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THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

A COMPUTERIZED MODEL FOR FORECASTING REVENUE FROM CHANGES
IN THE IOWA INDIVIDUAL INCOME TAX PROVISIONS

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A COMPUTERIZED MODEL FOR FORECASTING REVENUE FROM CHANGES
IN THE IOWA INDIVIDUAL INCOME TAX PROVISIONS

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A COMPUTERIZED MODEL FOR FORECASTING REVENUE FROM
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CHAPTER I

INTRODUCTION AND SCOPE

States have increasingly turned to reliance on income taxes at the same time increasing urbanization and a host of other social demands have made claims for increased expenditures. Income tax revenue has proved to be one of the most variable sources of state revenue which has been subject to more changes in the local and/or national economy. The complexity of the tax with many provisions, deductions, exemptions, etc., has made it difficult to know the impact of a single proposed change and even more difficult to project that change into the future.

The appearance of the digital computer has made new techniques available to many researchers--techniques which could not be realistically accomplished without its aid. Joseph A. Pechman, Brookings Institution, has experimented with one such new computerized approach to revenue estimation which has since been tried by some states.

It is the purpose of this dissertation to review the existing models using Pechman's basic approach and to determine some of the general weaknesses of the models built by the states. (Chapter II.) In Chapters III through V, a tax model will be constructed for Iowa to eliminate some of these weaknesses, while Chapter VI discusses technical problems and accuracy of the Iowa model estimates. Chapter VII will review some of the weaknesses and methods of improving tax simulation models with the Iowa model as a particular example. Chapter VIII summarizes the material presented and draws final conclusions.

CHAPTER II

COMPUTER INCOME TAX SIMULATION

Introduction

The verb 'to simulate' has come into vogue recently in a number of scientific disciplines to describe the ancient art of model building.¹ William D. Choplin has defined simulation models of social phenomena as "an operating representation in reduced and/or simplified form of relations among social units by means of symbolic and/or simplified parts."² Such a definition fits the models of simulating politics better than the area of economics. Each author, no matter what his field, has a particular definition which describes the actual work he is undertaking. Although any model, particularly any economic model, could be construed to fall under some definition of simulation, authors generally suggest that simulation is a technique with unique qualities which differ from general model building in that they have the

¹T. H. Naylor, et al., Computer Simulation Techniques (New York, N.Y.: John Wiley and Sons, Inc., 1967), p. 1.

²William D. Choplin, ed., Simulation in the Study of Politics (Chicago: Markham Publishing Co., 1968), p. 1.

qualitative difference of being more complex and/or necessitate the use of a digital computer. One such definition in economics suggests that simulation is:

a numerical technique for conducting experiments on a digital computer which involves certain types of mathematical and logical models that describe the behavior of a business or economic system (or component thereof) over extended periods of real time.³

Although such a definition is very broad, it includes the methodology developed by Joseph A. Pechman for revenue estimating. Thus, simulation as used in this paper will be used to describe all tax models using the methodology described in the following section.

National Income Tax Simulation

Joseph A. Pechman, Brookings Institution, began a pioneer experiment in the early 1960's which can be defined as a simulation technique for revenue estimating. Two basic publications⁴ detail the findings and the technique. The method is very simple to explain although carrying out data organization and programming is difficult. A sample of detailed information drawn from IRS sample used for the publication, Statistics of Income,⁵ concerning the 1960 taxpayers income tax returns was stored

³Naylor, op. cit., p. 3.

⁴Joseph A. Pechman, "A New Tax Model for Revenue Estimating," and "Individual Income Tax Provisions of the Revenue Act of 1964," Washington, D.C.: Brookings Institution, 1965.

⁵U.S., Treasury Department, Statistics of Income: Individual Income Tax, 1967 (Washington, D.C.: Government Printing Office, 1967).

on computer tapes. Computer programs were written to simulate the tax laws as they existed in 1960. Each recalculated return was weighted properly to give the population estimates for 1960. Since 1967 the Brookings Institution has mimeographed several memoranda and made available the sampled tax data and programs for research purposes.⁶ To estimate revenue in future years, the distribution of income was assumed to remain unchanged; and, therefore, all incomes were increased by a fixed rate consistent with the rate of growth of income of the United States. The technique also generated Figure 1 which has been widely used. The figure is practically self-explanatory. From it one can observe the impact of the major provisions of the federal income tax laws. The lowest line is the effective rate.

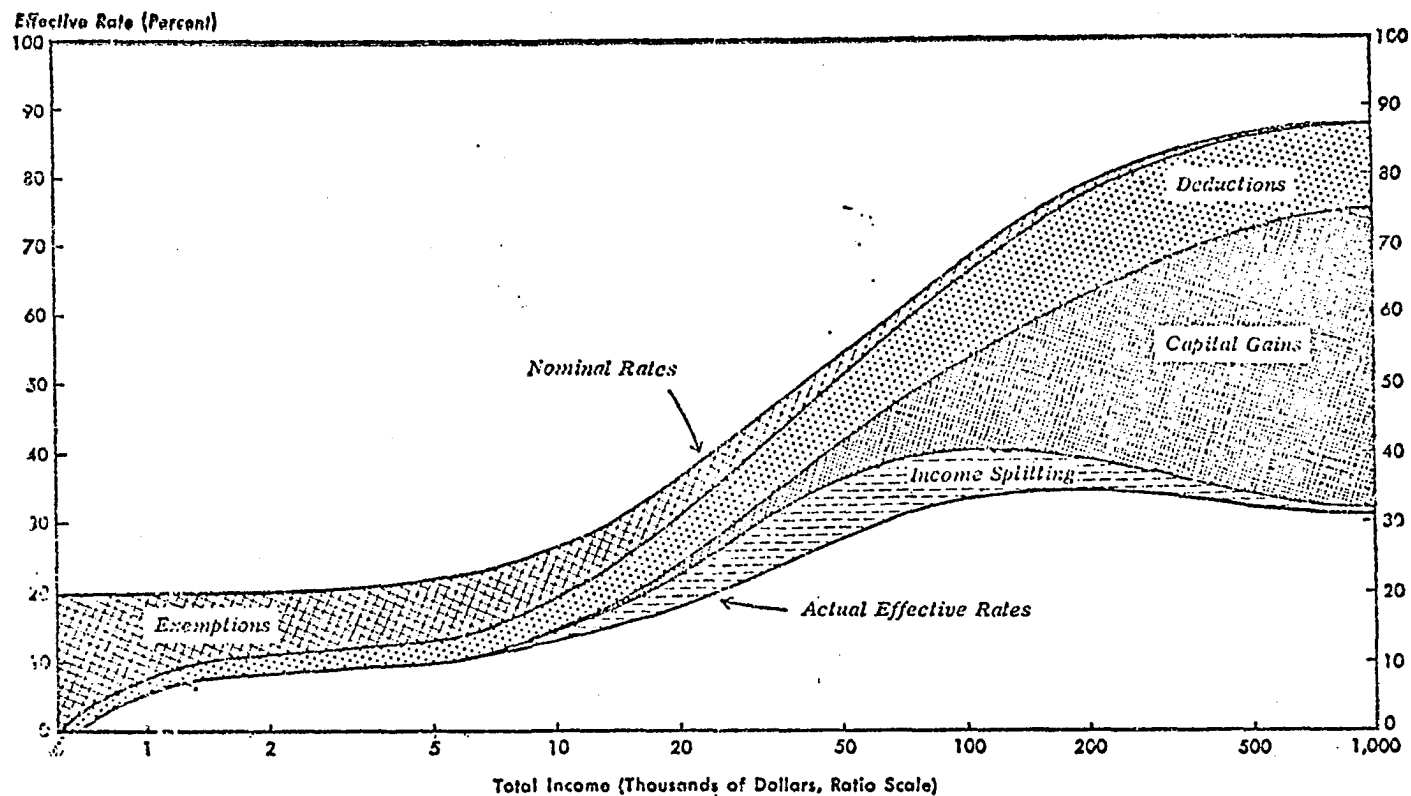
The Possibilities for State Income
Tax Simulation

Joseph A. Pechman stated optimistically that the basic technique would be applied to federal corporate income as well as state problems.⁷ Although the Brookings Institution was not able to indicate any research methodology

⁶Brookings Institution, Memorandum No. 14, "1964 Brookings Federal Individual Income Tax File;" Memorandum 24, "Logical Structure of the 1964 Tax Calculator;" Memorandum 27, "1964 Tax File Programs in the System Subroutine Library;" Memorandum 42, "The Brookings 1966 Federal Individual Income Tax File" (Washington, D.C.: Brookings Institution, 1967).

⁷"A New Model for Revenue Estimating," p. 248.

Fig. 1. Influence of Various Provisions on Effective Rates, Taxable Returns, 1960



SOURCE: Joseph A. Pechman, Individual Income Tax Provisions of the Revenue Act of 1964, Studies on Government Finance, 1965, p. 234.

being undertaken by any state,⁸ the method was too simple not to have been tried by several states. The author was aware that the Iowa Department of Revenue had tried such a simple method. Therefore, a questionnaire was designed to determine the extent to which states had tried to use the method as the primary source of information. The cover letter and questionnaire sent to all income tax states appears in Appendix D.

Thirty replies to the questionnaire, sent during the summer of 1969, were received. The letters were sometimes forwarded to research agencies in the respective states. If other agencies were suggested, they were contacted. The answers which follow should be fairly accurate since the agency notified would be responsible for releasing income tax return data to any researcher and would, therefore, be likely to know of any research.

It was felt that four things could have been associated with the development of simulation in states. First, since the simulation technique gives a burden of income taxation, states studying the burden of income tax might have "spun off" a revenue estimating procedure from their studies. Second, states not using sampling statistics in research are not likely to develop a complex tax model using sampled data. Third, states without necessary tax

⁸Personal correspondence with Joseph A. Pechman, Brookings Institution, March 8, 1967.

TABLE 1

STATES HAVING DATA TO RECALCULATE
INCOME TAX RETURNS,
1969

California
Colorado
Georgia
Hawaii
Idaho

Indiana
Iowa
Kansas
Maryland
Minnesota

Missouri
Montana
Nebraska
New Mexico
New York
North Carolina

North Dakota
Oregon
Tennessee
Vermont
Virginia
Washington, D.C.
Wisconsin

SOURCE: Appendix D.

data to easily simulate the tax system cannot use simulation techniques. Finally, states perceiving little or no need for such a technique are not likely to be pioneers in developing tax models. Each of these points is discussed below.

Over half of the replying states (16) have made "some continuing study concerning the burden of income taxation by income class, occupation, or geographic area," while 13 states have made no study. These reports were highly variable in content and quality. California has detailed information by county, type of filing, and special data by individual provisions of the law. The 100-page report includes detailed information about techniques and methodology. Detailed reports were also received from Hawaii, North Carolina, and smaller states like Iowa and Montana. Some states, although making a report, gave little information on the burden of taxation.

As a key to the technical ability of research staffs in various states, it was discovered that nearly half of the responding states (14) used no sampling statistics.

Table 1 shows the states that report that they have enough information to recompute at least the basic provisions of their state return. These 23 states constitute about 2/3 of the replying states. All of the states with the

possible exception of California, New York, Indiana, and Hawaii have limited data easily at hand.

Responding departments were asked to indicate how valuable "a computerized model to calculate tax revenue by income class and geographical area with 15 minutes or less of computer time for current tax provisions and other provisions popular in most income using states" would be. Nine of the 25 states replying to the question indicated that such a model would add little to current procedures. It is not surprising that these states are not leaders in attempting to stimulate their tax system. Nearly as many states indicated that a model would be a very important tool.

State Use of Income Tax Simulation

Of the 23 states reporting that they had adequate data to recalculate the income tax return, over half (12) had attempted some type of simulation. These states are shown in Table 2. The following pattern emerges. First, most states attempting simulation have developed relatively simple models which generally deal with only major provisions of their tax law. This means solutions to problems concerning changes in federal tax deduction, changes in personal and child deductions and/or credits, and

TABLE 2

DESCRIPTION OF TAX MODELS USED BY STATES, 1969¹

Iowa	Periodically writes a program to measure impact of changing personal credits and exemptions, changes in federal tax deduction.
Kansas	Federal conformity.
Maryland	Program underway. Extent unknown. ²
Montana	Recalculated returns to estimate revenue effect of: <ol style="list-style-type: none"> 1. elimination of federal income tax deduction 2. using tax credit in lieu of personal deduction 3. changes in rate schedule
New Mexico	Took taxable income from each taxpayer and estimated revenue from proposed new tax brackets.
New York	"The model provides a basis for evaluating the yield of the state's personal income tax under various economic assumptions as well as proposed changes in rates, in exemptions, or departures from the existing definition of includable income or deductions."
North Carolina	Uses 10% sample of returns on cards. Computer programs analyze new bills.
North Dakota	Contracted a tax model to use a sample of state returns as part of a depth study of the states income.
Oklahoma	Federal conformity.
Oregon	Developed programs to analyze impact of federal deductibility, personal credits and exemptions, various tax rates.
Washington, D.C.	Maximum Information Systems.
Wisconsin	Maximum Information System used for federal conformity.

SOURCE: Appendix D

¹The following states also report that they have recalculated returns to provide estimates but no further information is available: Georgia, Idaho, Vermont.

²Latest indication from Maryland is that their study deals with income-elasticity estimation rather than simulation. See "Forecasting Maryland's Income-Tax Revenue," Neil Singer, Bureau of Business and Economic Research, University of Maryland, 1969.

marginal tax rates can be computed. Such states include Iowa, Oregon, Montana, New Mexico, and North Carolina. Second, several states have worked on non-repeated studies for federal conformity--Wisconsin, Oklahoma, Washington, D.C., and Kansas. Vermont apparently used federal income tax tapes to estimate the impact of "percent of federal" taxation in the state. Finally, with the exception of New York, all models operate to determine the impact of the proposed changes in the sample year only.

In an attempt to gain more detailed information about the models used by individual states, letters asking for information concerning methodology, samples of programs, and printouts were requested. No substantial additional information was elicited. Normally, the reply indicated in a paragraph or less what was done, and indicated that there was no formal information available on the study. No state had any formal indication of the accuracy of estimates, but most appeared pleased with the results.

The experiences of the states attempting simulation are undoubtedly varied. Many states using elementary recalculation of returns must have had experiences similar to Iowa.

The idea of simulation came from programmers in the data processing division. They were accustomed to

programming checks for taxpayer accuracy, and programming proposed provisions came naturally. The first experience was to stimulate the impact of changing Iowa's personal and child credit system to a deduction system. The programs developed recalculated the revenue due by recalculating each of the nearly 1 million Iowa tax returns. Department of Revenue and other state officials were not always so successful, normally because time pressures put on programmers made it impossible to work as carefully as necessary; and at least minor errors were present in the final output. Apparently such procedures are used by many states with varying degrees of carefulness.

In 1966 Kansas studied the impact of federal conformity by use of the basic simulation technique. The Kansas sample, 1/11 of the returns in 7 income classes, was selected by computer tapes. The selected return was then hand drawn and detailed data collected about the return. Problem returns, those with errors, were skipped or a replacement return drawn. The computer method was designed to get data which was accurate for those items known to have a material revenue effect.⁹

The method for the study was designed by Dr. Jarvin Emerson, Kansas State University, Manhattan; however, overseeing clerical work was done by members of

⁹Kansas Department of Revenue, Revenue Effect of Federal Conformity (Topeka, 1967).

the Kansas Department of Revenue staff. Programming of the model was done by Kansas State Teachers College, Pittsburg, Kansas.

The only significant finding not reported in the report was, according to a Dr. Emerson, "Estimates were not that far off--about 5%."¹⁰ Although no detailed analysis was made, it was his opinion that 50% of that error was due to not considering income growth in the model. Execution of the project from conception to delivery in a period of 3 months appears to be a very good record.

North Dakota released a random stratified sample of some 3,200 resident North Dakota income tax filers including detailed information from federal tax returns on the same taxpayers. The study's major goal was to measure the "impact of the present North Dakota tax structure on various classes and segments of the North Dakota population."¹¹ The report was prepared under the direction of Charles J. Libera, Director of the Bureau of Business and Economic Research at the University of North Dakota. Mr. Libera described the study as being composed of four basic computer programs.

¹⁰Personal interview with Dr. Jarvin Emerson, Professor of Economics, Kansas State University, Manhattan, Kansas, June 10, 1970.

¹¹Charles J. Libera, An Analysis of North Dakota Taxes (Bismarck, Bureau of Business and Economic Research, University of North Dakota, 1970), p. 1.

1. Means and standard deviations of various items (such as federal taxable income, N. Dak. taxable income, medical expense deduction, etc.).
2. An "option" analysis, calculation net tax liability of residents under current tax rates when various state exemptions and deductions were added back into North Dakota taxable income. This "option" analysis could readily handle changes in tax rates, although this was not done.
3. The Federal Tax Reform Act analysis, see Chapter VI, which incorporated data from the Federal returns, and yielding estimates (sic) of state net tax liability.
4. A program that calculates average amounts for various entries from the Federal returns.¹²

The North Dakota study is part of a long run study of taxes in the state and emphasized current analysis and creation of data for future analysis. None of the programs or analysis attempted to forecast or project revenue, but rather studied the revenue implications of structural changes in the base year.

One of the most interesting methodological models was the one from New York. The letter states:

The model provides a basis for evaluating the yield of the state's personal income tax under various economic assumptions (emphasis mine) as well as proposed changes in rates, in exemptions, or departures from the existing definition of incalculable income or deducting.¹³

A later reply indicates that the state of New

¹²Personal correspondence with Charles J. Libera, Director of the Bureau of Economic Research, University of North Dakota, Grand Forks, March 24, 1971.

¹³Personal correspondence, Lloyd E. Slater, Deputy Commissioner for Tax Research, State of New York, State Department of Taxation and Finance, Albany, New York, Aug. 4, 1970.

York Department of Taxation and Finance was not able to release technical documents outside the department and further felt it was impossible to transmit all of the information through correspondence. However, some additional information about the model was received.

It may be helpful to you to know that the model comprises two distinctly different sections:

1. A selection routine which selects returns from the Personal Income Tax Study Samples according to specified--for example, by type of return, marital status, interest income, number of exemptions, or most of the characteristics which appear on a New York State Income Tax return.
2. A change portion which alters the selected returns in some particular fashion. These changes might involve adjustments in rate structure, particular allowances for certain types of taxpayers, increased deductions, credits, or, again, any of the characteristics of the tax form.

Briefly, the tax model is capable of selecting particular returns by some specified criteria, altering the entries which appear on these returns, and estimating, on the basis of these adjusted samples, the effects on tax revenue of certain proposed changes. This is accomplished by coding a set of 66 cards which provide both selection criteria and new values, rates or limits for the components of the tax return. The resulting estimated effects on the universe of tax returns is displayed in three output tables which list, by income class groups, change in taxable status, net effect on tax liability, and changes for major items.¹⁴

Any additional information must be received by study at the State of New York Department of Taxation and Finance.

The Washington, D.C. model created by Mr. Billy D. Cook, Assistant Director of Fiscal Planning and Research, was designed as an income study based on his previous work

¹⁴Personal correspondence, William Wilson, Associate Statistician, Bureau of Tax Statistics, Office of Tax Research, State of New York Department of Taxation and Finance, Albany, New York, April 21, 1971.

in Wisconsin. The study is designed not only to estimate revenue but to provide maximum information about taxpayers. This will become clear in the description of the model which follows.¹⁵

Fifty-eight types of information, 240 characters, were taken from each sample's income return. Table 3 shows the detail of the input information which allows the development of the maximum information system.

The study can be divided into three parts; the basic information analysis, the taxpayer error analysis, and the analysis of a proposed tax change. The model in each case develops one set of information by adjusted gross income bracket then reports this basic information for many different taxpayer characteristics.

Figure 2 shows a conceptualization of the basic information system. Across the front of the box is the basic table of information. It is a large table consisting of 22 rows including heading and totals by 81 columns. The detail of all of the columns has been left out by necessity, but a list of the columns appears in Table 4. Note that there are two columns in Figure 2 for each column listed in Table 4. The top of the box shows that the full table of information will be printed for various selected

¹⁵Personal correspondence with Billy D. Cook, Assistant Director of Fiscal Planning and Research, Government of the District of Columbia, Washington, D.C., June 29, 1970. Important data was also received during an interview in Washington, D.C., June 9, 1970.

