)	(a)
\$ 1,000 - \$ 2,999	.2%	.1	.2%	(a)
3,000 - 4,999	.8	.7	.8	.4%
5,000 - 6,999	1.3	1.2	1.4	1.0
7,000 - 9,999	1.6	1.7	1.8	1.4
10,000 - 14,999	1.8	1.9	2.1	1.7
15,000 and Over	1.8	1.9	2.0	1.7
Total	.9	1.0	.8	.7

(a) Less than .05%

Source: Iowa State Tax Commission, data tape, 1963 returns.

by Iowans on their federal bond holdings is about \$65 million; consequently, the AGI reported on state returns would be about \$65 million less than that reported on federal returns in Iowa, if there were no offsetting

differences. It seems probable that the state and local bond holdings of Iowans are very low, because the federal tax-exempt feature of these securities makes them most attractive to a relatively small number of high income taxpayers. For purposes of calculation, it is assumed that the \$500 million gap between the reported AGI on federal and state returns of Iowa residents is due to differential underreporting rather than to definition. This assumption provides a rough estimate of the increased revenue that could be gained by bringing state income tax reporting up to the federal level. In Table 11 below, estimates are given of the number of taxpaying units that filed at the federal but not at the state level and the maximum amount of tax revenue that could be gained by raising the AGI reported on state returns to the federal level.

Improved income tax reporting is desirable not only because it reduces revenue loss, but it also makes for improved equity. The income tax is usually regarded as among the more equitable of taxes, but this is not necessarily true when underreporting of income is greater for some sources of income than for others. In particular, wage earners as a class are taxed more heavily than self-employed persons. This is of particular importance in a state such as Iowa, where farmers and other self-employed persons are relatively numerous.

TABLE 11

STATE INCOME TAX LOSS DUE TO DIFFERENTIAL
UNDERREPORTING, BY INCOME GROUP, 1963

Income	Number of taxpaying units not filing state returns (thousands) (1)	Estimated Income Not Reported (2)	Estimated Tax Liability Lost (3)
		(in millions of dollars)	
Under \$1,000	84	16	0
\$1,000 - \$2,999	84	143	.2
3,000 - 4,999	22	78	.5
5,000 and Over	55	263	3.0
Total	245	500	3.7

Source: Iowa State Tax Commission, Income Tax Division, Annual Report Fiscal Year 1963-64, and Statistics of Income, Individual Returns, 1963, p. 105.
Adjustment was made for separate returns.

The Tax Credit Provision. Exemptions are the usual device used to allow for differences in taxpaying ability due to family size. The exemption is in most cases a fixed deduction from adjusted gross income for each taxpayer and dependent. Five states, including Iowa, provide instead for credits (i.e., deductions from tax liability). In addition to adjusting for differences in the taxpaying ability of families of different size within each income group, exemptions or credits serve the following purposes:

- (1) They hold down the number of returns for which tax liability is less than cost of collections.
- (2) They free from taxation income necessary for a minimum standard of living.
- (3) They achieve a smooth rate of progression in the low income groups without changing marginal rates.

The Iowa constant tax credit acts like a vanishing exemption, as is shown by the declining exemption equivalents in Table 12. In addition the Iowa credit has the advantage of greater ease of calculation. Exemptions, deductions, and the various other special provisions used in adjusting for differences in ability to pay are effective in reducing the amount of taxes paid. Tax credits allowed for taxpayers and their dependents resulted in tax relief of \$23 million in Iowa in 1963. In Table 13 the reduction in tax liability is distributed among income groups. Tax relief as a percentage of current tax liability (the percentage increase in tax from eliminating tax credits) is largest for the lowest income groups. In column 4 of Table 13 the percentage change (negative represents a decrease) in tax liability if a \$600 per person exemption were substituted for the current tax credit is presented. It is apparent that replacement of the credit with a standard \$600 exemption would considerably reduce the overall progressivity of the Iowa personal income tax.