TABLE 3

INFORMATION COLLECTED FROM EACH SAMPLED RETURN
IN THE WASHINGTON, D.C. MAXIMUM
INFORMATION STUDY,
1970

<u>Field Titles</u> <u>Item</u>	<u>Remarks</u>
CARD 1	
Identification	Number
Card	Number
Quadrant	Number
Zip code	Number
Sex	Code
Marital status	Code
Number of dependents	Number
Head of household exemption	Code
Blind exemption	Code
Aged exemption	Code
Total exemptions	Amount
Method of deduction	Code
Job or profession	Code
Public or private employment	Code
Sick pay	Amount
Adjusted gross income	Amount
Wage income	Amount
Dividend income	Amount
Interest income	Amount
Capital gains or loss	Amount
Annuities and pensions	Amount
Gross rent	Amount
Net rent income	Amount
Months in District	Number
Code	Pro-rated
CARD 2	
Identification	Number
Card	Number
Partnership income	Amount
Estate and trust income	Amount
Other income sources	Amount
Unincorporated business income	Amount
Gross sales	Amount
Gross profit	Amount
Net profit or loss	Amount
Taxpayer error	Amount
Error code	Code
Taxes paid other states	Amount
D.C. withholding	Amount
Declaration payments	Amount
Non-taxable income	Amount

TABLE 3 (Continued)

<u>Field Titles</u> <u>Item</u>	<u>Remarks</u>
CARD 3	
Identification	Number
Card	Number
Refund and/or payment	Amount
Payment code	P= payment
Total deductions	Amount
Contributions	Amount
Interest deduction	Amount
Total tax deduction	Amount
Real estate tax deduction	Amount
Sales tax deduction	Amount
Gas tax deduction	Amount
Total medical	Amount
Net medical deduction	Amount
Casualty loss deduction	Amount
Miscellaneous deductions	Amount
Taxpayer error	Amount
Error	Code
Social Security	Number

SOURCE: Personal correspondence with Billy D. Cook, Assistant Director of Fiscal Planning and Research, Government of the District of Columbia, Washington, D.C., June 29, 1970.

Fig. 2. Maximum Information Study, Washington, D.C. 1969

240th Table	Table 40 1B-U					
6th Table	Table 1B-U					
5th Table	Table 1A-U					
4th Table	Table 1A-U					
3rd Table	Table 1B					
2nd Table	Table 1A					
1st Table	Table 1					
	AGI (1)	(2) WAGES	(3) (80)	REFUNDS	(81)
1		Amount	Number		Amount	Number
2	\$ 0-999					
3	1000-1999					
	.					
	.					
	.					
	.					
	.					
	.					
	.					
20	50000-99000					
21	100000&over					
22	Total					

SOURCE: Prepared by author.

TABLE 4

INFORMATION REPORTED BY INCOME CLASS IN THE BASIC
TABLES OF THE WASHINGTON, D.C. INCOME STUDY,
1970

Wages
 Dividends
 Interest
 Capital gains and losses
 Annuities and pensions
 Gross rent
 Net rent
 Partnership income
 Estate or trust income
 Other income sources
 U.B. Income
 Gross sales
 Gross profit
 Net profits or loss
 Sick pay
 Adjusted gross income
 Average adjusted gross income
 Exemptions
 Dependents
 Head of household
 Blind
 Aged
 Contributions
 Interest
 Total taxes
 Real estate taxes
 Sales tax
 Gasoline taxes
 Miscellaneous taxes and fees
 Total medical
 Net medical
 Casualty losses
 Miscellaneous deductions
 Total deductions
 Net taxable income
 Average net taxable income
 Tax liability
 State tax credit
 Withholding
 Declarations
 Payments with returns
 Refunds
 Non-taxable income sources

SOURCE: Personal correspondence with Billy D. Cook, Assistant Director of Fiscal Planning and Research, Government of the District of Columbia, Washington, D.C., June 29, 1970.

taxpayer characteristics. Forty types of tables are needed to report on all selected taxpayer characteristics. Table 5 gives a list of the forty types of tables generated. Tables are always reported in related groups of six. For example, take the second chosen characteristic--male. The six related filing taxes are in Table 6. The first three tables (2, 2-A, 2-B) give information about the sample. The second three tables (2-U, 2A-U, 2B-U) provide information weighted to give estimates of the universe. In addition, each set of tables reports information by whether the return filed has standard or itemized deductions. The basic information analysis is composed of the 40 types of tables, six in each group, for a total of 240 tables, each of the size 22 rows by 81 columns.

The second part of the Washington, D.C. study, the taxpayer error analysis, can be conceptualized exactly as the diagram is shown in Figure 2; however, the basic information which appears on the front of the box relates to taxpayer errors. The table again lists the amount and number of errors for 10 types of errors in completing source of income, 6 different types of errors on deductions, information on reported income net taxable income, tax reported and tax due as corrected. These areas are reported in 59 columns by each of the income classes. For this study not as many tables are reported. Again the information for this basic taxpayer analysis is printed

TABLE 5

LIST OF TABLES IN THE BASIC INFORMATION SYSTEM OF
THE WASHINGTON, D.C. INCOME STUDY, 1970

1	Itemized/Standard Deduction
2	Male
3	Female
4	Married Joint
5	Married Single
6	Single
7	Head of Household
8	Accountants
9	Business Executives
10	Clergymen
11	Dentists
12	Engineers
13	Lawyers
14	Government Professionals
15	Housewives
16	Security Employees
17	Medical Doctors
18	Manufacturing Representatives
19	Laborers (Skilled)
20	Military Employees
21	Nurses
22	Optometrists
23	Pharmacists
24	Photographers
25	Retired
26	Student
27	Teacher
28	Unemployed
29	Taxi and Truck Drivers
30	Other Professions
31	Other Occupations
32	Architects
33	Salesmen
34	Pro-rated--Incoming
35	Pro-rated--Outgoing
36	Public Employment
37	NW quadrant
38	NE quadrant
39	SW quadrant
40	SE quadrant

SOURCE: Personal correspondence with Billy D. Cook, Assistant Director of Fiscal Planning and Research, Government of the District of Columbia, Washington, D.C., June 29, 1970.

TABLE 6

RELATED TABLES FOR EACH TAXPAYER CHARACTERISTIC IN
THE WASHINGTON, D.C. MAXIMUM INFORMATION STUDY

<u>D.C. Table Number</u>	<u>Information Concerns</u>
2	All sampled male filers
2-A	Sampled male filers using itemized deduction
2-B	Sampled male filers using standard deduction
2-U	All male filers weighted for universe estimate
2A-U	Only male filers using itemized deduction weighted for universe estimate
2B-U	Only male filers using standard deduction weighted for universe estimate

SOURCE; Personal correspondence with Billy D. Cook, Assistant Director of Planning and Research, Government of the District of Columbia, Washington, D.C., June 29, 1970.

out for many taxpayer characteristics--items 1 through 33 in Table 3. The total number of tables is 198 (33×6).

The third part of the analysis provides tables to analyze the effect of changing the D.C. medical deduction to the federal regulation. A table is reported for sex, type of filing and selected occupations such as retired, government employees, etc. The information in each table reported by income bracket shows the number of people affected, information taken about the medical floor and ceiling, as well as difference in tax between the two plans. Thirty-two basic tables are used to complete the analysis.

It is important to note that the model, as developed, only estimates the impact of the change in the medical deduction. For any other changes a new, or modified, program will have to be written to provide information about the impact.

Conclusion

Joseph A. Pechman's work on income tax models led him to believe that states should use the method for revenue estimation. Nearly $2/3$ of the income states sampled had enough data on tape or cards to use at least a simple revenue model. About half of those having adequate data have tried the simulation technique. State models are generally non-repeatable from year to year, using a single computer program for a single problem.

solution. Thus a state studying personal and child deduction in one year uses little of the program which must be rewritten in another year if a different problem is to be solved. In no case was there information available on the accuracy of estimates provided by the models. Many states will be inhibited by lack of staff available to build a more detailed model.

State experimentation with tax simulation has resulted in the study of revenue implications of structural changes tax laws. With the possible exception of New York, none of the states have used their models for revenue projection over some period of real time. Only Washington, D.C. uses the model for allocation of audit resources.

In general, states have not developed general models to solve tax problems. It is the purpose of Chapters III through VI to carefully develop a tax model applicable to a wide range of state problems and test its accuracy.

CHAPTER III

THE IOWA TAX MODEL--AN OVERVIEW

The Purpose of the Iowa Model

The purpose of the Iowa tax model is to provide a model which can solve many of the problems states need answered and at the same time try to avoid many of the problems which other states have run into as they have attempted to simulate their income tax system. The Iowa tax model is designed to be a model which can: be kept current; use the most accurate data available in many income tax states; be applicable to a wide range of problems in many states; be relatively simple to use; and finally, operate over some period of real time.

Following the description of the model, each of these purposes will be examined and the extent to which they have been met will be discussed.

The Basic Iowa Data

The method of simulation chosen for the Iowa tax model is identical to that discussed in the previous chapter. In all of those cases, a sample of state returns was drawn, then recalculated with computer programmed

instructions for some proposed tax change and multiplied by appropriate weights to provide estimates of the impact of such a change. Data for the Iowa tax model could have been obtained from three possible sources: data reported in income tax reports from the Iowa Department of Revenue, second, data available from the actual returns which were filed in the state of Iowa, and finally, computerized files which are made by the Iowa Department of Revenue.

The Iowa Department of Revenue in its annual statistical report¹ provides basic data concerning the Iowa taxpayers from their computerized records. The major section of this report is designed to give information concerning the number of returns, adjusted gross income, number of personal, child, and other credits, and tax due for each of twenty-three income classes. Information is broken down in tables with the same format for each different type of filing--single, married joint, or married filing separate returns. Table 7 shows this information provided in the form in which it normally appears. The information has appeared in this basic form from fiscal 1959 to 1968. The report also includes the same basic information by county but does not indicate the information by income tax bracket. These data, as the data in many states, cannot be used for basing many kinds

¹Iowa Department of Revenue, Income Tax Annual Statistical Report, 1966, annually.

TABLE 7

ADJUSTED GROSS INCOME, NET TAXABLE INCOME, CREDITS, AND TAX PAID BY SIZE
OF INCOME IN IOWA, FISCAL YEAR 1967

Adjusted Gross Income Brackets			No. of Returns	Adjusted Gross Income	Net Taxable Income	No. of Personal Credits	No. of Credits for Dependents	Tax Paid
\$	1-\$	499	31,101	\$ 9,192,405.07	\$ 7,959,250.35	49,080	8,793	\$ 52.58
	500-	999	63,408	48,271,420.85	41,532,786.63	90,438	12,973	115.64
	1,000-	1,999	149,382	224,019,291.53	186,949,437.93	223,754	34,358	32,873.84
	2,000-	2,999	132,211	329,363,612.11	266,734,657.66	202,793	53,668	656,527.23
	3,000-	3,999	123,050	429,443,302.76	343,271,955.83	185,435	76,847	1,967,740.58
	4,000-	4,999	108,690	488,227,008.92	389,397,505.77	165,392	96,819	3,578,721.50
	5,000-	5,999	105,591	580,405,938.87	462,815,335.91	161,457	118,580	5,930,317.57
	6,000-	6,999	99,713	647,070,581.91	512,490,971.46	155,282	135,114	8,091,230.84
	7,000-	7,999	84,810	634,403,348.48	498,096,132.36	136,007	133,950	8,945,304.87
	8,000-	8,999	63,461	537,490,397.70	418,793,066.01	104,933	110,496	8,327,706.90
	9,000-	9,999	44,083	417,352,519.11	323,415,948.75	74,804	82,490	7,040,078.60
	10,000-	14,999	80,232	945,206,061.64	725,111,364.44	142,789	154,451	19,066,766.73
	15,000-	19,999	18,111	308,925,609.47	233,791,055.03	33,706	33,982	7,888,028.72
	20,000-	24,999	7,479	166,072,263.61	123,324,501.28	13,901	13,916	4,658,317.26
	25,000-	29,999	3,875	105,592,994.56	76,485,938.54	7,120	7,277	3,076,410.33
	30,000-	34,999	2,459	79,509,578.16	56,493,728.10	4,493	4,567	2,367,175.24
	35,000-	39,999	1,524	56,933,167.49	39,902,668.21	2,794	2,941	1,720,784.22
	40,000-	44,999	1,121	47,405,072.94	32,556,716.17	1,999	2,239	1,434,021.97
	45,000-	49,999	776	36,787,356.47	24,635,525.51	1,403	1,584	1,103,210.68
	50,000-	74,999	1,617	96,622,652.71	62,455,323.53	2,800	3,107	2,871,874.53
	75,000-	99,999	438	37,354,867.63	22,323,449.11	736	790	1,060,569.22
	100,000-	149,999	223	26,486,760.29	15,808,564.95	377	328	769,988.53
	150,000-and over		116	31,783,609.85	18,356,305.97	197	128	937,534.27
	Rejects (No AGI)		24,310	0.00	38,194.32	46,816	20,341	148.90
	Totals		1,147,781	\$6,283,919,822.13	\$4,881,940,383.82	1,808,506	1,109,739	\$91,525,500.75

SOURCE: Iowa Department of Revenue, Income Tax Annual Statistical Report, 1967, p. 3.

of policy decisions but rather give a description of the impact of the current tax.

Table 8 shows the information taken from the Iowa income tax return and placed on computer files. It is this information which is used to make the yearly statistical income report. An example of the Iowa income tax return appears in Appendix E; and on it, the large black dots are the material which has been key-punched and is shown in Table 8. These data are chosen to enable the department to audit and check returns as well as to make out its yearly statistical income report and maintain historic taxpayer record files.

To build an income tax model, one must sample enough information to recalculate the income tax returns. It is possible to recalculate the returns if one samples information marked by asterisks in Table 8. These data are the data which are used for the Iowa tax model. It should be noticed that the model cannot provide maximum information about each taxpayer because information concerning sources of income such as rents, royalties, capital gains, et cetera, as well as various information concerning itemized deductions are not included in the data. However, enough information has been sampled so that a model can be built to allow changes in the major provisions of the Iowa income tax. The Iowa income tax provisions are very similar to the provisions that exist in other states.

TABLE 8
COMPUTER INFORMATION ON INCOME TAX FILE
IN IOWA, FISCAL YEAR 1967

1. Name and Address
2. Urban/Rural
3. Validation Number
4. Social Security Number
5. School District
6. County
7. Occupation
8. Number of Personal Exemptions¹
9. Number of Children¹
10. Number of Other Dependents¹
11. Type of Filing
12. Deduction Method
13. Wages and Salaries¹
14. Farm Income¹
15. Profession and Business Income¹
16. Other Income¹
17. Federal Tax Deduction¹
18. Itemized Deductions¹
19. Net Taxable Income
20. Tax Paid to Other States¹
21. State Tax Withheld
22. Refund
23. Monies and Credits Replacement Tax
24. Tax
25. Indicator for Pay or No Pay Status¹

SOURCE: Personal correspondence with Lloyd Chaney, Research Analyst, Iowa Department of Revenue, August 1967.

¹Indicates data used in the Iowa tax model.

Basic Calculations in the Iowa Tax Model

Calculations for Pay Returns

For purposes of exposition, assume a taxpayer, A, with particularly convenient characteristics to make this example simple. Mr. A is married, salaried, and making \$40,000 per year with no other source of income. He paid \$10,000 in federal taxes, itemized \$4,000 of allowable Iowa deductions, and paid \$500 of income taxes allowable for Iowa tax credit to another state. Furthermore, assume that Iowa has a 5% proportional income tax, offers a 100% deduction for all federal taxes paid, and all itemized deductions. Iowa also gives a personal tax credit of \$15 and a child credit of \$10. The state allows a 100% credit for taxes paid to other states² and has a sales tax credit which Mr. A is not able to claim because his income is too high.³ The Iowa return is calculated in a rather typical fashion and a simplified outline of the calculations can be seen in Table 9. The tax is determined by subtracting the federal tax deduction (FTD), 100% of federal taxes paid, and the itemized state personal deduction (SPD) from adjusted gross income for Iowa (AGI) which in this case is the same as total income. The Iowa net

²The out of state credit is actually already calculated. See Appendix E for detailed instructions.

³For a detailed explanation of the Iowa sales tax credit see p. 50.

TABLE 9
SIMPLIFIED CALCULATIONS FOR AN IOWA
INCOME TAX RETURN

AGI	\$40,000.
FTD	-10,000
SPD	- 4,000
	<u>\$26,000</u>
tax rate	<u>.05</u>
gross tax	\$ 1,300
PCC	-50
OST	-500
STC	<u>0</u>
TDUE	\$ 750

SOURCE: Prepared by author.

taxable income of \$26,000 is then multiplied by the state tax rate to give a gross tax of \$1,300. By subtracting personal and child credits (PCC), out-of-state income taxes paid (OST) and the sales tax credit (STC), the amount of tax due (TDUE) is calculated to be \$750.

It is obvious, from examination of Table 9 that each provision results in a reduction of taxes paid to the state of Iowa. This fact makes calculations possible which resemble the method of calculation in the Iowa tax model. Table 10 indicates the calculations that are actually used in the model for income taxpayers who owe taxes. Given the tax rate of 5% and the adjusted gross income of \$40,000, Mr. A would have to pay \$2,000 ($\$40,000 \times .05$) to the state of Iowa if there were no other provisions. This amount is therefore the most tax that he could pay and is called maximum state tax (MST). The federal tax deduction results in a tax loss (TL) equal to the federal tax times the tax rate ($\$10,000 \times .05 = \500). Therefore, in Table 4, we see that the tax loss resulting from the federal tax deduction policy (TLFTD) is \$500. The same logic holds for state personal deductions. The remaining provisions are credits so the amount of the credit equals the tax loss. In the case of the model calculations, the tax due is \$750 just as it was with the more typical calculations of the tax returns shown in Table 9.

The model calculations allow one to determine the

TABLE 10

IOWA TAX RETURN--TAX MODEL CALCULATIONS

AGI • tax rate = MST	= \$2,000
FTD • tax rate = TLFTD	= -500
SPD • tax rate = TLSPD	= <u>-200</u>
gross tax	\$1,300
TLPCC	-50
TLOST	-500
TLSTC	<u>0</u>
TDUE	\$ 750

SOURCE: Prepared by author.

loss of tax revenue for each provision given a hypothetical law and individual.

The tax losses also provide an easy method of calculating a series of tax rates. Using the simple principle, the tax is equal to the base times the rate ($T = BR$), the tax rate is the tax divided by the base ($R = T/B$). Income taxes are paid from income; and, therefore, this income tax model assumes that the best base for income tax is adjusted gross income. The rate, then, becomes $R = T/AGI$. However, each provision reduces the tax rate by the tax loss shown in Table 10. Based on this concept each provision will produce a lower tax rate. The calculation of a series of these rates appears in Table 11. The R stands for rate and the A for AGI. Thus, the rate, based only on adjusted gross income, is the maximum state tax divided by the adjusted gross income. The numeric calculations appear in Table 11 and the tax rate is, of course, 5%. The rate after the federal tax deduction (RF) is the tax that would be collected if there were a federal tax deduction, that is, $MST-TLFTD$ divided by the adjusted gross income. One can see that the tax rate has dropped from 5% to $3\frac{3}{4}\%$ due to the federal deduction. The other rates are formed by adding a letter from the provision name: RS is the rate after state personal deduction (SPD), RP is the rate after personal and child credits (PCC), RT is the rate after out-of-state tax credit (OST),

TABLE 11

TAX RATE CALCULATIONS OF THE IOWA TAX MODEL FOR PAY RETURNS

Rate Symbol	Symbolic Calculations	Numeric Calculations	Tax Rate
RA =	MST/AGI	\$2,000/40,000	5 %
RF =	(MST-TLFTD)/AGI	(2,000-500)/40,000	3.75
RS =	(MST-TLFTD-TLSPD)/AGI	(2,000-500-200)/40,000	3.25
RP =	(MST-TLFTD-TLSPD-TLPCC)/AGI	(2,000-500-200-50)/40,000	3.125
RT =	(MST-TLFTD-TLSPD- TLPCC-TLOST)/AGI	(2,000-500-200-50-500)/ 40,000	1.875
RC =	(MST-TLFTD-TLSPD- TLPCC-TLOST)/AGI	(2,000-500-200-50-500-0)/ 40,000	1.875

SOURCE: Prepared by author.

finally, the effective rate RC is the rate after the final provision for sales tax credit (STC). Mathematical relationship of these rates appear in Table 11.

Calculations for No Pay Returns

It is possible to develop a concept similar to the one expressed in Table 11 for only no pay returns. The technique used in this model involves the calculation of negative tax rates. It is, therefore, necessary to explain the model calculations for no pay returns in some detail. Following the same format of the discussion concerning the pay returns, assume a taxpayer who had an adjusted gross income of \$10,000 all of which is earned in Iowa, who paid \$8,000 in current and back federal taxes, had itemized deductions of \$1,500 and an income too high to apply for a sales tax credit.⁴ In addition, again assume a proportional tax rate of 5% and a family of two adults and two children.

The calculations for this no pay return are shown in Table 12 and are basically the same as those for pay returns with two major differences which result when the tax falls to zero. The losses due to federal tax deduction and state personal deductions are conceptually unchanged. After the subtraction of the tax losses due to the federal tax deduction and state personal deduction, \$25 of gross

⁴For a detailed explanation of the Iowa sales tax credit see p. 50.

TABLE 12

IOWA TAX RETURN--TAX MODEL CALCULATIONS
FOR NO PAY RETURNS

AGI • tax rate = MST	=	\$10,000 • .05	=	\$500.
FTD • tax rate = TLFTD	=	8,000 • .05	=	-400.
SPD • tax rate = TLSPD	=	1,500 • .05	=	<u>-75.</u>

Gross tax due	\$ 25.
Less PCC	-50.
UNPCC	25.
TDUE	0.

TLPCC = \$25

NPCC is incremented by 1

SOURCE: Prepared by author.

tax remains due. However, after the personal and child credits of \$50, the actual tax due is zero. The tax loss, due to the personal and child credits (TLPCC), is not \$50 but rather \$25 and is so marked. The first major change for returns which are no pay is represented by the new variable appearing in the table called UNPCC, the UN standing for the first two letters in the word unused because after the return has a tax rate of zero, the remaining tax loss is unused or fictitious. In this case, the unused personal and child credits (UNPCC) is \$25. If there were additional tax losses, for instance one having to do with out of state taxes, all of this loss would be fictitious and would be so marked. By increasing the value of UNOST, each of the major provisions has a variable which is of the same basic form UN---.

The second difference between pay and no pay calculations is a series of variables with the general prefix N--- added to the variable provision names which indicate the number of returns which became no pay during the provision indicated by the last three letters. In the example, the taxpayer discussed became no pay during the provision for the personal and child credits and therefore the counter (NPCC) was incremented by 1.

In attempting to calculate tax losses for no pay returns problems are encountered. If a no pay return has an adjusted gross income of \$500 and a federal tax deduction

of \$600 there is an unused deduction of \$100. Any loss due to this \$100 is conjectural. The Iowa tax model for the sake of symmetry argues that it must constitute some kind of a loss just as the unused credits. The tax loss of the unused deduction is the unused deduction times the rate of the lowest income tax bracket. Thus any loss after the tax due falls to zero is fictitious. The loss is any revenue that could be lost if the return had earned more revenue.

The calculation of the tax rate for no pay returns is basically the same as pay returns except that all losses are used in the rate including the fictitious losses. It may be convenient to think that the calculations are identical for both pay and no pay returns except for the pay returns there are no fictitious losses. The result of the calculation shown in Table 13 is the calculation of some negative tax rates. Without the calculation of the negative rates, the effective rates of no pay returns would, of course, always fall to zero. With the negative tax rate, we tend to measure the extent to which some income groups are unable to use provisions which are available to other income taxpayers. Therefore, if we justify an increase in the personal child credits provision on the basis of equity, the impact on low income groups will be measured by an increase in their inability to use this provision. As a result the negative tax rate will

TABLE 13

TAX RATE CALCULATIONS OF THE IOWA TAX
MODEL FOR NO PAY RETURNS

$$RA = MST/AGI = .05 = 5\%$$

$$RF = (MST-TLFTD-UNFTD)/AFI = .01 = 1\%$$

$$RS = (MST-TLFTD-UNFTD-TLSPD-UNSPD)/AGI = .0025 = .25\%$$

$$RP = (MST-TLFTD-UNFTD-TLSPD-UNSPD-TLPCC-UNPCC)/AGI = -.25\%$$

$$RT = (MST-TLFTD-UNFTD-TLSPD-UNSPD-TLPCC-UNPCC-TLOST-UNOST)/AGI = -.25\%$$

$$RC = (MST-TLFTD-UNFTD-TLSPD-UNSPD-TLPCC-UNPCC-TLOST-UNOST-TLSTC-UNSTC)/AGI = -.25\%$$

SOURCE: Prepared by author.

rise as an indication of this inability to use the added credit.

Model Weights for the Sample Year

The weighting procedure for the sample year is very simple. The weight is:

$$W_i = \frac{T_i}{S_i}$$

where W is for the weight, T is for the number of returns, S is sample and i is the income class. The weights are determined by dividing the number of returns in the sample into the total number of returns filed for each income class. For instance, the number of pay returns in 1966 for those having adjusted gross income of \$40,000 to \$45,000 is 900 and the number in the sample 34. The weight, 26.47 ($900/34 = 26.47$), will be multiplied times all variables (FTD, SPD, TDUE, et cetera) derived concerning each pay return whose AGI is \$40,000 to \$45,000. This weighting process takes place in main program number 2 called WORK and the weights for all income classes can be seen in preliminary program number 2. Both program listings may be found in Appendix B.

The Model Extended

The Iowa Tax Model and Preprogrammed Options

The logic of income tax models is simple and the Iowa tax model is no exception. One writes a program and

weights the data to receive information concerning the tax system. Writing a program to provide estimates for the sample year would not be too fruitful. It would provide some of the information in the income tax report of the Iowa Department of Revenue for 1966 and some of the information would be new and useful. However, it would be possible to program changes in the law and study the effect on revenue and tax rates. This would be a much more valuable use of the model. It is difficult and time consuming to reprogram the model each time that a new provision is desired. The power and advantage of the Iowa tax model results from using the preprogrammed options.

Table 14 lists the six changes which affect the tax due in the state of Iowa. The provisions are very similar to those in many other states. The model allows one to choose any number of options, selected because they exist in other states or provide symmetry in the model, for each one of the provisions and then provides the tax rates and tax losses and other information in a computer printout. A discussion of this printout follows in Chapter IV.

Appendix A contains a detailed set of instructions for the use of the Iowa tax model. It is designed for use by those who have little knowledge of computer programming and allows the user to call the various options on each of the six provisions which are described in detail in the following section.

TABLE 14
PROVISIONS WHICH CAN BE CHANGED IN THE
IOWA TAX MODEL

1. Marginal Tax Rates
2. Federal Tax Deduction
3. Itemized and/or Standard Deduction
4. Personal and Child Credits or Exemptions
5. Out of State Income Taxes Paid
6. Sales Tax Credit

SOURCE: Prepared by author.

Tax Rate Options

This option will allow the use of any proportional or marginal rate structure of not more than twenty-five income classes.

The Federal Tax Deduction

The federal tax deduction can be calculated by either a fixed rate, for example 50% or 75% of federal taxes paid, or by a marginal schedule of less than twenty-five brackets chosen by the user. The sample schedule shown in Table 15 indicates that an individual paying \$1,000 in federal tax would have a federal tax deduction on his Iowa income tax return of \$1,000. An individual who paid \$2,000 in federal taxes would have a deduction of \$1,500 and all individuals paying over \$2,000 or more would have a federal tax deduction of \$1,500. The federal tax deduction is subject to three possible constraints. The first is that the maximum amount of the federal tax deduction can be specified. For example, say a particular schedule shows that a taxpayer has a federal tax deduction of \$10,000 but the constraint has been fixed at \$5,000. This means that although the taxpayer paid \$10,000 in taxes, he would be allowed only \$5,000 for the purpose of Iowa taxation. The second constraint is tied to family size, where only a specified amount for each exemption is allowed. For example, assume two adults and two children on a particular Iowa return. The constraining amount, if \$200 per child

TABLE 15

A SAMPLE SCHEDULE FOR THE FEDERAL TAX DEDUCTION

Federal Tax	Marginal Rate
on the first \$1,000	100%
on the second \$1,000	50
on all over \$2,000	0

SOURCE: Prepared by author.

or adult is allowed, would be \$800. This means that for this individual family, they would not be allowed any federal tax deduction in excess of \$800 even if they paid those taxes. The third constraint is to specify that the federal tax deduction will not be larger than a specified percent of AGI. That is, the schedule or the fixed rate would be allowed only if equal to or less than 10% or some other fixed proportion of adjusted gross income.

The State Personal Deductions

These deductions may be itemized or standard. The standard deduction can be specified as any fixed percent of adjusted gross income and is subject to two possible constraints. The first constraint can be just a specified maximum standard deduction. The second limit is to be computed by allowing an absolute amount of deduction for each adult, child, and other dependents.

The itemized deduction, which in Iowa is the same as federal itemized deduction plus deductions for contributions to political parties less state income taxes, can be taken as listed on the returns or be subject to one of the two following constraints. The itemized deduction can be limited by some fixed percent of AGI. Such a rule might be that the state accept 100% of itemized deduction only if they are equal to or less than 10% of the individual tax payer's adjusted gross income. The second constraint is based upon family size. By specifying a

fixed dollar amount for children, adults, and other dependents, the itemized deductions above this amount would not be allowed.

Personal and Child Credits or Exemptions

This provision allows for specifying either a credit which is currently required by Iowa law and which was used in the example of model calculations or a deduction similar to that used by the Federal government. The credit or deduction must specify a separate amount for children, adults and other dependents.

Out of State Income Taxes Paid

The options are the same for state income taxes paid as federal tax deductions. See The Federal Tax Deduction above.

Sales Tax Credit

This provision is to enable the income tax to offset the regressivity of the sales tax. It is included because Iowa has had a sales tax credit which was in existence in 1967. A disappearing credit based upon income is shown in Table 16. The income specified to meet the requirements for the credit can be specified in the model as either adjusted gross income or net taxable income. This credit can be received as a subsidy if there is no tax liability. Thus, given the schedule in Table 10, a three person family with \$500 income (therefore owing no tax) could receive a check from the state for \$15.

TABLE 16
SALES TAX CREDITS SCHEDULE

Adjusted Gross or Net Taxable Income	Credit per Exemption
0 - \$ 500	\$5.00
\$500 - \$1,000	\$4.00
\$1,000 - \$2,000	\$3.00
\$2,000 - \$3,000	\$2.00
\$3,000 - \$4,000	\$1.00
\$4,000 and over	\$.00

SOURCE: Prepared by author.

Revenue Projection Method for the Iowa Tax Model

In the section above, it was stated that the Iowa tax model can easily make revenue estimates for a wide range of pre-programmed changes. These changes, however, are limited to the sample year. For the model to be particularly valuable, it will be necessary to project these estimates in the sample year into some future years to measure revenue productivity of proposed legislation.

The National Tax Model developed by Joseph A. Pechman makes estimates of revenue for future years essentially by assuming the distribution of income to remain unchanged and multiplies each source of income by the proper percentage.⁵ The returns are then recalculated with the increased income. Such an approach is not possible in Iowa. If the spouse earns income it is advantageous to the Iowa taxpayer to file a separate Iowa income tax return because the income is being split and taxes reduced. When these married taxpayers file returns, they are required to split the federal taxes paid and itemized deductions in proportion to their separate incomes. This means, in the case of a man making \$40,000 and his wife making \$10,000, that the wife would declare 1/5 of the total federal taxes. This deduction is inordinately large for a taxpayer with income of \$10,000. As a result of having these features in the Iowa tax law and tax model

⁵Joseph A. Pechman, A New Tax Model for Revenue Estimating, Washington, D.C., The Brookings Institution, 1964, p. 237.

it is impossible to increase income by some percentage, e.g. 10%, and estimate the federal taxes because the marginal tax brackets for the wife and husband are unknown. It is impossible to ignore this particular area because the federal tax deduction results in millions of dollars of tax savings to particular Iowans.

Iowa has data concerning the distribution of returns by income class for the past decade. The projection model is fairly simple. The number of returns in each income bracket is estimated for a particular future year and the weights for that bracket are increased to provide revenue estimates.

Some of these data have been summarized in Table 17 for pay returns and Table 18 for no pay returns. A look at the tables indicates a steady trend in the number of returns in many different income classes. For example, in Table 17, the number of individual pay returns from \$7,000 to \$8,000 have increased in every year since 1959. Income classes between \$2,000 to \$5,000 show a mixed trend in the number of returns from 1959 to 1967. This particular area is a dividing line between those income brackets declining, the lower income brackets, and those which are increasing, higher income brackets. For an example of the number of returns declining, see the income class from \$2,000 to \$3,000.

For each income class, a linear regression equation

TABLE 17

THE NUMBER OF NO PAY RETURNS, FISCAL YEARS 1959-1967

AGI Class	1959	1960	1961	1962	1963	1964	1965	1966	1967
\$ 0- 500	18613	13362	11913	10594	9841	10866	9214	8223	14286
500- 1000	27122	31561	28716	26206	25496	26279	25110	24957	43254
1000- 2000	91589	91105	89117	85226	82861	86292	79368	78155	108311
2000- 3000	67330	62832	62627	58301	55321	61522	53680	48188	47467
3000- 4000	32722	31617	32022	30978	29534	34947	28634	25650	23219
4000- 5000	7988	7365	8946	8054	8316	11378	9565	9234	7447
5000- 6000	1173	1388	2720	1763	1910	3468	3378	3442	2016
6000- 7000	280	372	986	446	530	1310	1566	1723	684
7000- 8000	104	151	479	181	212	634	876	965	304
8000- 9000	54	54	218	87	117	351	495	548	150
9000- 10000	32	48	138	59	73	148	251	342	80
10000- 15000	73	83	154	105	124	256	317	397	171
15000- 20000	27	27	59	41	42	60	66	87	45
20000- 25000	16	13	23	20	23	16	31	44	23
25000- 30000	9	9	9	11	9	16	8	29	13
30000- 35000	8	5	13	9	10	12	7	18	7
35000- 40000	3	4	3	4	7	6	4	7	5
40000- 45000	1	3	3	2	8	6	3	7	5
45000- 50000	1	1	3	3	3	3	4	2	2
50000- 75000	7	7	6	5	8	9	6	9	7
75000-100000	1	4	2	1	3	0	4	6	2
100000-150000	1	3	3	3	1	1	0	4	2
150000- & over	0	1	1	0	0	1	2	2	1
rejects	4	14976	12639	10501	9804	12380	9511	10141	8464
Total	247158	254991	250790	232600	224253	249961	222100	212190	255965

SOURCE: Iowa Department of Revenue, Income Tax Annual Statistical Report, annually 1959-1967.

TABLE 18

THE NUMBER OF PAY RETURNS, FISCAL YEARS 1959-1967

AGI Class		1959	1960	1961	1962	1963	1964	1965	1966	1967
\$	0- 500	113	20	24	68	24	26	39	39	1
	500- 1000	78	75	47	60	45	56	68	88	3
	1000- 2000	14768	12906	13000	21530	11753	10355	13089	14246	71998
	2000- 3000	76113	70486	70417	69997	67889	61635	63729	65718	88497
	3000- 4000	108919	96964	98163	96926	91832	85211	86203	85549	97131
	4000- 5000	123098	109852	110404	109679	104762	100134	100090	96731	100241
	5000- 6000	92250	91844	94507	96892	96406	94607	95445	96982	93109
	6000- 7000	54331	60337	62240	68633	71971	75604	80163	83784	75888
	7000- 8000	29266	34902	37072	42010	46837	52080	58980	65466	56829
	8000- 9000	16499	19274	21267	24415	28003	32227	39261	46098	39426
	9000- 10000	10141	11135	12311	14432	16899	19369	24678	30231	70365
	10000- 15000	19481	20214	21559	25303	29193	32144	41229	53612	16754
	15000- 20000	6263	6268	6555	7476	8264	8659	10536	13847	7002
	20000- 25000	2936	3126	3247	3403	3676	3816	4585	5856	3681
	25000- 30000	1670	1830	1745	1987	2125	2153	2534	3107	2209
	30000- 35000	984	1104	1116	1161	1202	1310	1527	1940	1394
	35000- 40000	599	681	705	746	742	850	968	1233	900
	40000- 45000	368	402	412	464	511	507	645	791	657
	45000- 50000	280	318	307	338	331	354	457	542	1332
	50000- 75000	530	617	600	620	634	723	847	1091	349
	75000-100000	118	134	148	153	148	156	231	290	162
	100000-150000	63	56	64	81	65	73	93	129	92
	150000- & over	34	56	43	44	35	33	54	77	2
	rejects	123	1192	342	425	5027	3601	196	2979	
	Total	559025	543793	556395	577843	588374	585683	625674	670427	740072

SOURCE: Iowa Department of Revenue, Income Tax Annual Statistical Report, annually 1959-1967.

was computed. The slopes and intercepts appear in Appendix C in preliminary program number 6. In the equation, the years are coded, the first year, 1959 being 1. Each successive year is one larger. Using the equation, it is possible to estimate the number of returns filed in any future year. If we wish to estimate the number of pay returns filed for any income class for 1968 (code year 10) the slope and intercept must be determined from Appendix C. These numbers must be substituted into the simple linear equation:

$$N_i = I_i + S_i (Y)$$

where N refers to the number of returns, I, the intercept, S, the slope and Y, the coded year since 1958. The subscript refers to a particular income class. If the income bracket in question is from \$40,000, the 19th income class, the slope and intercept are found in Appendix C to be 63.4 and 329.4 respectively. The estimated number of returns in this bracket in 1968 would therefore be 963.4. The new weight for 1968 would be the sample divided by the estimated number for 1968 or 28.34. Thus, for the income bracket \$40,000 to \$45,000, the weight has risen from 26.47 in the year 1967 to 28.34 in the year 1968. The last page in Appendix A contains some simple instructions which are given to the computer to calculate all of the new weights for each of the income classes and make projections for future years.

Summary

The Iowa tax model is designed to use a sample of Iowa individual income tax returns and make estimates of tax rates, taxes, tax losses, and other information by income bracket in the base year and future years. The data utilized by the model are similar to data which exist in many other states. Furthermore, the input data in the model are generally available each year. The pre-programmed options provide a rapid solution to many problems which face the states continually as they attempt to gain additional revenue through their income tax. Finally, the model has been given a set of instructions so that those without knowledge of the computer can easily master them and gain access to the model. Thus, all of the purposes of the model have been achieved.

Chapter IV applies the model to the sample year and discusses the findings while Chapter V uses the model to solve various tax problems.

CHAPTER IV

AN ANALYSIS OF THE IOWA INCOME TAX PROVISIONS WITH THE IOWA TAX MODEL

Purpose

The purpose of this chapter is twofold. First, it gives a detailed review of all the data which are presented each time the model is run on the computer. It will provide a good understanding of the type of data which is generated when the model is used to solve various problems in Chapter V. The second purpose of the chapter is to analyze the information provided by the model for fiscal 1967. This analysis indicates some interesting findings concerning who pays taxes, the impact of provisions on the effective tax rate, and the distribution of various kinds of tax losses due to the various income tax provisions in Iowa.

An Overview of Output Information from the Iowa Tax Model

The computer output consists of seventeen pages and can be conveniently divided into four portions:

1. a list of provisions (pages 1 and 2); 2. information concerning pay returns (pages 3 through 7); 3. information concerning no pay returns (pages 8 through 14); 4. additional information about all tax returns filed (pages 15 through 17). To gain maximum advantage from the data for this discussion, it is necessary to combine the data in Appendix B, the complete computer printout of the Iowa tax model, in a form different from the original form appearing in Appendix B. The reader may refer to the appendix if additional information is sought.