TABLE 12

EXEMPTION EQUIVALENT TO TAX CREDIT, BY INCOME AND NUMBER OF CREDITS

Taxable Net Income	Exemption Equivalent to:		
	One \$15 Credit	Two \$15 Credits	Two \$15 and Two \$7.50
\$ 1,000	\$ 2,000 (\$ 1,000)	\$ 4,000 (\$ 1,000)	\$ 6,000 (\$ 1,000)
2,000	1,000	3,000 (\$ 2,000)	5,000 (\$ 2,000)
3,000	711	1,500	3,000
4,000	500	1,000	1,667
5,000	400	800	1,250
10,000	333	667	1,000

Figures in parentheses are the deductions necessary to just make the return nontaxable.

TABLE 13

TAX "COST" OF CREDITS AND EXEMPTIONS, 1963

Income	Tax Credit		Change in Tax Liability if \$600 Exemption Substituted for Credit	
	Amount (\$000)	As Per cent of Tax Liability	Amount (\$000)	As Per cent of Tax Liability
Under \$ 1,000	158	N.A.	3	N.A.
\$ 1,000 - \$ 2,999	3,616	610%	683	127%
3,000 - 4,999	6,726	127	-210	-4
5,000 - 6,999	6,120	55	-3,097	-30
7,000 - 9,999	4,053	31	-3,306	-28
10,000 - 14,999	1,306	18	-1,060	-16
15,000 - 24,999	514	10	-436	-9
25,000 and Over	259	5	-173	-4
Total	22,752	48	-7,596	-17

Source: Iowa State Tax Commission Report, 1964. The tax cost of the credit on taxable returns is the amount of the tax credit. The cost on nontaxable returns is estimated by multiplying the average tax before credits, calculated from the average taxable net income in each income and marital status group, by the number of returns in that group. The tax liability if the exemption were substituted was estimated from average data for each income, marital status, and taxable-non-taxable class.

ALLOWABLE DEDUCTIONS

Income used for certain purposes may be deducted from adjusted gross income in calculating taxable income for federal and Iowa tax purposes. The following three types of expenditures may be deducted:

- (1) Expenditures that are necessary in earning income;
- (2) Expenditures brought about by or losses resulting from unavoidable emergencies, such as medical and dental expenditures (in excess of 3 per cent of income) and casualty losses (in excess of \$100);
- (3) Expenditures on certain desirable activities, for instance, contributions to nonprofit organizations such as churches.

State income taxes paid in Iowa are, of course, not deductible, and a separate deduction is made for federal income tax paid. Only those taxpayers itemizing their federal deductions are permitted to itemize their state deductions. The optional standard deduction at the state level is 5 per cent of income or \$250, whichever is smaller.

The following breakdown of itemized deductions on Iowa income tax returns was derived from the federal Statistics of Income for 1960:

<u>Type</u>	<u>Percentage of Itemized Deductions</u>	
Necessary costs in earning income		36
Employee expenses	9	
Interest paid	27	
Expenditures or losses due to unavoidable emergencies		18
Medical and dental	17	
Casualties	1	
Encouragement of certain activities		47
Taxes paid (excluding state income tax)	23	
Contributions	19	
Total Itemized Deductions		100

Table 14 below contains estimates of the amount by income group of tax relief provided as a result of itemized and standard deductions. The measure of tax relief is obtained by multiplying the amount of deductions by the average marginal rate of state income tax. The estimated revenue reduction of 31 per

cent of tax collections gives some approximation of the amount of revenue a tax based on adjusted gross income with credits for dependents and a federal income tax deduction would yield under the present rate structure.

THE FEDERAL INCOME TAX DEDUCTION

As indicated earlier, each Iowa taxpayer is allowed to deduct his federal income taxes paid in calculating his Iowa income tax liability. Table 15 shows the impact of the federal income tax deduction on state tax revenues for each year since 1958. If the federal income tax deduction had been limited to \$200 in 1963, the revenue reduction would have been \$3.1 million instead of the actual \$14.7 million. Imposing a limit of \$300 would have reduced the revenue reduction to \$10.1 million.

In addition to the revenue "cost," the present federal income tax deduction also tends to lower the income elasticity of the tax. As indicated in Table 16, elimination of the provision would make income tax revenues more responsive to Iowa economic growth.

In Table 17, the effect of the federal income tax deduction by income group is given. Elimination of the deduction would serve to increase revenues, enhance the tax's elasticity, and make the income tax more progressive.

TABLE 4

TAX RELIEF DUE TO ALLOWABLE DEDUCTIONS, 1963

Income	Itemized Deductions		Standard Deduction		Total Deductions	
	Amount (\$000)	As per cent of tax	Amount (\$000)	As per cent of tax	Amount (\$000)	Per cent
Under \$ 1,000	0	0	0	0	0	0
\$ 1,000 - 2,999	148	28	51	9	199	37
3,000 - 4,999	1,460	30	412	9	1,872	39
5,000 - 6,999	3,517	34	527	5	4,044	39
7,000 - 9,999	3,584	30	267	2	3,851	32
10,000 - 14,999	1,625	24	74	1	1,699	25
15,000 - 24,999	954	20	17	(a)	971	20
25,000 and Over	942	19	2	(a)	944	19
Total	12,230	28	1,350	3	13,580	31

(a) Less than .05 per cent

Source: Iowa State Tax Commission Report, 1964, and Iowa State Tax Commission data tape of individual tax records.

TABLE 15

REVENUE REDUCTION DUE TO THE FEDERAL INCOME TAX DEDUCTION

Year	Revenue Reduction (in millions)	Tax collections, excluding delinquent (in millions)	Per cent Increase if no FITD
1958	\$10.9	\$34.1	31.3
1959	12.0	34.6	34.8
1960	12.3	35.8	34.3
1961	12.9	39.5	32.8
1962	14.0	42.4	33.0
1963	14.7	44.1	33.5

Source: Iowa State Tax Commission Reports and unpublished data supplied by the Iowa Tax Commission. To calculate the revenue reduction due to the federal income tax deduction by income group, the federal income tax deduction was multiplied by the average marginal rate of tax for that income group.

TABLE 16

INCOME ELASTICITY OF THE IOWA INCOME TAX
WITHOUT FEDERAL TAX DEDUCTIBILITY

Year	Percentage change in:		
	Adjusted Gross Income	Tax, no FITD	Elasticity
	<u>A</u>		
1958 - 1960	3.9	7.1	1.8
1959 - 1961	7.9	12.1	1.5
1960 - 1962	7.5	15.9	2.1
1961 - 1963	7.6	11.3	1.5
	<u>B</u>		
<u>Income</u>			
Under \$ 3,000	88.1	194.4	2.2
\$ 3,000 - 4,999	50.4	125.6	2.5
5,000 - 6,999	33.3	71.7	2.2
7,000 - 9,999	35.6	61.8	1.7
10,000 - 14,999	19.8	29.1	1.5
15,000 - 24,999	54.1	68.6	1.3
25,000 - 49,999	70.1	83.8	1.2
50,000 and over	79.5	78.2	1.0

Source: Iowa State Tax Commission Reports and unpublished data supplied by the Tax Commission.

TABLE 17

EFFECTS BY INCOME GROUP OF BROADENING THE BASE OF THE IOWA INCOME TAX
BY ELIMINATING THE FEDERAL INCOME TAX DEDUCTION (1963)

Adjusted Gross Income		Average Tax Rate ¹	Average Tax Rate After Base Broadening ²	Percentage Increase in Tax Liability Due to Base Broadening
Under	\$	(a)	(a)	(a)
	1,000			
\$	1,000 - 2,999	.1%	.2%	29.2%
	3,000 - 4,999	.5	.7	33.0
	5,000 - 6,999	1.0	1.3	33.4
	7,000 - 9,999	1.4	1.8	29.5
	10,000 - 14,999	1.8	2.3	28.9
	15,000 - 24,999	2.0	2.7	33.6
	25,000 - 49,999	2.1	3.0	44.2
	50,000 - 99,999	1.8	3.0	64.7
	100,000 - 149,999	1.6	3.3	109.2
	150,000 and Over	1.6	2.8	77.3
	Total	1.1	1.4	33.6

(a) Less than .05%

¹Average tax rate equals tax paid in 1963 divided by adjusted gross income.²Average tax rate after broadening equals tax that would have been paid in 1963 if the 1963 federal income tax deduction had not been allowed divided by adjusted gross income.