Part 1 of the computer output is designed to print-out a listing of the provisions used in the calculation of all of the information. Illustration 1 shows the Iowa income tax provisions as listed on the computer printout. From it, one can observe the Iowa marginal tax rate structure; that the federal tax deduction is 100 per cent of federal taxes paid; that itemized deductions are fully allowed and that the standard deduction is 5 per cent of adjusted gross income less federal taxes paid but may not exceed \$250; that there is a \$15 tax credit for each adult and a \$10 credit for every child and other dependent; that there is a 100 per cent credit for all allowable income taxes paid to other states and finally, that there was no sales tax credit. These provisions, which were in effect for income earned in fiscal 1967, were used to provide the estimates discussed in the following section.

ILLUSTRATION 1

IOWA INDIVIDUAL INCOME TAX PROVISIONS, FISCAL YEAR 1967

THE STATE TAX IS CALCULATED marginally USING THE FOLLOWING BRACKETS AND RATES.

BRACKET		RATE
0.-	1000.	0.0075
1000.-	2000.	0.0150
2000.-	3000.	0.0225
3000.-	4000.	0.0300
4000.-	9000.	0.0375
9000.-	0.	0.0450

THE FEDERAL TAX DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD-
marginally BY THE FOLLOWING BRACKETS AND RATES

BRACKET		RATE
0.-	0	1.0000
AND CAN BE NO GREATER THAN		8000001.01.

THE STATE PERSONAL DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD OF ITEMIZED-
THE ITEMIZED AMOUNT IS EQUAL TO THE STATE PERSONAL DEDUCTION.
AND IF NOT ITEMIZED THE STATE PERSONAL DEDUCTION IS EQUAL TO-
(AGI-FTD)* 0.05.

AGI = ADJUSTED GROSS INCOME.

FTD = FEDERAL TAX DEDUCTION.

AND CAN BE NO GREATER THAN 250.00.

THE PERSONAL AND CHILD CREDIT IS EQUAL TO-
NUMBER OF ADULTS*15.00-NUMBER OF CHILDREN*7.50-NUMBER OF OTHER
DEPENDENTS*750.

THE OUT OF STATE CREDIT IS CALCULATED marginally USING THE FOLLOWING BRACKETS AND RATES-

BRACKET		RATE
0.-	0.	1.0000
AND CAN BE NO GREATER THAN		8000001.01.

THE SALES TAX CREDIT IS NOT USED.

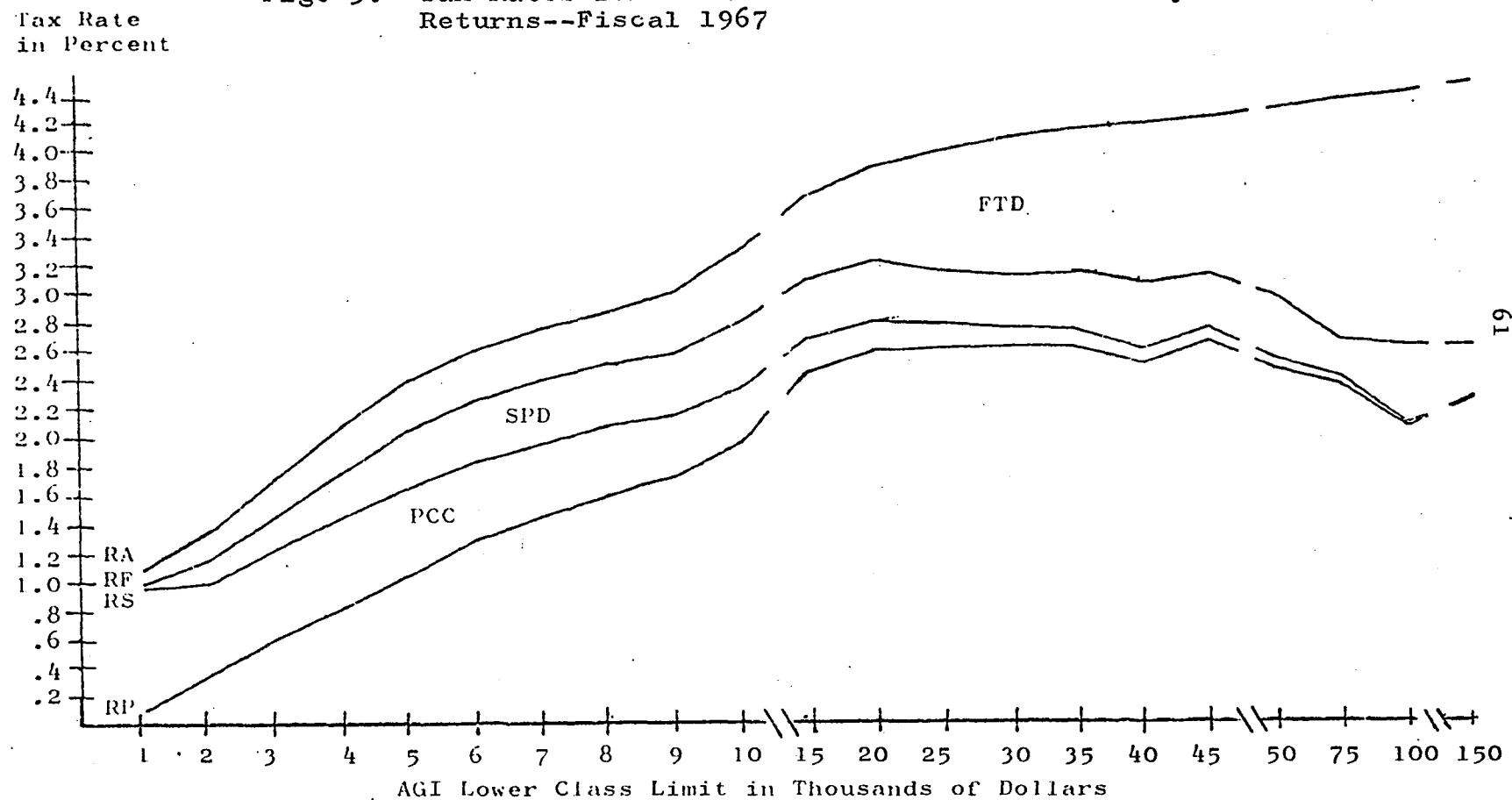
The Effect of Iowa Income Tax Provision
on the Tax Rate

Tax Rates of Pay Returns

Figure 3 indicates graphically the effect of the provisions of the Iowa individual income tax law for those paying taxes. The topmost line marked RA is the average tax rate, that rate which would be paid if there were no exemptions or deductions in the Iowa law. As explained earlier, RF is the rate after the federal tax deduction, RS, the rate after itemized and standard deductions, and RP, the rate after personal credits. RC, which was defined as the effective tax rate, is omitted since the out of state tax credit and the sales tax credit in fiscal 1967 had a negligible effect. Therefore, the effective rate in this figure can be considered RP.

From the figure, it is easily seen that the effective rate, RP, rises progressively between income levels from \$1,000 to \$25,000. For those paying Iowa taxes, this includes all but about 1.4 percent of the filers. The rate then stabilizes for income classes between \$25,000 and \$40,000 and then declines. The reason for this decline can be observed by comparing the distance (drop) between RA and RF. The increasing distance between the two lines indicates the effect of the federal tax deduction in Iowa. It is this provision alone which is responsible for the stabilizing of the tax rate RC and the creation of the regressive tax rate for income over

Fig. 3. Tax Rates for Iowa Individual Income Tax Pay
Returns--Fiscal 1967



SOURCE: Appendix F.

TABLE 19

PERCENT DECLINE FROM NOMINAL TO EFFECTIVE TAX RATE
FOR PAY RETURNS IN IOWA, FISCAL YEAR 1967

Adjusted Gross Income		Percentage Drop in Tax Rate
Rejects ¹		
\$ 0.-	\$ 500.	5.0000
500.-	1,000.	12.9746
1,000.-	2,000.	90.8259
2,000.-	3,000.	73.8421
3,000.-	4,000.	64.6576
4,000.-	5,000.	60.0514
5,000.-	6,000.	55.3246
6,000.-	7,000.	49.9371
7,000.-	8,000.	47.0355
8,000.-	9,000.	43.9243
9,000.-	10,000.	42.4845
10,000.-	15,000.	40.2969
15,000.-	20,000.	33.5797
20,000.-	25,000.	32.3042
25,000.-	30,000.	33.9575
30,000.-	35,000.	35.2985
35,000.-	40,000.	36.6486
40,000.-	45,000.	39.9642
45,000.-	50,000.	36.7168
50,000.-	75,000.	42.3808
75,000.-	100,000.	45.7478
100,000.-	150,000.	53.3425
150,000.-	and over	49.1721

SOURCE: Appendix B.

¹Not reported.

approximately \$40,000.

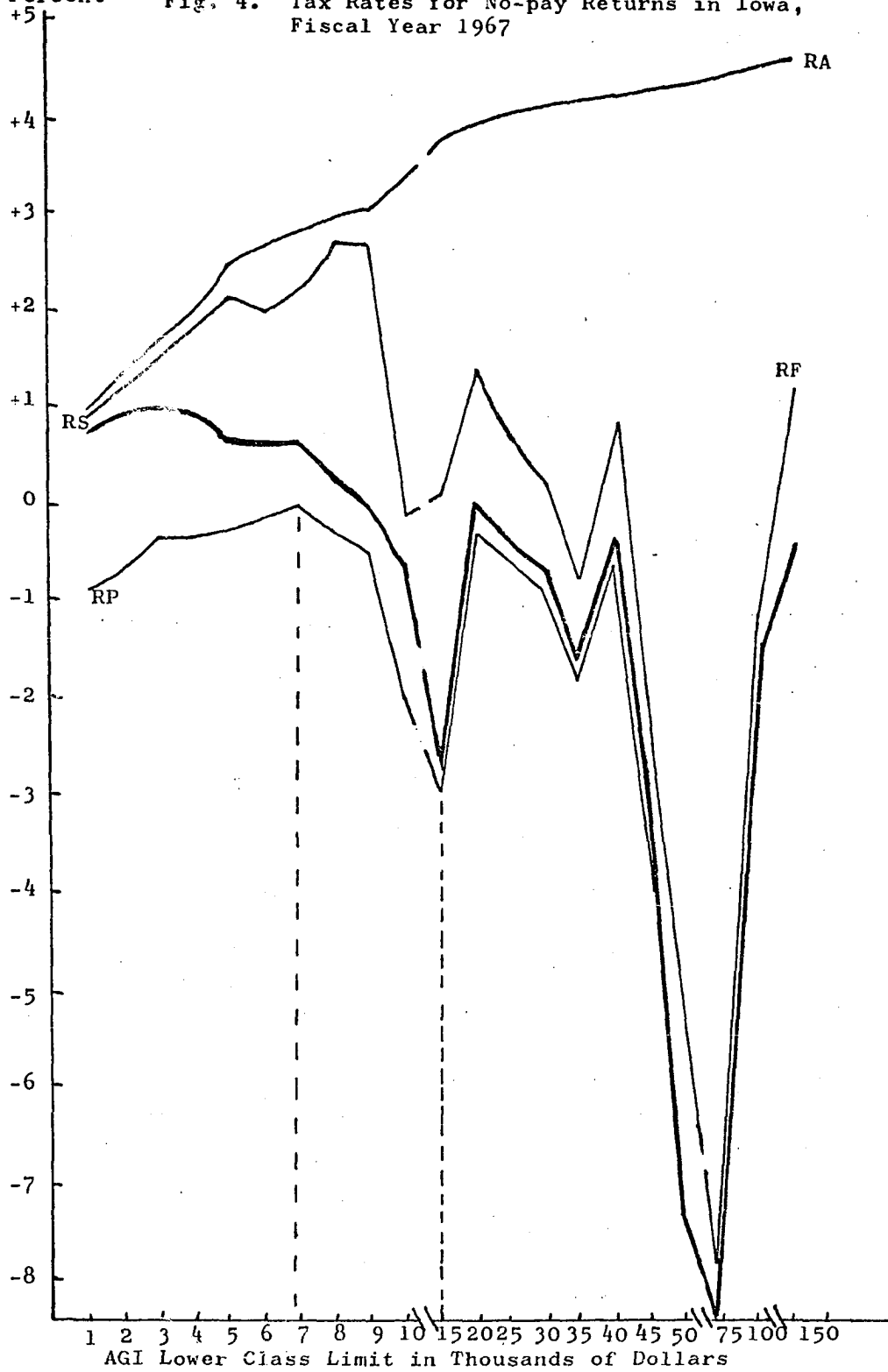
The itemized and standard deduction uniformly reduce the rate of taxation except for those in the lowest income brackets. Finally, the personal credits, shown by the distance between RS and RP, affect the rate of the low income brackets primarily because the rate of tax due is relatively low compared to that of high income groups. More detailed information concerning the tax rates appear in Appendix B, where the columns labeled "PC drop RA-RF" should be read "the percent drop in a tax rate from RA to RF" which is the percent reduction in the tax rate due to the federal tax deduction provision. Table 19 shows the tax rate reduction which takes place due to all of the Iowa tax provisions. Individuals whose income is \$1,000 to \$2,000 had their tax rate reduced by 90 percent and those whose incomes were \$150,000 and over had their taxes reduced by slightly over 49 percent. The most important generalization from Table 19 is that individuals in the lower and higher income tax groups can take the greatest advantage of the tax provisions, while those whose income is in the range of \$15,000 to \$30,000 find that the percentage drop in their taxes is relatively smaller: about 32 percent.

Tax Rates for No Pay Returns

The no pay returns are calculated using tax loss plus unused exemptions or fictitious losses as described

Tax Rate
Percent

Fig. 4. Tax Rates for No-pay Returns in Iowa,
Fiscal Year 1967



SOURCE: Appendix B.

in Chapter III. The diagram for the rates of no pay returns in Figure 4 indicates a number of things concerning the tax rates. First, by comparing RA and RF, one observes that the federal tax deduction contributes little income tax loss for taxpaying individuals whose income is under \$5,000. Second, in observing the difference between RA and RF, the impact of the federal tax deduction on no pay returns, it is obvious that the elimination of the federal tax deduction would make it impossible for most taxpayers to become no pay above \$10,000. The Iowa tax model could examine such a problem in detail, but that is not the purpose of this chapter. Third, the state personal deduction (SPD), represented by the distance between RF and RS, reduces taxes substantially for all but the highest income classes. Fourth, the erratic movement of various rate curves at \$15,000 and over is relatively meaningless because there were so few individuals filing no pay returns. There is no sampling variability because 100 percent of all taxpayers in these classes are in the sample. Fifth, it is interesting to note that in the lower income range, where negative rates taxation has been discussed nationally, the rate declines to nearly zero at \$7,000. The income classes above that amount are somewhat erratic.

The usefulness of this analysis with the negative rates has not been pursued in depth but is useful because changes in the law to improve equity of the tax

would be reflected in a decrease in the negative rate. Conversely, an increase in the rate signifies additional unused credits or exemptions.

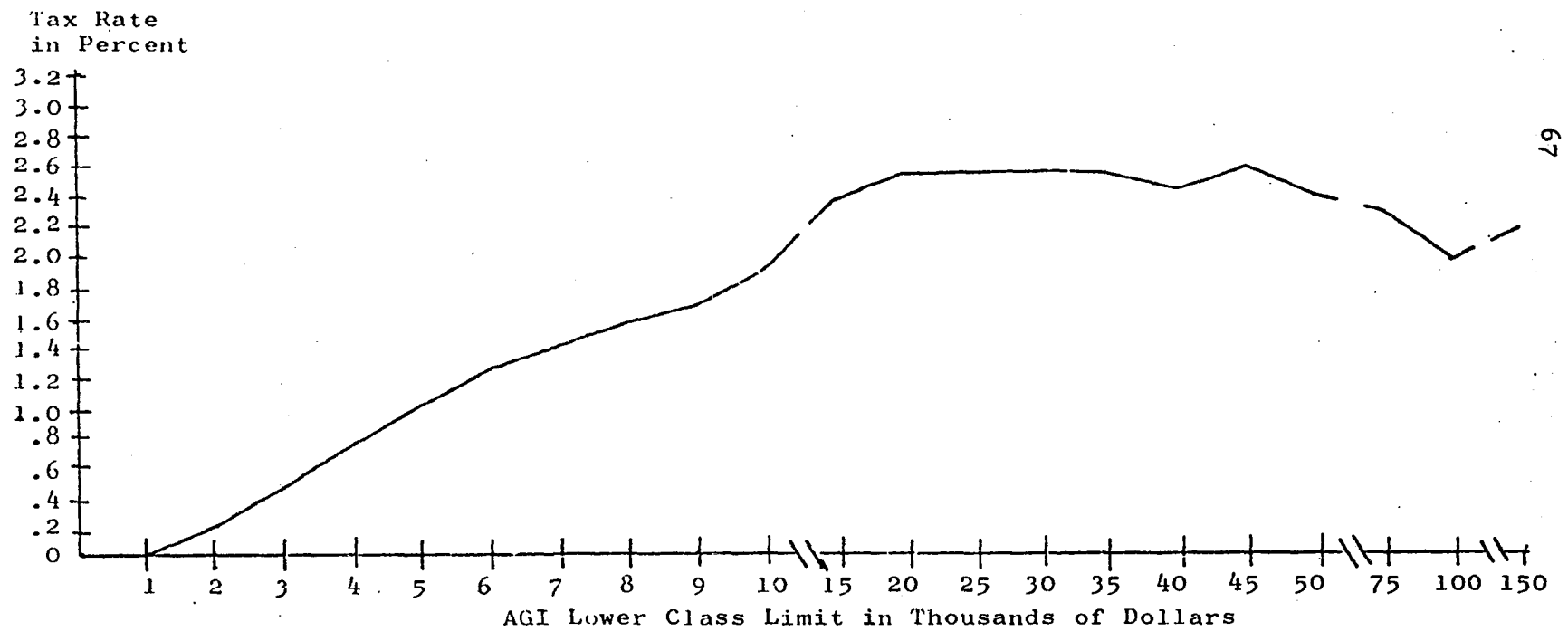
Tax Rates of All Returns

The final page of the output is the effective rate for all returns. The effective rate for all taxpayers as shown in Figure 5 shows the same basic trend as those in Table 20 for pay returns. However, with the addition of more income to most income brackets, especially in the lower ones, there tends to be a particularly measurable reduction in the tax rate in lower income classes. Any general measure of tax burden covers up various data such as the type of filing (for instance whether an individual is single or married) and lumps together individuals whose taxes may be high or low. It must be remembered that Figure 5 covers up all of these differences as well as whether the individual paid any tax.

The Distribution of Tax Losses in Iowa

Table 20 is developed from pages 6 and 11 of Appendix B. Column 2 indicates the maximum state tax for each income bracket for both those paying taxes and those not paying taxes. Iowa could have collected in fiscal 1967 \$154.528 million if all provisions had been eliminated except the definition of income and the marginal tax rates. The bulk of this amount would have come from

Fig. 5. Total Tax Paid as a Percentage of Adjusted Gross Income
for All Taxpayers in Iowa, Fiscal Year 1967



SOURCE: Appendix B.

those who paid taxes--\$148.436 million, however \$6.092 million would have come from lower income individuals who paid no tax. The amount to be collected from each income bracket can be seen in Table 20, Column 2.

Iowans, however, actually paid only \$80.6 million in individual income taxes. The difference, a substantial amount, is called a tax loss. The distribution of these funds can be seen by provision and income class as well as by filing status. The taxes of nearly 750,000 tax filers paying taxes in fiscal 1967 were reduced by \$23.6 million because of the federal tax deduction provision. Those not paying taxes used \$727,000 in tax losses before their returns became no pay. For example, in column TLFTD of Table 20, one can see that over \$4 million in tax losses to the state (or savings to individuals) accrued to those whose income was between \$10,000 and \$15,000. The tax losses for other provisions and income classes can be easily determined. Similarly, tax losses of over \$22 million due to state personal, itemized and standard deductions, \$27.4 million due to personal and child credits, and \$175,000 for payment of out of state income taxes were distributed to individuals filing returns in the state of Iowa. In total, the state distributed by various provisions \$73.89 million in tax savings to individuals. That amount is nearly equal to the total individual income tax collections in the state, \$80.6 million.