APPENDIX TABLE I

STATE INDIVIDUAL INCOME TAXES: RATES, DECEMBER 31, 1965

State	Net income after personal exemption	Rate (per cent)	Federal Tax Deductible	Special rates or features
Alabama	First \$1,000	1.5	X
	\$1,001-\$3,000	3		
	\$3,001-\$5,000	4.5		
	Over \$5,000	5		
Alaska	16 percent of the total Federal income tax..... that would be payable for the same taxable year at the Federal tax rates in effect on December 31, 1963.			
Arizona ^a	First \$1,000	1.3	X
	\$1,001-\$2,000	2.0		
	\$2,001-\$3,000	2.6		
	\$3,001-\$4,000	3.3		
	\$4,001-\$5,000	4.0		
	\$5,001-\$6,000	4.6		
	\$6,001-\$7,000	5.6		
Over \$7,000	5.9			
Arkansas	First \$3,000	1
	\$3,001-\$6,000	2		
	\$6,001-\$11,000	3		
	\$11,001-\$25,000	4		
	Over \$25,000	5		
California	First \$2,500	1
	\$2,501-\$5,000	2		
	\$5,001-\$7,500	3		
	\$7,501-\$10,000	4		
	\$10,001-\$12,500	5		
	\$12,501-\$15,000	6		
	Over \$15,000	7		
Colorado	First \$1,000	3	X	Surtax on income from in- tangibles in excess of \$5,000, 2 percent. Tax- payers are allowed a credit equal to 1/2 of 1 percent of net taxable income on the first \$9,000 of taxable income. A \$7 tax credit is allowed each taxpayer and each dependent for sales tax paid on food. If there is no income tax liability the taxpayer can apply for a refund.
	\$1,001-\$2,000	3.5		
	\$2,001-\$3,000	4		
	\$3,001-\$4,000	4.5		
	\$4,001-\$5,000	5		
	\$5,001-\$6,000	5.5		
	\$6,001-\$7,000	6		
	\$7,001-\$8,000	6.5		
	\$8,001-\$9,000	7		
	\$9,001-\$10,000	7.5		
Over \$10,000	8			

APPENDIX TABLE I - (2)

State	Net income after personal exemption	Rate (per cent)	Federal tax Deductible	Special rates or features
Delaware	First \$1,000	1.5	x ^b
	\$1,001-\$2,000	2		
	\$2,001-\$3,000	3		
	\$3,001-\$4,000	4		
	\$4,001-\$5,000	5		
	\$5,001-\$6,000	6		
	\$6,001-\$8,000	7		
	\$8,001-\$30,000	8		
	\$30,001-\$50,000	9		
	\$50,001-\$100,000	10		
Over \$100,000	11			
Georgia	First \$1,000	1
	\$1,001-\$3,000	2		
	\$3,001-\$5,000	3		
	\$5,001-\$7,000	4		
	\$7,001-\$10,000	5		
	Over \$10,000	6		
Hawaii ^c	First \$500	2.25	Alternative tax on capital gains: Deduct 50 percent of capital gains and pay an additional 3 percent on such gains. The income classes reported are for individuals and heads of households. For joint returns the rates shown apply to income classes twice as large. A sales tax credit based on modified adjusted gross income brackets is provided, ranging from 45¢ to \$18 per qualified exemption. Taxpayers are also provided credits for student attending institutions of higher learning (\$2 to \$50) and dependent children attending school in grades kindergarten to twelve (\$2 to \$20). The amount of credit is based on size of A.G.I. If a taxpayer's credits exceed his tax, a refund will be made.
	\$501-\$1,000	3.25		
	\$1,001-\$1,500	4.50		
	\$1,501-\$2,000	5.00		
	\$2,001-\$3,000	6.50		
	\$3,001-\$5,000	7.50		
	\$5,001-\$10,000	8.50		
	\$10,001-\$14,000	9.50		
	\$14,001-\$20,000	10.00		
	\$20,001-\$30,000	10.50		
Over \$30,000	11.00			
Idaho ^a	First \$1,000	2.5	X	A \$10 filing fee is imposed on each return. A \$10 tax credit is allowed for each personal exemption.
	\$1,001-\$2,000	5.0		
	\$2,001-\$3,000	6.0		
	\$3,001-\$4,000	7.0		
	\$4,001-\$5,000	8.0		
	Over \$5,000	9.0		