TABLE 20

ESTIMATED TAX LOSS FOR MAJOR PROVISIONS OF IOWA'S INDIVIDUAL INCOME
TAX PROVISIONS, FISCAL YEAR 1967

		Pay Returns					
AGI CLASS		MST ¹	LFTD ¹	TLSPD ¹	TLPCC ¹	TLOST ¹	TDUE ¹
Rejects	0 \$	0 \$	-1,629 \$	-50 \$	90 \$	0 \$	1,488
\$ 0-\$	500	1	0	0	0	0	1
500-	1,000	20	-15	3	15	0	17
1,000-	2,000	300,459	26,877	21,192	224,825	0	27,564
2,000-	3,000	2,463,175	351,657	284,305	1,181,071	1,825	644,311
3,000-	4,000	5,368,944	824,595	685,588	1,961,249	0	1,897,472
4,000-	5,000	9,068,916	1,376,497	1,332,343	2,727,332	9,841	3,622,914
5,000-	6,000	13,141,028	1,828,726	2,185,084	3,252,675	3,749	5,870,756
6,000-	7,000	15,511,300	2,053,777	2,459,564	3,209,964	22,591	7,765,386
7,000-	8,000	15,528,658	2,022,042	2,416,759	2,846,584	18,601	8,224,742
8,000-	9,000	13,769,928	1,754,601	2,037,357	2,253,107	3,291	7,721,584
9,000-	10,000	11,156,596	1,550,421	1,585,326	1,594,854	9,232	6,416,784
10,000-	15,000	27,251,468	4,065,447	3,817,929	3,030,655	67,486	16,270,026
15,000-	20,000	10,377,674	1,622,537	1,149,424	703,584	9,249	6,892,877
20,000-	25,000	6,014,323	1,003,863	652,122	286,896	0	4,071,442
25,000-	30,000	3,886,233	809,483	358,092	152,092	0	2,566,563
30,000-	35,000	2,922,108	688,417	255,624	87,420	0	1,890,647
35,000-	40,000	2,137,919	499,646	213,938	63,534	6,398	1,354,401
40,000-	45,000	1,587,660	418,775	175,446	38,713	1,561	953,163
45,000-	50,000	1,295,695	332,534	113,710	28,487	1,006	819,956
50,000-	75,000	3,438,278	1,040,458	357,286	59,427	0	1,981,106
75,000-	100,000	1,258,926	485,324	76,798	13,809	0	682,994
100,000-	150,000	823,434	330,597	100,726	4,995	2,922	384,193
150,000-and over		1,133,590	465,635	88,722	3,051	0	576,180
TOTAL		\$148,436,160	\$23,550,240	\$20,367,368	\$23,724,408	\$157,755	\$80,636,512

SOURCE: Appendix B.

¹For a definition of heading see pp. 32-35.

TABLE 21

ESTIMATED TAX LOSS FOR MAJOR PROVISIONS OF IOWA'S INDIVIDUAL INCOME
TAX PROVISIONS, FISCAL YEAR 1967

No Pay Returns

AGI CLASS		MST ¹	LFTD ¹	TLSPD ¹	TLPCCL ¹	TLOST ¹	TDUE ¹
Rejects	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
\$ 0 - 500		31,806	1,490	2,454	27,861	0	0
500 - 1,000		247,651	15,332	24,230	208,086	0	0
1,000 - 2,000		1,580,072	160,807	235,771	1,183,499	0	0
2,000 - 3,000		1,544,346	123,413	375,358	1,044,873	704	0
3,000 - 4,000		1,318,549	115,671	393,857	803,738	5,281	0
4,000 - 5,000		663,697	67,510	292,981	302,446	758	0
5,000 - 6,000		257,607	32,678	153,512	71,416	0	0
6,000 - 7,000		112,445	27,547	60,344	24,552	0	0
7,000 - 8,000		61,760	10,939	36,159	11,633	3,033	0
8,000 - 9,000		36,213	13,288	18,805	3,251	868	0
9,000 - 10,000		22,380	7,240	12,849	1,677	613	0
10,000 - 15,000		66,212	39,449	21,529	1,951	3,282	0
15,000 - 20,000		29,228	16,537	11,225	603	861	0
20,000 - 25,000		20,022	11,605	7,096	297	1,023	0
25,000 - 30,000		13,716	9,140	3,329	256	989	0
30,000 - 35,000		9,018	7,203	1,760	54	0	0
35,000 - 40,000		7,662	7,305	357	0	0	0
40,000 - 45,000		8,584	6,170	2,394	20	0	0
45,000 - 50,000		3,919	3,919	0	0	0	0
50,000 - 75,000		17,566	17,566	583	0	0	0
75,000 - 100,000		7,376	7,376	0	0	0	0
100,000 - 150,000		11,662	11,662	0	0	0	0
150,000 - and over		20,706	13,903	6,803	0	0	0
TOTAL		\$6,092,200	\$727,172	\$1,661,405	\$3,686,218	\$17,416.	\$ 0

¹For a definition of heading, see pp. 32-35.

Additional Information about No Pay Returns

Fictitious Losses

Table 22, which was constructed from page 13 of the computer printout in Appendix B, includes detailed information concerning the fictitious losses. As indicated in the discussion of Table 12, Chapter III, these figures are an amount of tax that could have been collected if the return had had enough income. The table indicates that almost \$4.6 million of unused exemptions existed in 1966. As one would expect, most of these exemptions in dollar terms went to individuals in low income brackets--96 percent of these unused exemptions and credits were for individuals whose incomes were under \$4,000. The overwhelming portion of these unused credits were due to the personal and child credit.

The Cause of No Pay Status

Table 23 presents selected data from page 13 of the computer outputs that appear in Appendix B. It indicates where each no pay return becomes no pay. For example, one can see from the table that 108,268 individuals whose income was between \$1,000 and \$2,000 became no pay during the personal and child credit provision. In addition 103 became no pay after the federal tax deduction and 623 after state personal deduction. Ninety-five percent of the no pay returns were no pay because of the personal and child

TABLE 22

ESTIMATED INDIVIDUAL INCOME TAX LOSS OF UNUSED EXEMPTIONS AND
CREDITS BY INCOME CLASS, IN IOWA, FISCAL YEAR 1967

AGI CLASS		UNFTD ¹	UNSPD ¹	UNPC ¹	UNOS ¹	UNSTC ¹	UNTOT ¹
Rejects	\$ 0	\$485,852	\$19,085	\$ 283,307	\$ 0	\$ 0	\$ 788,244
\$ 0-	500	277	627	298,089	0	0	298,993
500-	1,000	0	1,794	661,759	0	0	663,553
1,000-	2,000	255	615	1,387,510	1,869	0	1,390,249
2,000-	3,000	0	13,866	820,451	13	0	834,330
3,000-	4,000	0	1,658	297,952	5,464	0	305,074
4,000-	5,000	0	0	132,487	192	0	132,679
5,000-	6,000	0	425	34,422	0	0	34,847
6,000-	7,000	0	180	9,647	0	0	9,827
7,000-	8,000	0	0	4,781	1,478	0	6,259
8,000-	9,000	0	444	3,585	1,001	0	5,030
9,000-	10,000	2,479	322	1,730	538	0	5,069
10,000-	15,000	27,931	10,593	5,897	1,033	0	45,454
15,000-	20,000	10,247	11,751	1,110	0	0	23,108
20,000-	25,000	738	804	627	128	0	2,297
25,000-	30,000	1,469	789	222	152	0	2,632
30,000-	35,000	793	415	170	0	0	1,378
35,000-	40,000	958	1,411	195	0	0	2,564
40,000-	45,000	313	579	129	0	0	1,021
45,000-	50,000	1,759	440	45	0	0	2,244
50,000-	75,000	20,359	5,439	202	0	0	26,000
75,000-	100,000	11,724	887	157	0	0	12,768
100,000-	150,000	1,625	405	82	0	0	2,112
150,000-and over		0	562	60	0	0	622
TOTAL		\$566,785	\$73,090	\$3,944,622	\$11,872	\$ 0	\$4,596,369

SOURCE: Appendix B.

¹For a definition of heading, see pp. 38-40.

TABLE 23

ESTIMATED NUMBER OF RETURNS BECOMING NO PAY DUE TO VARIOUS PROVISIONS
OF THE IOWA INDIVIDUAL INCOME TAX LAW, FISCAL YEAR 1967

AGI CLASS	NFTD ¹	NSPD ¹	NPCC ¹	NOST ¹	NSTC ¹	TOTAL
Rejects \$ 0	8,463	0	0	0	0	8,463
\$ 0- 500	430	172	13,683	0	0	14,285
500- 1,000	0	1,052	42,199	0	0	43,251
1,000- 2,000	103	623	107,542	0	0	108,268
2,000- 3,000	0	615	46,748	102	0	47,465
3,000- 4,000	95	95	22,739	287	0	23,216
4,000- 5,000	79	0	7,288	79	0	7,446
5,000- 6,000	0	196	1,819	0	0	2,015
6,000- 7,000	0	22	661	0	0	683
7,000- 8,000	0	0	279	24	0	303
8,000- 9,000	0	34	109	5	0	148
9,000- 10,000	6	6	63	3	0	78
10,000- 15,000	34	61	54	20	0	169
15,000- 20,000	7	10	25	1	0	43
20,000- 25,000	4	7	9	2	0	22
25,000- 30,000	4	2	5	1	0	12
30,000- 35,000	2	2	3	0	0	7
35,000- 40,000	4	1	0	0	0	5
40,000- 45,000	1	2	2	0	0	5
45,000- 50,000	2	0	0	0	0	2
50,000- 75,000	4	3	0	0	0	7
75,000- 100,000	2	0	0	0	0	2
100,000- 150,000	2	0	0	0	0	2
150,000-and over	0	1	0	0	0	1
TOTAL	9,245	2,910	243,235	528	0	255,918

SOURCE: Appendix B.

¹For a definition of heading, see pp. 38-40.

credits and less than six-tenths of one percent who have no pay returns have an income in excess of \$6,000.

Other Aggregate Information

The Iowa tax model makes estimates of the adjusted gross income, federal tax deductions, state personal deduction, personal and child credits by income class or both pay and no pay returns. This allows the calculation of net taxable income and this information may be valuable when one attempts to manipulate the model to achieve a particular burden of taxation in the state. This is the goal of our next chapter.

The information analyzed in this chapter is available each time the Iowa tax model is run. If additional years are estimated, one more page appears after all the data discussed in this chapter and information for the future year is printed.

Chapter Summary

The Iowa tax model provides estimates of the tax due and the distribution of various tax losses. It also provides data to analyze the impact of no pay status of returns.

In general the Iowa income tax system becomes regressive above \$20,000, due to the federal tax deduction. The state distributes nearly as many tax savings as it collects in taxes. The effective tax rate of the lower

and higher income brackets tends to be reduced relatively more than middle income tax brackets due to the Iowa income tax provisions.

CHAPTER V

USING THE IOWA TAX MODEL TO SOLVE INCOME TAX PROBLEMS

Classifying Income Tax Problems

The basic Iowa tax model can provide answers to many types of problems. The solution to the problem will be easy to determine if one of the three programmed options described in Chapter III is used. It will be difficult if a segment of the program or a new tax model must be written; and perhaps, it will be impossible to solve the problem if the change involves some legal data which were not sampled for the Iowa tax model. The solution of tax problems can be conveniently divided into two types.

First, many problems can be solved by using the preprogrammed options. The model is equipped to solve two basic types of problems using the pre-programmed options. First it will give a solution to those problems which can be formulated in the form of questions seeking to answer what will happen to tax revenue and equity if a specific change is made and second what provision may be changed to bring about a given goal. If the question is of the first type it may be stated as follows: "What

is the effect on tax revenue by income bracket, resulting from increasing the child exemption to \$15, adding an additional marginal income bracket of 6 percent for income from \$6,000 to \$15,000, and allowing the federal tax deduction on only the first \$5,000 of federal taxes paid?" The solution to such a problem would be a formidable task for most state departments seeking the answer to it; however, the model can provide the answer in a standard print-out in a matter of minutes from conception to solution. An example of the second type of problem is: "How could you raise an additional \$5 million and at the same time reduce the regressivity of the income tax in the upper income brackets?" In the second case a value judgment has been specified to lead the researcher to the proper legal conditions. However, important questions have not been answered concerning how much the regressivity is to be changed, whether the increased tax is to be placed almost totally on higher income groups or only a larger share than in the past, and what method should be chosen to make the increase which may preferentially affect the taxpayers in different income brackets. The solutions to such a problem involve the interaction of man and machine where the user of the model must apply his knowledge of the tax system and information about the model printouts to make a series of guesses which lead to a continually more accurate solution to the problem.

The solution may be a lengthy process or in some cases impossible. Human judgement always plays an important role in the solution of this type of tax problem.

The second major type of problem requires some type of re-programming to solve. These types of problems can be broken down into those requiring some modification of the Iowa tax model and those which require writing a new tax model.

The sections which follow are designed to solve sample problems in each one of the areas discussed above.

Using Pre-Programmed Options to Solve Tax Problems with the Iowa Tax Model

There are two questions to be answered and discussed. The first question seeks to measure the impact of a single provision: a 10 percent federal surcharge on Iowa income tax collections. The second is to determine two methods for decreasing the income tax regressivity of the Iowa income tax and at the same time raise \$5 million.

The Impact of a 10 Percent Federal Surcharge on Iowa Income Tax Collections

Any discussion of the impact of a 10 percent surcharge is brief since the major impact is what will happen to Iowa income tax collections. State income tax collections must fall due to an increase in the federal tax deduction. The impact discussed here is the impact on a single year, the sample year. No analysis of problems

relating to double deductibility of state and federal taxes is included. Findings are reported in full in Appendix F in the printed computer printout and the important results are summarized in Table 24.

Table 24 shows the changes which were brought about by a 10 percent surcharge by the federal government. Since an increase in federal taxes paid results in a higher level of federal tax deduction, the amount of taxable income in Iowa declines. Such a charge, therefore, results in a reduction of revenue to the state of Iowa. Two points are readily observable from Table 24. The first is in column 3. This shows that in every income bracket there has been a reduction in the total amount of tax paid to the state of Iowa. The loss resulting from a 10 percent federal surcharge would be approximately \$2 1/4 million. The second major impact can be seen in the column on the right, labeled Percent Drop in Tax Due. This indicates, as one would expect, that the higher the level of income the greater would be the reduction in Iowa taxes. This is because as federal tax brackets rise, the federal tax deduction becomes larger, and the higher Iowa brackets result in larger dollar savings for individuals in higher income groups than in lower groups. For the great bulk of taxpayers, those whose income is between \$4,000 and \$30,000 the tax rate drops 2 percent to 3 percent. However, in some of the higher tax brackets (for example the two tax

TABLE 24

TAX DUE BEFORE AND AFTER A 10 PERCENT FEDERAL SURCHARGE IN IOWA, FISCAL YEAR 1967

AGI Brackets		Tax Due without Surcharge	Tax Due with Surcharge	Reduction in Tax Due	Percent Dro in Tax Due
Rejects		\$ 1,488	\$ 1,692	-- ¹	-- ¹
\$ 0-\$ 500		1	1	-- ¹	-- ¹
500- 1,000		17	19	-- ¹	-- ¹
1,000- 2,000		27,564	24,447	\$ 3,117	11.308
2,000- 3,000		644,311	613,334	30,977	4.807
3,000- 4,000		1,897,472	1,826,866	70,606	3.721
4,000- 5,000		3,622,914	3,507,353	115,561	3.189
5,000- 6,000		5,870,756	5,698,505	172,251	2.934
6,000- 7,000		7,765,386	7,561,970	203,416	2.619
7,000- 8,000		8,224,742	8,023,596	201,146	2.445
8,000- 9,000		7,721,584	7,546,941	174,643	2.261
9,000- 10,000		6,416,784	6,274,423	142,361	2.218
10,000- 15,000		16,270,026	15,898,806	371,220	2.281
15,000- 20,000		6,892,877	6,731,852	161,025	2.336
20,000- 25,000		4,071,442	3,971,053	100,389	2.465
25,000- 30,000		2,566,563	2,485,653	80,910	3.152
30,000- 35,000		1,890,647	1,821,804	68,843	3.641
35,000- 40,000		1,354,401	1,304,436	49,965	3.689
40,000- 45,000		953,163	911,286	41,877	4.393
45,000- 50,000		819,956	786,703	33,253	4.055
50,000- 75,000		1,981,106	1,877,548	103,558	5.227
75,000- 100,000		682,994	634,462	48,532	7.105
100,000- 150,000		384,193	352,889	31,304	8.147
150,000-and over		576,180	529,801	46,379	8.049
TOTAL		\$80,636,512	\$78,385,328	\$2,251,184	2.791

SOURCE: Tax due without surcharge, see Appendix B; tax due with surcharge, see Appendix F.

¹Numbers missing in rejects and \$0-\$1,000 classes not applicable.

brackets from \$75,000 to \$100,000 and \$100,000 to \$150,000), the state tax reduction is about 8 percent. Such a shift in tax paid would result in a relatively smaller proportion of the total tax being paid by higher income tax groups.

The increase in the federal tax deduction obviously would cause an increase in the number of Iowa taxpayers owing no tax. About 5,000 taxpayers do not pay taxes as a result of the increase in the federal tax deduction.

Two Methods of Raising Revenue and Reducing the Regressivity of the Iowa Income Tax

The Problem

Our second problem is to determine two methods for decreasing the income tax regressivity of Iowa and at the same time raise \$5 million. In analyzing the data for fiscal year 1967 Figure 3 in Chapter IV clearly indicated the regressivity of the Iowa income tax as well as the major reason for that regressivity--the federal tax deduction. Although there are any number of methods which would reduce the regressivity of the Iowa tax as well as raise \$5 million the two methods chosen here are: first, a reduction in the federal tax deduction; second, an increase in the marginal tax rates.

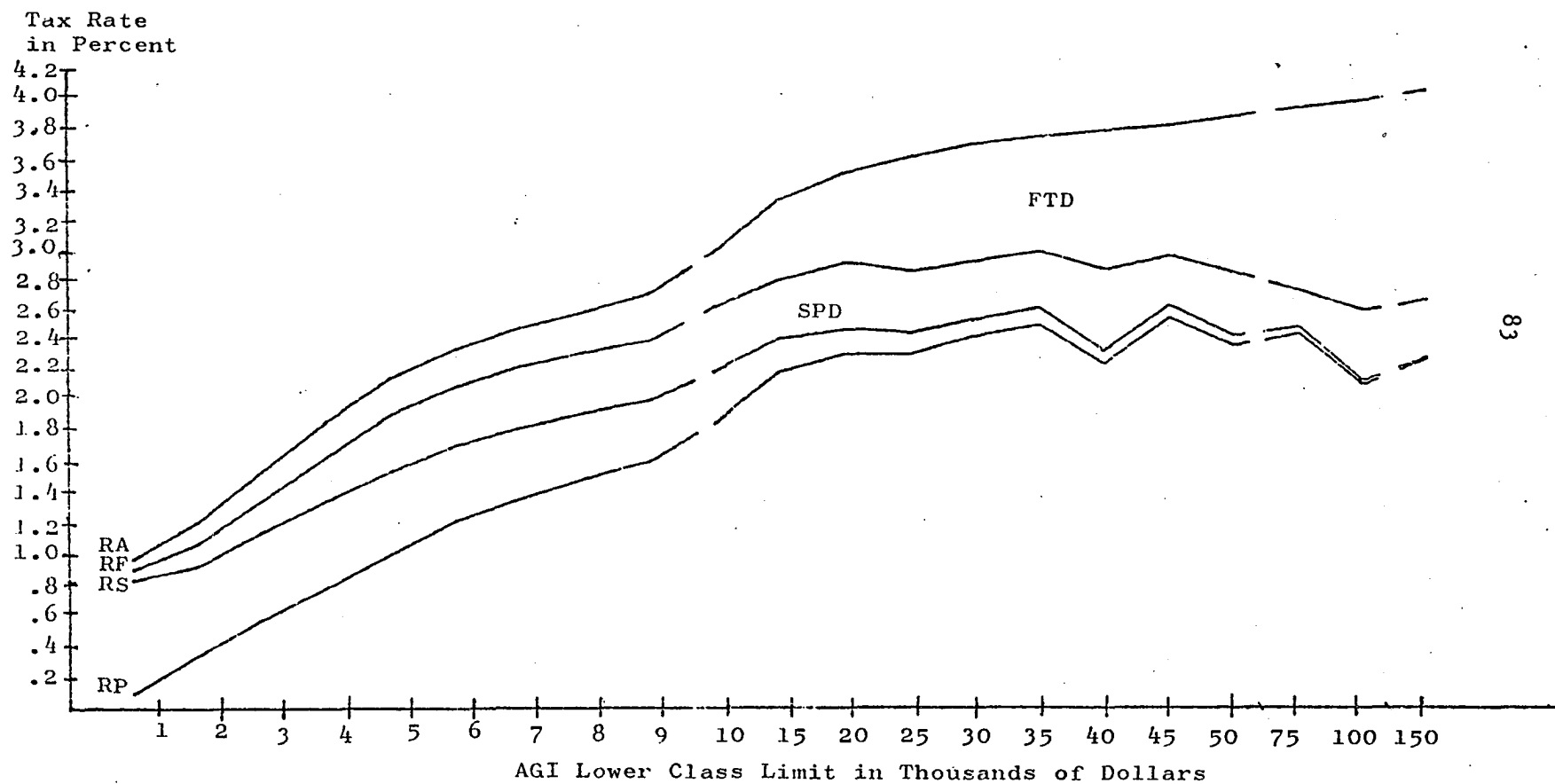
Changing the Federal Tax Deduction--A Possible Solution

All of the Iowa provisions were left unchanged except the federal tax deduction was reduced from a

100 percent rate to a 78.86 percent rate. The reduction of the federal tax deduction allowing only 78 percent federal taxes paid rather than 100 percent of federal taxes paid resulted in raising the total amount of revenue collected in Iowa to \$85.6 million. That amount is \$5 million more than were the provisions as stated in the sample year for fiscal year 1967. A complete computer printout appears in Appendix G.