APPENDIX TABLE I - (3)

State	Net income after personal exemption	Rate (per cent)	Federal tax Deductible	Special rates or features
Indiana	Adjusted gross income		2	A \$6 tax credit is allowed each taxpayer and each dependent for sales tax paid on food. If there is no income tax liability, the taxpayer can apply for a refund.
Iowa	First \$1,000	0.75	X	.....
	\$1,001-\$2,000	1.5		
	\$2,001-\$3,000	2.25		
	\$3,001-\$4,000	3		
	\$4,001-\$9,000	3.75		
	Over \$9,000	4.5		
Kansas	First \$2,000	2.5	X	The income classes reported are for individuals and heads of households. For joint returns the rates shown apply to income classes twice as large.
	\$2,001-\$3,000	3.5		
	\$3,001-\$5,000	4		
	\$5,001-\$7,000	5		
	Over \$7,000	6.5		
Kentucky	First \$3,000	2	X	.....
	\$3,001-\$4,000	3		
	\$4,001-\$5,000	4		
	\$5,001-\$8,000	5		
	Over \$8,000	6		
Louisiana ^a	First \$10,000	2	X	.....
	\$10,001-\$50,000	4		
	Over \$50,000	6		
Maryland	Ordinary income	3	.....	.....
	Investment income:			
	First \$500	3		
	Balance	5		
Massachusetts ^c	Earned income and business income	3.075	X	Rates include the following additional taxes: 3 percent permanent surtax on all types of income; and, through June 30, 1967, 20 percent surtax on all types of income, 1 percent on earned and business income, and 3 percent on capital gains on intangibles.
	Interest and dividends, capital gains on intangibles	7.38		
	Annuities	1.845		

APPENDIX TABLE I - (4)

State	Net income after personal exemption	Rate (per cent)	Federal tax Deductible	Special rates or features
Minnesota	First \$500	1.5	X	There is an additional tax of 1 percent on the first \$1,000 or fraction thereof of adjusted gross income where net income tax plus surtax does not exceed \$10. This additional tax shall not, however, be applied to increase the total taxes payable by such persons to more than \$10.
	\$501-\$1,000	2.0		
	\$1,001-\$2,000	3.0		
	\$2,001-\$3,000	5.0		
	\$3,001-\$4,000	6.0		
	\$4,001-\$5,000	7.0		
	\$5,001-\$7,000	8.0		
	\$7,001-\$9,000	9.0		
	\$9,001-\$12,500	10.0		
\$12,501-\$20,000	11.0			
Over \$20,000	12.0			
Mississippi	First \$5,000	2
	Over \$5,000	3		
Missouri	First \$1,000	1	X	The rates apply to total income not merely to the portion of income falling within a given bracket, but as a result of the following tax credits, the schedule in effect is a bracket rate schedule: \$1,001-\$2,000, \$5 \$2,001-\$3,000, \$15 \$3,001-\$5,000, \$30 \$5,001-\$7,000, \$55 \$7,001-\$9,000, \$90 Over \$9,000, \$135
	\$1,001-\$2,000	1.5		
	\$2,001-\$3,000	2		
	\$3,001-\$5,000	2.5		
	\$5,001-\$7,000	3		
	\$7,001-\$9,000	3.5		
	Over \$9,000	4		
Montana	First \$1,000	1.1	X
	\$1,001-\$2,000	2.2		
	\$2,001-\$3,000	3.3		
	\$3,001-\$5,000	4.5		
	\$5,001-\$7,000	5.6		
	Over \$7,000	7.9		
Nebraska	Taxed on net income (federal taxable income under the Internal Revenue Code as of Jan. 1, 1965) at a flat rate to be determined by the State Board of Equalization and Assessment by Sept. 1 of each year. ^d		
New Mexico ^{a, c}	First \$10,000	1.5	X	Net income (of married taxpayer filing joint return with one or more dependents) under \$1,500 nontaxable.
	\$10,001-\$20,000	3.0		
	\$20,001-\$100,000	4.5		
	Over \$100,000	6		

APPENDIX TABLE I - (5)

State	Net income after personal exemption	Rate (per cent)	Federal tax Deductible	Special rates or features
New York	First \$1,000	2	Capital gains treatment is similar to that provided under Federal law. Income from unincorporated business is taxed at 4 percent. The following credit is allowed: If tax is-- Credit is-- \$100 or less Full amount of tax \$100-\$200 Difference between \$200 and amount of tax. \$200 or more No credit.
	\$1,001-\$3,000	3		
	\$3,001-\$5,000	4		
	\$5,001-\$7,000	5		
	\$7,001-\$9,000	6		
	\$9,001-\$11,000	7		
	\$11,001-\$13,000	8		
\$13,001-\$15,000	9			
	Over \$15,000	10		
North Carolina	First \$2,000	3
	\$2,001-\$4,000	4		
	\$4,001-\$6,000	5		
	\$6,001-\$10,000	6		
	Over \$10,000	7		
North Dakota	First \$3,000	1	X
	\$3,001-\$4,000	2		
	\$4,001-\$5,000	3		
	\$5,001-\$6,000	5		
	\$6,001-\$8,000	7.5		
	\$8,001-\$15,000	10		
	Over \$15,000	11		
Oklahoma ^c	First \$1,500	1	X	The income classes reported are for individuals and heads of households. For joint returns the rates shown apply to income classes twice as large.
	\$1,501-\$3,000	2		
	\$3,001-\$4,500	3		
	\$4,501-\$6,000	4		
	\$6,001-\$7,500	5		
	Over \$7,500	6		
Oregon	First \$500	3	X	The income classes reported are for individuals and heads of households. For joint returns the rates shown apply to income classes twice as large.
	\$501-\$1,000	4		
	\$1,001-\$1,500	5		
	\$1,501-\$2,000	6		
	\$2,001-\$4,000	7		
	\$4,001-\$8,000	9		
	Over \$8,000	9.5		
South Carolina	First \$2,000	2	X ^e
	\$2,001-\$4,000	3		
	\$4,001-\$6,000	4		
	\$5,001-\$8,000	5		
	\$8,001-\$10,000	6		
	Over \$10,000	7		

APPENDIX TABLE I - (6)