Figure 6 indicates a summary view of the modified tax rates with the lowered federal tax deduction. The rate RP tends to rise until about \$50,000 with the exception of the \$40,000-\$45,000 class. Above \$50,000 the modified income tax system for Iowa will remain regressive. Under the original provisions in fiscal 1967 the tax system becomes proportional or slightly regressive beginning about \$20,000. Thus, we have met our original criteria of raising \$5 million and reducing regressivity. The further reduction of regressivity, while raising \$5 million in revenue, could not be brought about by changing the federal tax deduction unless it were geared to some type of schedule. This would mean, for example, that those whose federal taxes were above \$10,000 would be able to deduct only 50 percent of their federal taxes paid over \$10,000 rather than the 78 percent. There would have to be some compensatory reduction also in the 78 percent rate for those whose taxes are between zero and \$10,000.

Fig. 6. Tax Rates When the Federal Tax Deduction Is 78.86 of Federal Taxes Paid for Iowa, Fiscal Year 1967



SOURCE: Appendix G.

TABLE 25

CHANGES IN THE NUMBER OF PAY RETURNS DUE TO A FEDERAL
TAX DEDUCTION OF 78.86 PERCENT OF FEDERAL TAXES
PAID IN IOWA, FISCAL YEAR 1967

AGI Class		Number before Change	Number after Change
Rejects		2.	1.
\$ 0.- \$ 500.		1.	1.
500.- 1,000.		3.	3.
1,000.- 2,000.		14,988.	15,171.
2,000.- 3,000.		72,224.	73,602.
3,000.- 4,000.		88,474.	89,955.
4,000.- 5,000.		97,032.	98,016.
5,000.- 6,000.		100,038.	100,438.
6,000.- 7,000.		91,954.	92,599.
7,000.- 8,000.		75,628.	76,474.
8,000.- 9,000.		56,737.	57,409.
9,000.- 10,000.		39,333.	39,806.
10,000.- 15,000.		70,179.	70,657.
15,000.- 20,000.		16,668.	17,801.
20,000.- 25,000.		7,001.	7,591.
25,000.- 30,000.		3,623.	4,031.
30,000.- 35,000.		2,209.	2,350.
35,000.- 40,000.		1,393.	1,429.
40,000.- 45,000.		899.	1,005.
45,000.- 50,000.		657.	677.
50,000.- 75,000.		1,311.	1,400.
75,000.- 100,000.		348.	349.
100,000.- 150,000.		162.	168.
150,000.- and over		91.	95.
Total		740,986.	751,038.

SOURCE: Tax due before change, see Appendix B;
tax due after change, see Appendix F.

One effect of the change in the federal tax deduction was noted which might not have been expected and would have been very difficult to estimate. In the sample year, fiscal 1967, the reduction of the federal tax deduction rate would have resulted in an additional 10,000 individuals paying taxes in the state of Iowa. There is an increase in all income brackets that can be observed in Table 25.

Changing the Marginal Tax Brackets--A Second Solution

The second method of raising \$5 million and reducing the regressivity of the Iowa income tax is by changing the state marginal tax brackets. All the provisions of the Iowa income tax law in fiscal 1967 remain intact except that the marginal tax brackets have been changed to those shown in Table 26. The standard computer printout for these provisions appears in Appendix H.

The rates in Table 26, determined by trial and error, appeared to be somewhat unusual. For example, the rate in the income tax bracket from \$50,000 to \$75,000 of 11.04 percent is not a reasonable rate, however, the rates have been adjusted to raise exactly \$5 million. By eliminating the fractions of a percent the rates more politically reasonable, but they would not raise exactly \$5 million in revenue.

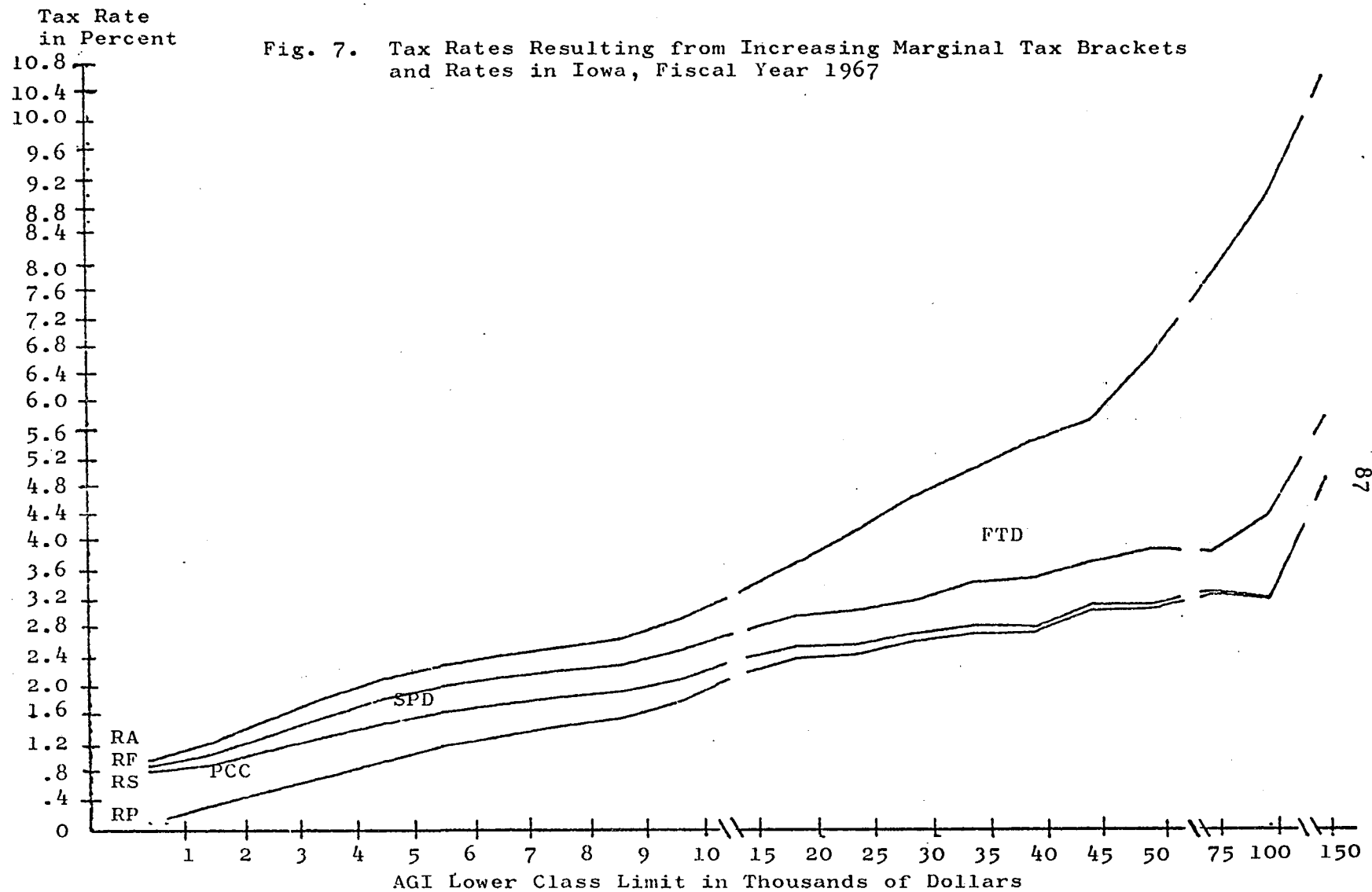
Figure 7 indicates the tax rates resulting from

TABLE 26

MARGINAL TAX BRACKETS TO REDUCE TAX REGRESSIVITY AND
INCREASE REVENUE BY FIVE MILLION DOLLARS IN IOWA,
FISCAL YEAR 1967

AGI Brackets	Iowa Marginal Tax Rate
\$ 0.- \$ 1,000.	0.0079
1,000.- 2,000.	0.0154
2,000.- 3,000.	0.0229
3,000.- 4,000.	0.0304
4,000.- 9,000.	0.0379
9,000.- 16,000.	0.0454
16,000.- 20,000.	0.0529
20,000.- 25,000.	0.0629
25,000.- 35,000.	0.0779
35,000.- 50,000.	0.0929
50,000.- 75,000.	0.1104
75,000.- and over	0.1307

SOURCE: Prepared by author.



SOURCE: Appendix H.

new marginal rates for Iowa. Projections were made for the year 1971, and the revenue effects were not too different. In 1971, the projected revenue to be raised by the changing of the federal tax deduction was \$111.9 million. The revenue for the second method of changing the marginal tax bracket had a projected revenue in 1971 of \$112.3 million. It must be remembered that for these estimates to be accurate there must be no change in the federal income tax structure, and the trend in the distribution of returns in Iowa must continue at about the same rate. A discussion of the projection technique is contained in Chapter VI.

Summary

In summary, the Iowa tax model can provide various taxing methods which yield an increase in revenue for the state of Iowa and project those provisions into the future. These rates can be created to raise any amount of revenue, but politically reasonable provisions may have to be substituted for exact accuracy. It is not the purpose of this chapter to indicate what the burden of taxation should be, but to indicate that this is a model which rather accurately and quickly can provide various methods for achieving increased revenue and indicating those tax brackets or groups which will have to pay for the tax change.

As previously indicated, there are numerous additional methods which could raise \$5 million. These can be created by changing the standard provisions or combinations which were discussed in Chapter III. The standard printout with the above information could be received from the model from conception time to delivery and analysis in a period of two hours or less. This is because all the programming has been done and if the options which one wants to use have been pre-programmed, the solution is very easy to derive. There are considerable disadvantages when one wants to program the model without taking advantage of the pre-programmed options. The next section is designed to show examples of how the model might be considerably changed to take advantage of some provisions which are not pre-programmed.

Solving Tax Problems Requiring Re-programming

Modifying the Iowa Tax Model

Many times tax changes will be sought where the model must be re-programmed to arrive at an estimate of tax due or of the tax burden from the standard printout. Such revisions may be minor in nature or may result in the development of new programs or the creation of new kinds of data and output. The main program which does most of the calculations for the model is called WORK and appears in Appendix C under main program 2. This program

is designed so that new options may be easily programmed by the user. For example, on the third page of the program printout one can find the comment "federal tax deductions sub program." Below it appears the following fortran statement:

```
300      GO TO (320,310,330,400),IFTD
```

This calculated GO TO statement is used to call one of the four major areas in the program dealing with the various methods of calculating the federal tax deduction. The user at this point may choose to write a new federal tax deduction sub program placing the beginning statement somewhere after 400. Of course it will then be necessary to provide a different IFTD code whose value would have to be 5. The same basic logic of the calculated GO TO statement above is used for state personal deduction, personal and child credits, sales tax, credits, and out-of-state taxes paid. The appendixes in this thesis have been written in enough detail that an individual who wishes to write the program should have no difficulty.

Developing a New Tax Model--Percent of Federal Taxation

Often a change is not a change which can be easily re-programmed in the basic Iowa tax model. It is one which must include significant changes in the handling of the data sampled. Such a situation arose early in the spring

of 1969 when the Iowa legislature met with a new governor attempting to fulfill a campaign promise of a simplified state income tax based on percent of federal taxation which would take about the same amount of tax from individuals as the current Iowa income tax. The author was approached about the use of the model for such a purpose and the plan was made to provide information to the Iowa Department of Revenue. The following is some data which were supplied to the Department of Revenue. It was conceived, programmed, written and delivered to the Department of Revenue in thirty days. It required only the part-time work of the author and a programmer familiar with the Iowa tax model. The report, although limited by data problems to be discussed later, clearly spells out some basic technical problems in adapting percent of federal taxation to fulfill the governor's campaign promise. There are four basic plans which indicate these problems. These plans are labeled 1a, 1b, 2a, 2b. They were developed by using the programmed instructions listed in Appendix I. Three tables--27, 28, and 29--summarize the information from these plans and will continually be referred to in the coming section.

The model uses the same basic approach as most tax models. The federal tax deduction on the Iowa return was taken times the specified rate and multiplied by a weight to provide an estimate of revenue. In many cases

TABLE 27

NUMBER OF RETURNS BY INCOME CLASS FOR VARIOUS TAX PLANS FOR PAY RETURNS
IN IOWA, FISCAL YEAR 1967

AGI Class		Fiscal 1967	Plan 1a	Plan 1b	Plan 2a	Plan 2b
Rejects		2	775	465	620	465
\$ 0-\$ 500		1	769	85	170	85
500-	1,000	3	7,334	1,238	1,428	1,238
1,000-	2,000	17,790	58,734	21,030	38,211	21,030
2,000-	3,000	74,333	78,720	58,086	69,623	58,086
3,000-	4,000	89,183	85,044	74,450	80,098	74,450
4,000-	5,000	96,978	84,069	74,741	79,171	74,741
5,000-	6,000	99,832	88,476	80,890	84,262	80,890
6,000-	7,000	92,009	84,264	80,432	82,397	80,432
7,000-	8,000	75,631	70,744	68,487	70,147	68,487
8,000-	9,000	56,632	54,065	52,809	53,582	52,809
9,000-	10,000	39,250	37,225	36,467	36,656	36,467
10,000-	15,000	70,013	66,450	65,281	65,671	65,281
15,000-	20,000	16,702	16,208	16,033	16,121	16,033
20,000-	25,000	6,973	6,628	6,628	6,628	6,628
25,000-	30,000	3,677	3,628	3,628	3,628	3,628
30,000-	35,000	2,205	2,212	2,212	2,212	2,212
35,000-	40,000	1,388	1,358	1,358	1,358	1,358
40,000-	45,000	897	902	902	902	902
45,000-	50,000	657	659	659	659	659
50,000-	75,000	1,328	1,335	1,335	1,335	1,335
75,000-	100,000	348	350	350	350	350
100,000-	150,000	160	157	157	157	157
150,000-	and over	91	89	89	89	89
TOTAL		746,097	750,205	647,825	695,488	647,825

SOURCE: Plans prepared by author. Plans are described on pp. 95-102. Estimates were generated with computer programs in Appendix I.

TABLE 28

AMOUNT OF TAX PAID BY INCOME CLASS FOR VARIOUS TAX PLANS FOR PAY RETURNS
IN IOWA, FISCAL YEAR 1967

AGI Class		Fiscal 1967	Plan 1a	Plan 1b	Plan 2a	Plan 2b
Rejects		\$ 1,488	\$ 74,564	\$ 70,048	\$ 73,266	\$ 79,961
\$ 0-\$ 500		1	14,005	3,084	4,609	1,623
500- 1,000		17	150,671	55,559	56,944	33,646
1,000- 2,000		35,154	1,507,107	811,836	1,136,324	494,597
2,000- 3,000		665,532	2,847,806	2,491,914	2,606,843	1,493,010
3,000- 4,000		1,914,168	4,248,851	4,135,233	4,026,026	2,670,226
4,000- 5,000		3,621,849	5,282,560	5,222,546	5,056,249	3,789,371
5,000- 6,000		5,859,898	6,425,495	6,430,802	6,212,538	5,079,147
6,000- 7,000		7,770,347	7,216,882	7,310,061	7,047,360	6,177,092
7,000- 8,000		8,225,620	7,043,723	7,162,250	6,936,724	6,542,662
8,000- 9,000		7,707,398	6,112,953	6,232,998	6,053,907	6,065,629
9,000- 10,000		6,403,253	4,985,891	5,090,992	4,971,009	5,335,735
10,000- 15,000		16,231,042	11,973,332	12,236,804	12,140,798	14,557,790
15,000- 20,000		6,907,044	4,775,589	4,886,375	4,955,350	6,506,449
20,000- 25,000		4,055,160	2,927,067	2,996,920	3,079,819	4,036,002
25,000- 30,000		2,605,127	2,403,111	2,460,460	2,558,788	3,193,921
30,000- 35,000		1,888,079	2,009,398	2,057,351	2,155,093	2,557,907
35,000- 40,000		1,349,543	1,476,566	1,511,803	1,589,808	1,835,253
40,000- 45,000		951,045	1,225,938	1,255,195	1,325,311	1,491,198
45,000- 50,000		819,956	977,838	1,001,174	1,058,989	1,172,285
50,000- 75,000		1,976,645	3,108,033	3,182,206	3,385,201	3,604,864
75,000- 100,000		682,994	1,457,754	1,492,542	1,595,478	1,635,523
100,000- 150,000		381,821	989,155	1,012,761	1,084,636	1,096,057
150,000-and over		576,180	1,384,269	1,417,304	1,521,466	1,508,522
TOTAL		\$80,629,280	\$80,618,480	\$80,528,112	\$80,632,448	\$80,958,384

SOURCE: Plans prepared by author. Plans are described on pp. 95-102. Estimates were generated with computer programs in Appendix I.

TABLE 29

NUMBER OF NO PAY RETURNS FOR VARIOUS TAX PLANS
IN IOWA, FISCAL YEAR 1967

AGI Class			Fiscal 1967	Plan 1a	Plan 2a	Plan 3a	Plan 4a
Rejects			8,377	7,604	7,914	7,759	7,914
\$	0-\$	500	14,183	13,415	14,099	14,014	14,099
	500-	1,000	43,050	35,720	41,815	41,625	41,815
	1,000-	2,000	102,884	61,940	99,643	82,463	99,643
	2,000-	3,000	44,344	39,957	60,591	49,054	60,591
	3,000-	4,000	21,955	26,095	36,690	31,042	36,690
	4,000-	5,000	7,002	19,912	29,240	24,810	29,240
	5,000-	6,000	1,813	13,170	20,757	17,384	20,757
	6,000-	7,000	627	8,372	12,205	10,239	12,205
	7,000-	8,000	266	5,153	7,410	5,750	7,410
	8,000-	9,000	144	2,711	3,967	3,194	3,967
	9,000-	10,000	75	2,100	2,859	2,669	2,859
	10,000-	15,000	154	3,718	4,886	4,497	4,886
	15,000-	20,000	40	534	709	621	709
	20,000-	25,000	22	368	368	368	368
	25,000-	30,000	12	61	61	61	61
	30,000-	35,000	7	0	0	0	0
	35,000-	40,000	5	35	35	35	35
	40,000-	45,000	5	0	0	0	0
	45,000-	50,000	2	0	0	0	0
	50,000-	75,000	7	0	0	0	0
	75,000-	100,000	2	0	0	0	0
	100,000-	150,000	2	5	5	5	5
	150,000-	and over	1	3	3	3	3
TOTAL			244,987	240,883	343,265	295,601	343,265

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SOURCE: Plans prepared by author. Plans are described on pp. 95-102. Estimates were generated with computer programs in Appendix I.

it was necessary to experiment with the model using dozens of different schedules in an attempt to find one which would raise the proper amount of tax revenue and fit the other conditions necessary. The computer program and instructions appear in Appendix I.

Percent of Federal Taxation--Proportional Rate

In an attempt to simplify the tax system the state tax can be fixed as a percent of federal tax paid. To relieve lower income individuals from taxation, a fixed amount of federal taxes can be exempt. The governor had indicated that he would exempt the first \$100 of federal taxes. It was discovered that a proportional tax rate of 12.99 percent and the exempting of \$100 of federal tax will raise about the same amount as was produced by the Iowa income tax provisions in fiscal 1967. This plan will be called 1a.

There are three major observations discovered about plan 1a. The first can be seen by comparing columns 2 and 3 of Table 27. Plan 1a causes an increase in the number of individuals who would be paying taxes in Iowa. The number would be increased from 746,000 to 750,000. The increase in numbers paying taxes occurred almost totally in lower income groups--below \$4,000. In all other income classes, except for a few income classes over \$30,000, a reduction in the number of individuals paying Iowa tax occurred.

Second, although the plan yields the same amount of revenue as actually collected in fiscal 1967, the taxes of individuals whose income is less than \$6,000 have increased. This can be seen by comparing columns 2 and 3 of Table 28. In the income group with less than \$6,000, the lower the income level the greater the increase in tax paid. For example, individuals whose income is from \$1,000 to \$2,000 had their taxes increased over 140 times. Individuals whose income was from \$6,000 to \$30,000 have tax cuts, some by 20 percent. Finally, individuals in the higher income brackets have their taxes approximately doubled. It is clear that this plan does not meet the requirements set forth for percent of federal taxation by the governor.

Table 29, column 3 shows the third observation concerning tax plan 1a--the distribution of tax filers who did not owe taxes to the state of Iowa. The distribution of individuals is essentially a list of those filers paying less than \$100 to the federal government in fiscal 1967. It is of interest to note that these extend well past any reasonable definition of low income groups. For example, an estimated 6,824 individuals would owe no tax but had an adjusted gross income of over \$9,000. This is many times the number of individuals having an income over \$9,000 exempt in fiscal 1967 under the state provisions.

To summarize plan 1a, it was discovered that a

fixed percent of federal taxation with \$100 of federal taxes exempt would substantially modify the distribution of taxes paid in the state of Iowa, taxing heavily those groups who are considered low income and those who are in very high income brackets. Furthermore, it exempts a substantially larger number of middle and higher income individuals from taxation. Finally, it increases the number of individuals paying taxes in Iowa by about 4,000, predominantly in lower income groups.

In an attempt to reduce the number of taxpayers in low income groups, the federal tax exemption was raised to \$200 and the tax rate increased to 13.3 percent to make up for the lost revenue. This plan is called lb. Again three observations can be noted.

First, in Table 27, the number of individual returns paying taxes under plan lb would be reduced to 615,000 which is 100,000 less than was actually filed in fiscal 1967. As can be seen in column 4 of Table 27, the increase in exemption from \$100 to \$200 substantially reduces the taxpayers in that income group but especially those whose income is under \$5,000. In the latter group in fiscal 1967, 277,000 paid taxes but under plan lb only 229,000 are estimated to pay.

The second observation of importance can be seen in Table 27, column 4. The amount of revenue raised is approximately equal to the revenue in fiscal 1967, however,

in spite of the reduction in the number of taxpayers, there is still a greater tax due from the lowest income groups--those whose income is below \$5,000. Taxes paid by this income group are double the taxes paid in fiscal 1967. Most of the taxes fall on those whose income is between \$3,000 and \$5,000.

Third, in looking at Table 29, column 4, there has been a substantial increase in the number of individuals not paying tax in Iowa in the income brackets up to \$15,000 and even over due to the increase in the federal tax exemption.

Plan 1b has the same basic effect as plan 1a: fewer filers, increase number of no pay returns in higher income classes and higher taxes for individuals in low and high income brackets. However, one additional generalization is important. It is evident from the example that in attempting to reach our goal there is a trap for fixed rate taxation based upon the federal tax. Further increases in the federal exemption will exempt taxpayers who owe federal taxes over \$200. The non-taxable returns will be primarily in lower income groups but there will also be a substantial number in each income class up to \$15,000 and over. The result is that individuals remaining in the lower income groups and higher income groups must have their taxes increased. Thus, in attempting to pattern the percent of federal taxation after the state

law there must be some shift due to some type of a schedule.

Percent of Federal Taxation--Marginal Brackets

Since it is impossible to allocate the tax burden with the proportional rate it was decided that a progressive marginal federal tax schedule could possibly be made. The purpose of the marginal tax schedule is an attempt to shift taxes away from lower and higher income class individuals. The progressive rates, in Table 30, were chosen so that each marginal tax bracket rises and so that the first \$150 of federal taxes is not taxed. This plan is called 2a.

Three brief observations can be made. First, in column 5 of Table 27 one can see that the number of individuals who have filed income tax returns under this plan has increased substantially in lower income groups, especially those in income brackets from \$1,000 to \$2,000 and only slightly in the higher ones. The total number of taxpayers would be reduced by approximately 150,000.

The second observation concerning the impact of taxes paid can be seen in Table 28, column 5. As in the two previous plans it has been possible to raise a proper amount of revenue, however, when comparing taxes paid by income groups under \$5,000 with the amount they paid in fiscal 1967, taxes have risen significantly--a little more than doubling from \$6 million actually paid in 1966 to \$13 million estimated under plan 2a. The amount of tax

TABLE 30
EXEMPTION AND SCHEDULE FOR PLAN 2A

If your federal income tax is more than	But less than	Your state minimum income tax is
\$ 0	\$ 150	\$ 0
150	500	18.75 plus 12.5% of any amount over \$150.
500	1,100	62.50 plus 13.2% of any amount over \$500.
1,100	2,700	141.70 plus 13.95% of any amount over \$1,100.
2,700	5,700	364.90 plus 14.1% of any amount over \$2,700.
5,700 or more		787.90 plus 14.3% of any amount over \$5,700.

SOURCE: Prepared by author.

TABLE 31
SCHEDULE AND EXEMPTIONS FOR PLAN 2B

If your federal income tax is more than	But less than	Your state income tax is
\$ 0	\$ 200	\$ 0
200	300	14 plus 7% of any amount over \$200.
300	500	21 plus 11% of any amount over \$300.
500	700	43 plus 15% of any amount over \$500.
700	1,100	73 plus 19% of any amount over \$700.
1,100	2,700	149 plus 23% of any amount over \$1,100.
2,700	4,000	517 plus 28% of any amount over \$2,700.
4,000 and over		879 plus 14% of any amount over \$4,000.

SOURCE: Prepared by author.

paid in each income class between \$6,000 and \$30,000 still declines.

Third, the number of no pay returns as seen in Table 29 for plan 2a has increased in most income groups, notably in the low income classes.

Generalizing from this particular plan indicates that it is impossible to develop a marginal federal tax schedule for the state of Iowa which would collect the same amount of revenue from each income tax bracket as was collected by the state income tax provisions. This is true because of a strong progressivity of the federal tax.

There may be a schedule which can be developed for the state of Iowa which will come closer to the particular goal which has been set out. The marginal brackets must begin with a low marginal bracket, rise to a high, and then drop back down to a lower level. Since such a plan would not likely be politically feasible, only a brief amount of time was spent in attempting to find such a schedule. The schedule in Table 31 representing plan 2b accomplishes this goal only in part. The general conclusions which can be drawn from this particular set of data are not any different than the other plans. The schedule could be adjusted further by raising the rate in the middle income areas and reducing the rate in low and high tax brackets.

In summarizing the four plans one can observe

that in every case individuals in low income tax classes have their taxes increased. This increase takes place despite the fact that the total number of taxpayers declines in each instance. This suggests that the only way to shift the tax burden away from the poor and the very wealthy would be to lower the tax rates in the marginal schedule at low federal taxes, have the rates rise more rapidly and then drop back quickly. Such a plan may not give the particular desired result and number of taxpayers in low income groups may need to be excluded on the basis of low income rather than low federal taxes due. Such a plan might provide that individuals whose income is \$1,500 plus \$600 for each dependent would be exempt from paying Iowa tax. If the taxpayer was not exempt by the regulation he would face a federal tax deduction schedule in which the rate was low, rose rapidly and then fell. For the state of Iowa the only certain conclusion is that percent of federal taxation would provide increase in taxes paid by individuals in low and high income groups and reduce the total number of individuals filing returns.

Limitations of the Study

Many federal taxpayers filed joint returns, while it is to the advantage of the taxpayer in Iowa to file separate returns to split income and reduce tax. This means that all of the sample data in this study will cause an overestimate in the number of returns that will

be filed by low income individuals. This is because a wife who has a job and makes \$2 or \$3 thousand a year currently is filing a separate Iowa return. If there were percent of federal taxation, only one return would be filed for the entire family. There are revenue aspects of this particular condition. The result of filing two returns in the state of Iowa, as the legislation suggested, is that twice as much income is being exempted in the schedule before federal taxation begins. The addition of the currently exempt amount would cause the revenue to be collected to be greater than estimated. The revenue that would be derived from this exemption on the part of the wife will be subject to many different federal tax brackets depending upon the income of the spouse.

A second source of possible error results from the fact that Iowans claimed that they paid less federal taxes than is reported in Statistics of Income. It is impossible to indicate the extent to which this error may be due to errors in sampling due to the statistics of income or to data sampled in the Iowa tax model. However, it seems reasonable to assume that Iowans will react next year as they did in the current year. Therefore, the \$617 million of federal taxes paid claimed by Iowans may result in further underestimate of total estimated tax due.

All of the estimates which have been provided by

the research in percent of federal taxation are subject to the limitation of accuracy discussed in Chapter VI. In addition such research has included no adjusting of the information for various kinds of provisions. One such problem results from the taxation of state and local bonds. This source of income is non-taxable by the federal government and taxable by the state. In the model we have just built, that income would also become non-taxable to the state; and this may not be a desirable assumption.

Summary

According to the estimates for fiscal 1967 all of the percent of federal plans will increase the Iowa income tax paid by individuals whose income is below \$5,000 or who have an income earner in the family making below \$5,000. Generally speaking, those who have incomes between \$7,000 and \$30,000 will have their taxes reduced and individuals with incomes in excess of \$30,000 will find a substantial increase in their taxes. All the plans generally tend to increase the number of individuals exempt from taxation. Many of these individuals are in higher income groups. These basic patterns could not be changed by using a fixed percent of federal taxes with a deduction or a schedule. Although it was impossible to make the plans conform to past taxing patterns by income class by exempting relatively small amounts of federal

income tax, there may be some possibility of exempting those in low income classes on the basis of low income, not low tax. By exempting individuals on the basis of low income and creating a schedule which rises rapidly and then falls, it may be possible to create a tax system which would reflect the amount of tax paid in the state of Iowa by income class. Such a plan, however, is not politically feasible since the impact of the schedule is to exempt the rich from state income taxation.

In addition to the statements on model accuracy in Chapter VI, the results of this model appear to be underestimates of the tax that would be actually collected. No particular method was available to indicate what the range of error might be.

In the case of percent of federal taxation, it was impossible to use the pre-programmed aspects of the Iowa tax model. As a result of this it was necessary to write a special program. This particular program has no use other than for formulating policies relating to percent of federal taxation in Iowa.

Summary

The Iowa tax model can quickly and easily solve many problems relating to the impact of a single provision or group of provisions. Although more time-consuming,

due to interaction of man and machine, the model can provide solutions where a particular goal, such as reducing regressivity, is desired. Although the model is designed for easy addition of new options, technical knowledge of computer programming would be necessary. In some cases it may be necessary to write a new model to solve different types of problems. An example of this problem was shown in the discussion of the percent of federal taxation. There are some problems for which the Iowa tax model would be of no use. For example, if one wanted to examine the impact of Iowa tax revenue due to changing capital gains taxation or changing some provision of the itemized deduction it cannot be done because the sampled information in the Iowa tax model does not include these data. Whether solutions result from pre-programmed options or new programs, the analytical information can be received in a relatively short period of time.

CHAPTER VI

SAMPLING TECHNIQUES AND MODEL RELIABILITY

Purpose

The purpose of this chapter is fourfold: first, to explain the sampling techniques used in drawing the sample for this research project; second, to indicate the reliability of the major aggregates; third, to check the accuracy of model estimates for various years when weights are known and when they result from the projection method; and finally, to discuss problems relating to variability of the sampled data.

The Sampling Technique

Several sampling procedures were examined, however, a number of factors combined to have a major impact in the selection of the sample which were not originally foreseen. The Iowa Department of Revenue had agreed to draw a sample but only as part of a yearly report which was soon to be processed. In addition, the programmers who could be assigned to the project by the Department of Revenue had only worked with data processing problems. They had never taken as much as a one semester course in statistics thus ruling out the use of sophisticated sampling techniques. Finally the IBM 1130 computer at Drake University has a

single disk storage which put a further constraint on the maximum sample size which could be used. The result of a lack of statistical and scientific skills, time pressures, and the limitations of the IBM 1130 caused the drawing of the sample on the following basis: the sample is a proportionate, random sample stratified by twenty-three income classes and also by pay and no pay classification. The sampling rate was 1 percent of each adjusted gross income class plus twenty-five returns. The sample draws a continually larger proportion of the tax returns as the income brackets get larger. The distribution of the 10,776 returns is shown in Table 32. The variation in pay and no pay returns results from the state considering any return paying less than \$1.00 a no pay return and owing no taxes. In the Iowa tax model, returns of taxpayers owing less than \$1.00 are considered pay returns. The sample is drawn from income earned in 1966 and reported in the Iowa Department of Revenue's annual report on individual tax for fiscal 1967. Due to a misunderstanding in drawing the sample, the twenty-five returns were not randomly drawn but were the first twenty-five returns on the computer files at the Iowa Department of Revenue. There was no method of identifying the twenty-five returns in each income class because card order was not maintained.

The Iowa Department of Revenue puts the income tax returns on their master income tax file in the order in

TABLE 32

NUMBER OF RETURNS IN POPULATION, STATE SAMPLE AND MODEL SAMPLE
IN IOWA, FISCAL YEAR 1967
Pay Returns

Income Class	Pay Returns			No Pay Returns		
	Population	State Sample	Model Sample	Population	State Sample	Model Sample
Rejects	2	2	2	8,464	108	108
\$ 0-\$ 500	1	1	1	14,286	166	166
500- 1,000	3	3	3	43,254	452	452
1,000- 2,000	13,050	155	203	108,311	1,091	1,043
2,000- 3,000	71,998	735	763	47,467	491	463
3,000- 4,000	88,497	898	910	23,219	254	242
4,000- 5,000	97,131	982	987	7,447	99	94
5,000- 6,000	100,241	1,012	1,016	2,016	45	41
6,000- 7,000	92,109	935	938	684	32	30
7,000- 8,000	75,888	774	777	304	28	25
8,000- 9,000	56,829	586	587	150	27	26
9,000- 10,000	39,426	414	415	80	26	25
10,000- 15,000	70,365	720	721	171	27	25
15,000- 20,000	16,754	191	192	45	26	25
20,000- 25,000	7,002	95	95	23	22	22
25,000- 30,000	3,681	62	63	13	13	12
30,000- 35,000	2,209	47	47	7	7	7
35,000- 40,000	1,394	39	39	5	5	5
40,000- 45,000	900	34	34	5	5	5
45,000- 50,000	657	32	32	2	2	2
50,000- 75,000	1,332	39	39	7	7	7
75,000- 100,000	349	29	29	2	2	2
100,000- 150,000	162	27	27	2	2	2
150,000-and over	92	26	26	1	1	1
TOTAL	740,072	7,838	7,946	255,965	2,938	2,830

SOURCE: Population, Iowa Department of Revenue, Income Tax Annual Statistical Report, 1966; state sample analysis provided by Iowa Department of Revenue; model sample prepared by author.

which they are filed with the Department of Revenue. This means that the drawing of the first twenty-five returns in each income class will result in an error only if the characteristics of these taxpayers vary significantly from income taxpayers who file their returns later. It is probable that those who pay income taxes earlier are likely to have larger income tax refunds due to them. This may mean, although not necessarily, that they owe less than the average amount of tax. Any error which would result from these assumptions would create errors that would result in underestimation. The next section is designed to indicate the accuracy of various estimates in the sample year.¹

Reliability of Major Aggregates in the Sample Year

The Statistics of Income in the United States provides the greatest wealth of information concerning income tax that exists in the world.² These yearly statistics are based on a sample of approximately 400,000 federal income tax returns. The Brookings National Tax Model "took a

¹Currently a computer program is being readied to select a new sample from the fiscal 1970 report. The basic sample is to be a 10 percent (about 130,000 returns) disproportionate (optimal) sample stratified by county, income class and pay or no pay status.

²U.S. Treasury Department of Internal Revenue Service, Statistics of Income, 1966, Individual Income Tax Returns.

selected amount of information from the 400,000 returns"³ for their model. The only accuracy checks made available in the Brookings publications were on the larger aggregates. That is, the model estimate of total adjusted gross income in Statistics of Income was compared to AGI estimates of the Brookings model. The Brookings estimate is just under .02 percent higher. When comparing tax due between the two samples the Brookings model is .34 percent higher. Close results of course can be expected since both of these samples were very large and the sampling variability for the larger aggregates therefore small. In addition, the percentage distribution of returns by income class is almost identical for the two samples.⁴

The information concerning the Iowa tax model is presented in a similar fashion by comparing the model estimates of the basic aggregates to the known information published by the Iowa Department of Revenue. Table 33 columns 5 and 6 show the adjusted gross income of the population and the sample estimate. The reported AGI was \$5.6915 billion and the model estimate is \$5.6674 billion. However, \$.0171 billion, the negative adjusted gross income, must be added to the total to make a valid comparison with the Iowa Department of Revenue figure, which is the sum of

³ Joseph A. Pechman, "A New Model for Revenue Estimating," 1965 Brookings Institution, p. 233.

⁴ Ibid., p. 235.

only positive incomes. The resulting \$5.6745 billion estimate from the Iowa tax model is in error just under .3 percent. The total estimate of AGI for pay returns indicates even less error. The total error is only .08 percent. A superficial look at Table 33 will indicate that the estimates for each income class are almost as low as the error for the total adjusted gross income.