State	Net income after personal exemption	Rate (per cent)	Federal tax Deductible	Special rates or features
Utah	First \$1,000	2	X	.....
	\$1,001-\$2,000	3		
	\$2,001-\$3,000	4		
	\$3,001-\$4,000	5		
	\$4,001-\$5,000	6		
	Over \$5,000	6.5		
Vermont ^c	First \$1,000	2	.....	The rates are subject to reduction if there is sufficient surplus in the general fund.
	\$1,001-\$3,000	4		
	\$3,001-\$5,000	6		
	Over \$5,000	7.5		
Virginia	First \$3,000	2	.....	.....
	\$3,001-\$5,000	3		
	Over \$5,000			
West Virginia	First \$2,000	1.2	.....	The income classes reported are for individuals and heads of households. For joint returns the rates shown apply to income classes twice as large.
	\$2,001-\$4,000	1.3		
	\$4,001-\$6,000	1.6		
	\$6,001-\$8,000	1.8		
	\$8,001-\$10,000	2.0		
	\$10,001-\$12,000	2.3		
	\$12,001-\$14,000	2.6		
	\$14,001-\$16,000	2.8		
	\$16,001-\$18,000	3.0		
	\$18,001-\$20,000	3.1		
	\$20,001-\$22,000	3.4		
	\$22,001-\$26,000	3.5		
	\$26,001-\$32,000	3.7		
	\$32,001-\$38,000	3.9		
	\$38,001-\$44,000	4.1		
	\$44,001-\$50,000	4.3		
	\$50,001-\$60,000	4.5		
	\$60,001-\$70,000	4.7		
	\$70,001-\$80,000	4.9		
\$80,001-\$90,000	5.0			
\$90,001-\$100,000	5.2			
\$100,001-\$150,000	5.3			
\$150,001-\$200,000	5.4			
Over \$200,000	5.5			
Wisconsin ^c	First \$1,000	2.7	.....	.....
	\$1,001-\$2,000	2.95		
	\$2,001-\$3,000	3.2		
	\$3,001-\$4,000	4.2		
	\$4,001-\$5,000	4.7		
	\$5,001-\$6,000	5.2		
	\$6,001-\$7,000	5.7		
	\$7,001-\$8,000	6.7		
	\$8,001-\$9,000	7.2		
	\$9,001-\$10,000	7.7		
	\$10,001-\$11,000	8.2		
	\$11,001-\$12,000	8.7		
	\$12,001-\$13,000	9.2		
	\$13,001-\$14,000	9.7		
Over \$14,000	10.0			

APPENDIX TABLE I - (7)

State	Net income after personal exemption	Rate (per cent)	Federal tax Deductible	Special rates or features
Washington, D.C.	First \$5,000	2.5	Income from unincorporated business is taxed at 5 percent.
	\$5,001-\$10,000	3		
	\$10,001-\$15,000	3.5		
	\$15,001-\$20,000	4		
	\$20,001-\$25,000	4.5		
	Over \$25,000	5		

Note: Excludes the New Hampshire (4.25%) and Tennessee (6%) flat rate tax on interest and dividends, and the New Jersey "commuters' tax," which applies only to income earned in New Jersey by residents of New York (tax rates are same as New York).

- a Community property State in which, in general, 1/2 the community income is taxable to each spouse.
- b Limited to \$300 for single persons and \$600 for married persons filing joint returns.
- c Allows deduction of State individual income tax itself in computing State tax liability.
- d Effective January 1, 1967 (subject to approval of electorate at the general election in November 1966).
- e Limited to \$500 per taxpayer.

Source: See Table 1 of text.

31723020695573

amount of purchased services pays less in retail sales tax than family whose consumption pattern includes relatively little service purchases. Persons who devote much of their incomes to the care and upkeep of their cars, their clothing and their appearance will find the retail sales tax less burdensome than persons who, instead, spend heavily for groceries, household supplies, books, and phonograph records, and the like.

Table 11 shows what the 1965 distribution of burden of the Iowa retail sales tax would have been if the base had been extended to cover certain selected personal services. The yield of the tax would have been approximately 20 per cent greater than actually realized, or total collections would have been between \$110-\$115 million for the same period. Interestingly, the revenue gains from the base extension would just about equal the revenue loss from the adoption of a retail sales tax credit. Thus, without any revenue change, the Iowa retail sales tax could be substantially improved in terms of responsiveness to economic growth and equity by the base extension and the credit adoption.

Table 11

ESTIMATED INCIDENCE OF IOWA RETAIL SALES AND USE TAX WITH BASE
EXTENDED TO INCLUDE SELECTED SERVICES, BY INCOME AND OCCUPATION GROUP, 1964

Money Income (thousands of dollars)	Percentage of Income Paid in Tax				
	Wage and Salaried	Self-Employed (non-farm)	Farm	Retired and Others	All Households
Under 1	3.6	6.6	--	3.2	--
1 - 3	2.2	2.8	4.3	2.1	2.7
3 - 5	1.8	2.1	2.7	1.8	2.1
5 - 7	1.6	1.6	2.0	1.6	1.6
7 - 10	1.5	1.4	1.6	1.4	1.5
10 - 15	1.3	1.2	1.2	1.3	1.3
	1.3	0.7	1.4	1.5	1.1