The Iowa Department of Revenue also reports the distribution of taxes paid by income class. Table 34 compares the tax reported by the Iowa tax model and the information from the annual Iowa income tax report. It is interesting to note by comparing column 2 and column 3 that the tax model underestimates the tax due in all but three income classes. The percent of underestimation varied considerably from class to class but is generally low in all but the lowest and highest income classes. As mentioned in the discussion of the sampling technique this continual tendency to estimate low may be due to the drawing of the first twenty-five returns in each income class. The model estimate of total taxes paid \$80.6, is an underestimate of taxes actually by 1.12 percent. Finally, the Iowa Department of Revenue reports the number of personal and child credits by income class. These data have been converted to tax losses by multiplying the appropriate amount times each of the credits and comparing them to the model estimates in Table 35. The actual loss in 1966 was \$24.107 million. The model estimate is \$.383 million

TABLE 33

REPORTED AND MODEL ADJUSTED GROSS INCOME FOR PAY AND NO PAY RETURNS
IN IOWA, FISCAL YEAR 1967

AGI Class		Pay Returns		No Pay Returns		Total Returns	
		Reported AGI	Model Est.	Actual AGI	Model Est.	Actual AGI	Model Est.
	Rejects	\$ 0.0	\$ -4,247.	\$ 0.0	\$ -17,137,944.	\$ 0.0	\$ -17,142,191.
\$	0.-\$ 500.	200.00	200.	4,463,677.85	4,240,903.	4,463,877.85	4,241,105.
	500.- 1,000.	2,699.60	2,699.	33,299,531.37	33,020,132.	33,302,230.96	33,022,831.
	1,000.- 2,000.	24,379,536.07	27,524,776.	159,363,087.24	159,471,424.	183,742,623.12	186,996,200.
	2,000.- 3,000.	181,671,210.49	181,698,400.	116,709,473.18	116,103,388.	298,380,683.49	297,802,288.
	3,000.- 4,000.	310,539,863.37	311,681,856.	79,334,870.03	78,779,808.	389,874,733.24	390,461,664.
	4,000.- 5,000.	437,863,723.49	435,900,096.	32,714,644.11	32,592,560.	470,578,367.62	468,492,656.
	5,000.- 6,000.	551,032,179.49	550,506,113.	10,895,241.23	10,901,534.	561,927,419.99	561,407,647.
	6,000.- 7,000.	597,586,291.74	597,543,553.	4,394,218.80	4,366,543.	601,980,509.74	601,910,106.
	7,000.- 8,000.	657,597,815.99	665,355,393.	2,265,814.31	2,254,944.	569,863,630.74	567,610,337.
	8,000.- 9,000.	481,307,134.99	480,671,552.	1,274,273.82	1,265,683.	373,846,605.12	373,231,515.
	9,000.- 10,000.	373,092,509.87	372,480,832.	754,095.58	750,683.	373,846,605.12	373,231,515.
	10,000.- 15,000.	828,361,038.99	827,829,505.	2,026,899.43	2,012,894.	830,387,938.24	829,842,399.
	15,000.- 20,000.	286,349,298.62	283,398,400.	780,226.15	792,019.	287,129,524.62	284,190,419.
	20,000.- 25,000.	155,275,250.68	155,824,672.	516,960.11	517,780.	155,792,210.62	156,342,452.
	25,000.- 30,000.	100,186,535.99	97,835,632.	346,076.48	345,980.	100,532,612.43	98,181,612.
	30,000.- 35,000.	71,495,470.15	71,930,944.	222,589.03	222,589.	71,717,959.15	72,153,533.
	35,000.- 40,000.	52,000,326.20	51,923,672.	186,114.48	186,114.	52,186,440.65	52,109,786.
	40,000.- 45,000.	38,052,252.78	38,131,376.	206,607.04	206,607.	38,258,859.81	38,337,983.
	45,000.- 50,000.	31,126,163.12	30,873,752.	93,432.74	93,432.	31,219,595.85	30,967,184.
	50,000.- 75,000.	79,076,388.15	80,624,240.	412,534.76	412,534.	79,388,922.90	81,036,774.
	75,000.- 100,000.	29,496,165.50	29,081,340.	170,263.03	170,263.	29,666,428.51	29,251,603.
	100,000.- 150,000.	18,908,384.79	18,811,584.	265,507.56	265,507.	19,173,892.34	19,077,091.
	150,000.- 0.	24,955,190.91	25,482,244.	463,310.08	463,310.	25,418,500.99	25,945,554.
		\$5,240,355,489.99	\$5,235,102,733.	\$451,159,444.24	\$432,298,560.	\$5,691,514,861.99	\$5,667,401,293.

SOURCE: Reported adjusted gross income, Iowa Department of Revenue; Income Tax Annual Statistical Report, 1966; model estimate of adjusted gross income, Appendix B.

TABLE 34
REPORTED AND MODEL ESTIMATE OF INCOME TAX PAID IN
IOWA, FISCAL YEAR 1967

AGI Income Class	Reported Tax	Model Estimate
Rejects	\$ 1,488.99	\$ 1,488
\$ 0-\$ 500	1.50	1
500- 1,000	19.59	17
1,000- 2,000	31,889.61	27,564
2,000- 3,000	675,739.23	644,311
3,000- 4,000	1,937,773.42	1,897,472
4,000- 5,000	3,726,002.53	3,622,914
5,000- 6,000	6,037,074.91	5,870,756
6,000- 7,000	7,794,397.00	7,765,386
7,000- 8,000	8,316,495.04	8,224,742
8,000- 9,000	7,693,807.68	7,721,584
9,000- 10,000	6,387,343.85	6,416,784
10,000- 15,000	16,401,648.48	16,270,026
15,000- 20,000	6,895,599.89	6,892,877
20,000- 25,000	4,011,675.11	4,071,442
25,000- 30,000	2,643,595.86	2,566,563
30,000- 35,000	1,917,979.06	1,890,647
35,000- 40,000	1,384,098.19	1,354,401
40,000- 45,000	1,003,701.02	953,163
45,000- 50,000	821,268.33	819,956
50,000- 75,000	2,034,183.95	1,981,106
75,000- 100,000	715,022.03	682,994
100,000- 150,000	447,446.82	384,193
150,000-and over	671,464.14	576,180
TOTAL	\$81,549,636.23	\$80,636,512

SOURCE: Reported tax paid, Iowa Department of Revenue,
Income Tax Annual Report, 1966; model estimate,
Appendix B.

TABLE 35

ACTUAL AND MODEL ESTIMATE OF TAX LOSS DUE TO PERSONAL AND
CHILD CREDITS FOR PAY RETURNS IN IOWA, FISCAL YEAR 1967

AGI Income Class		Actual Loss	Model Estimate
Rejects		\$ 90.00	\$ 90
\$ 0-\$ 500		0	0
500-	1,000	15	15
1,000-	2,000	195,772.50	224,825
2,000-	3,000	1,163,602.50	1,181,071
3,000-	4,000	1,921,395.00	1,961,249
4,000-	5,000	2,700,135.00	2,727,332
5,000-	6,000	3,175,222.50	3,252,675
6,000-	7,000	2,970,487.50	3,209,964
7,000-	8,000	2,851,777.50	2,846,534
8,000-	9,000	2,243,610.00	2,253,107
9,000-	10,000	1,624,027.50	1,594,854
10,000-	15,000	2,986,830.00	3,030,655
15,000-	20,000	717,247.50	703,584
20,000-	25,000	300,735.00	286,896
25,000-	30,000	156,592.00	152,092
30,000-	35,000	96,127.50	87,420
35,000-	40,000	59,655.50	63,534
40,000-	45,000	38,002.50	38,713
45,000-	50,000	27,840.00	28,487
50,000-	75,000	55,230.00	59,427
75,000-	100,000	13,575.00	13,809
100,000-	150,000	5,902.50	4,995
150,000-	and over	2,970.50	3,051
TOTAL		\$24,106,661.50	\$23,724,408

SOURCE: Actual Loss, Iowa Department of Revenue, Income Tax Annual Report, 1966; model estimate, Appendix B.

low giving an error of .88 percent. The error by income class varies but is within a narrow margin of error.

The error in adjusted gross income, total tax due and personal and child credits are so low that they will create no problems for a state agency using the model.

Revenue Predictions with the Iowa Tax Model⁵

The Revenue Projection Technique of the Iowa Tax Model is based on two assumptions. The first is that there is very little change in taxpayer characteristics by income class from year to year. This means that the sampled data will remain valid over a period of years. The second assumption is that the number of returns in each income class can be estimated and provide an estimate of future revenue.

As previously explained the weight for the model variable is:

$$W_{iy} = \frac{T_{iy}}{S_{iy}}$$

where W is the weight, T the total number of returns, S the number of sampled returns, i the income class and y the year. The number of returns for each income class is known for past years since it is reported in the annual Iowa income tax statistical reports. By forming the weight as indicated above, and programming the tax laws of the year in question the Iowa tax model

⁵This discussion relies on information presented on pp. 52-55.

will provide estimates of tax due as well as all other data in the model. Weights based on the known number of returns for years other than fiscal 1967 are called known weights. If estimates are close it can be inferred that taxpayer characteristics have changed relatively little.

To estimate taxes in future years the number of returns is needed to make the weights. The number of returns in each bracket can be estimated for future years by projecting the number of returns by assuming linearity and calculating least squares linear regression equations.⁶ These estimates can be used to form new weights to make new revenue estimates.

The correlation coefficients for the regression equations of pay returns were high. For the eighteen income classes over \$3,000 the range was from .831 to .986 with most being over .9. The correlation coefficients for income classes less than \$3,000 showed very little correlation--the range being between .17 and .53. However, these returns contribute less than .9 percent of revenue and large errors will not change revenue greatly.

The correlation coefficients of no pay returns were considerably less--generally on the order of .6 and .7.

⁶ 1130 Scientific Subroutine Package, IBM application manual number H20-0252-2, International Business Machines Corporation Technical Manual, White Plains, New York, 1967.

However, the income class \$1,000 to \$2,000 which constitutes over 40 percent of the no pays had a coefficient of .92.

Accuracy of Estimates

A major assumption of the Iowa tax model is that there is no major change in the basic tax data sampled from year to year. That is, the federal tax deduction, family size, and various deductions and exemptions are not subject to very rapid change and therefore, by altering the weight for any given year, estimates of the tax due can be made. Because of changes in the federal tax due to the federal income tax cut, the only previous year which can be estimated accurately is fiscal 1966. In addition, two years have passed since the sample was drawn and estimates for fiscal 1968 and 1969 can also be made.

Table 36 shows the percentage error in the estimates of tax due by income class for fiscal years 1966 through 1969. Table 36 shows three things. First, in looking over the table generally, in each year the large percentage error appears in the highest and lowest income classes. Such variation can be due at least in part to sampling variability which is discussed in the next section or possibly the drawing of twenty-five non random returns in the sample. Second, there is only one figure in all years which breaks the general consistency of the estimates--the tax due which is high by 30.6 percent for those

TABLE 36

PERCENTAGE DIFFERENCE BETWEEN REPORTED AND ESTIMATED TAX
PAID BY INCOME CLASS IN IOWA, FISCAL YEAR 1967

AGI Class	Fiscal 1966	Fiscal 1967	Fiscal 1968	Fiscal 1969
Rejects	-1	-1	-1	-1
\$ 0-\$ 500	-1	-1	-1	-1
500- 1,000	-1	-1	-1	-1
1,000- 2,000	-21.119	-13.5	-.350	+21.886
2,000- 3,000	-5.308	-4.5	-1.484	+3.287
3,000- 4,000	+30.638	-2.079	-3.468	-3.656
4,000- 5,000	+.937	-2.766	-3.296	-5.878
5,000- 6,000	+1.060	-2.754	-6.108	-6.156
6,000- 7,000	+2.963	-.370	-3.315	-3.536
7,000- 8,000	+.973	+1.103	-3.221	-3.406
8,000- 9,000	+1.604	+.361	-.874	-.7996
9,000- 10,000	+.552	-.460	-.300	+.3381
10,000- 15,000	-.153	-.802	+.009	+.5203
15,000- 20,000	+1.056	-.0395	+2.541	+3.642
20,000- 25,000	+2.941	-1.489	+2.158	+2.781
25,000- 30,000	-2.739	-2.260	-2.214	-3.259
30,000- 35,000	-5.332	-1.425	-2.214	-3.259
35,000- 40,000	-6.716	-2.145	-5.143	+.0216
40,000- 45,000	-3.707	-5.035	-8.912	-4.217
45,000- 50,000	+2.232	-.159	-3.173	+3.800
50,000- 75,000	+1.546	-2.609	-8.120	+.162
75,000- 100,000	-1.077	-4.479	-12.738	-3.769
100,000- 150,000	-8.582	-14.149	-26.371	-20.980
150,000-and over	-18.219	-14.190	-19.241	-7.950
uncorrected	+3.258	-1.12	-2.25	-.816
corrected	-.041%			

SOURCE: Iowa Department of Revenue, Income Tax Annual Statistical Report, annually 1966-1969; model estimates prepared by author.

¹No valid data because sample contains two items or less.

whose income is from \$3,000 to \$4,000 in fiscal 1966. It has been impossible to explain this error in any way. Third, the table shows the percentage error in total estimated tax due in all four years. The estimate of total taxes paid in fiscal 1967 as indicated before was 1.12 percent low. The estimate of taxes paid in fiscal 1968 was low by 2.25 percent and the estimate for fiscal 1969 was an underestimate of .82 percent. The estimate in the fiscal 1966 shows an uncorrected estimate of 3.26 percentage points high. During the years 1959-1968 the reject classification for pay returns paid about \$20 per return. However, the two sampled returns, all that were filed in the sample year, paid over \$700 each. A substantial increase in reject returns in the following years can not be expected to pay an average tax of \$700. Therefore, the model estimate of tax paid for these returns is inordinately large and must be subtracted to provide a reasonable estimate. After the adjustment for zero and negative income returns, the corrected tax due estimated in fiscal 1966 is low by only .04 percent.

It must be pointed out that during this period changes were taking place in the Iowa income tax provisions. Fiscal 1966 is a year when there was no income tax withholding in Iowa. In fiscal 1967 Iowa instituted a withholding tax system which continues in effect. Also fiscal 1968 saw an increase in the child credit from \$7.50

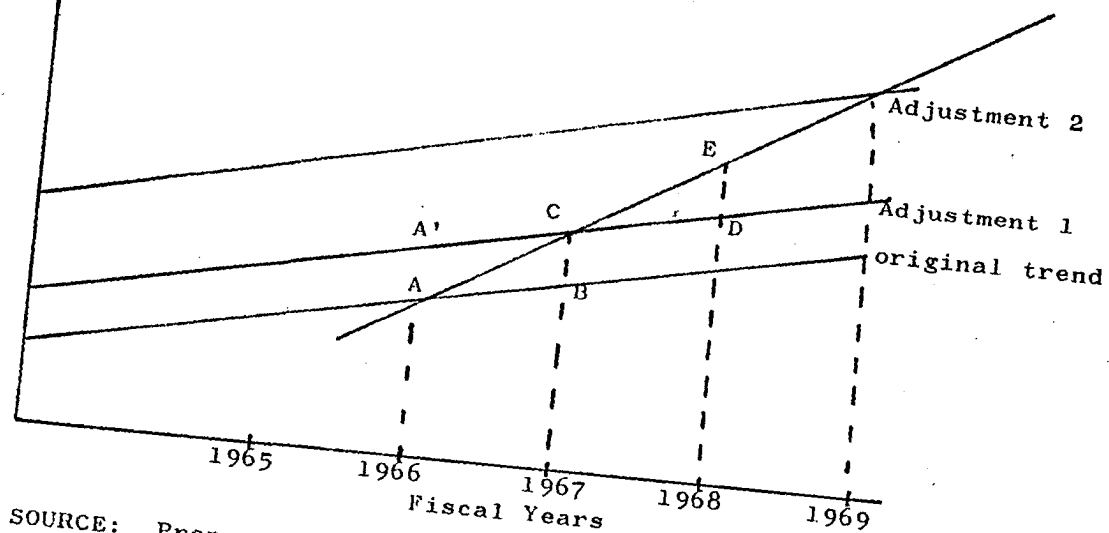
to \$10.00, the institution of a federal surcharge which amounted to 7 1/2 percent, and the addition of a new tax bracket. The fiscal year 1969 saw the continuation of the surcharge for the whole year which resulted in a 10 percent surcharge to the federal tax. All of which were programmed in the estimates. In light of these changes over a period of four years the model predictions with an error not exceeding 2.25 percent proves that taxpayer characteristics in the model are relatively stable.

Accuracy of Estimates with Projection Technique

The projection of revenue using trend lines in the number of returns in each income bracket for pay and no pay returns suffered some severe problems. Trends were made from data for the fiscal years 1959 to 1966. Although some changes in the Iowa tax provisions were made during that period these changes had little effect on the number of returns filed. However, changes becoming effective in the fiscal years 1967 and 1968 providing Iowa with state withholding and a sales tax credit caused the number and distribution of returns to shift. Such changes made it impossible to accurately check the projection method. The use of Figure 8 will aid in showing the development of the problems encountered. The diagram is not made from actual trend lines but is constructed only from logic to show the problems. The problem was that the trend lines continually underestimated the number of returns filed in the state and therefore underestimated the revenue to be collected.

Estimated
Number of
Tax Returns

Fig. 8. Problems in Projecting the Number
of Returns



SOURCE: Prepared by author.

Figure 8 will aid in showing the development of the problems encountered. Although a trend line was drawn for each of the 24 pay and no pay income classes this analysis looks at the problem as if there were only one trend line. The lowest line in Figure 1 marked the original trend is the line derived from the years 1959 to 1966. From the line it is obvious that the total number of returns estimated filed in 1967 would be amount B. However, due to the State of Iowa instituting a new state law requiring individual income tax withholding the actual amount C was filed. Thus the estimated weights were low resulting in a low estimate of revenue in fiscal 1967. The error was highly significant and represented an underestimation of the actual increase in revenue of 50%. Of course, any prediction of the impact of withholding some element of guess work and the above trend line includes no such correction.

The only real test of the possible accuracy of the estimating methodology was for the single past year fiscal 1966. Earlier prior years contain federal taxes under a changed federal law and therefore the sampled data are invalid. The tax due, after correcting for negative adjusted gross income returns, underestimates revenue to 2.113 percent. Such an estimate lends credence to the fact that without the changes effecting the number of returns the projection technique was a good one.

Because the trends in the number of returns were such a good fit over a relatively long period of time, it was felt that the slopes of the original trends were accurate. It was therefore assumed that withholding instituted in fiscal 1967 had the effect of shifting the trend lines upward. Thus, the first adjustment was to increase the y intercept of the trend lines to pass through the actual number of returns filed in fiscal 1967. In figure 8 the new trend line has the slope of the original line but passes through the point C--the actual number of returns filed. The trend line marked adjustment 1. when tested overestimates, as expected, the number of returns filed in 1966. Fiscal 1967 is, of course, correct. However, fiscal 1968 estimates were low. In the figure 8 estimates of returns were D while amount E were actually filed. This was not completely unexpected. The impact of withholding was expected to have an impact beyond one year. In addition, the state instituted a sales tax credit which could be paid as a cash return if no income tax was owed. The poorly written bill caused a great deal of confusion because it allowed every person to file for the credit. The first to line up were children and college students. The general impact was to increase the number of returns.

Adjustment 2 was shifting the trend upward to pass through point G--the number of returns actually filed in fiscal 1969. The resulting estimate for fiscal 1970 is

\$108.79 million. However, there is reason to believe that it is an underestimation of tax paid because the model has consistently underestimated revenue and because the rate of inflation and therefore income has exceeded the rate that was prevalent during the years used in the trends. Also increases in personal income in Iowa are at a higher rate than when the trend slope was determined.

The trend shown in figure 8 by the broken line appears to be the new trend line. However, due to the limited number of points no test was made.

In summary, the technique used for projection has been encumbered by problems unforeseen when this project was conceived. The period from fiscal 1967 to 1970 proved to be very poor years to attempt to justify such a technique. These same years proved difficult for standard revenue estimating techniques. The only year for which a valid check could be made provided a reasonably accurate estimate. The projection method does not account for more rapid than average inflation or variation in income which might result from a recession. Some method of relating taxable income in the state of Iowa to national or state projections of personal income should be researched.

Variability of Model Components

Table 37 presents data on adjusted gross income used in the model for pay returns and income class. The data provided are the actual and sample means, residuals

TABLE 37
MEAN ADJUSTED GROSS INCOME IN 1966 FOR PAY RETURNS

AGI Class	Sample Returns Mean AGI	Returns Mean AGI	Residual Columns 1-2	Relative Sampling Variability ¹
Rejects				
\$ 1-\$ 499	\$ 200.00	\$ 200.00	.0	.0000
500- 999	899.33	899.86	-0.53	.0893
1,000- 1,999	1,865.47	1,868.16	-2.69	.0515
2,000- 2,999	2,523.28	2,519.06	-4.22	.1161
3,000- 3,999	3,522.61	3,509.04	+13.57	.0831
4,000- 4,999	4,492.60	4,507.97	-15.37	.0640
5,000- 5,999	5,502.57	5,497.07	+5.50	.0524
6,000- 6,999	6,497.83	6,487.81	+10.02	.0453
7,000- 7,999	7,475.02	7,479.41	-4.39	.0389
8,000- 8,999	8,471.50	8,469.39	+2.11	.0341
9,000- 9,999	9,469.40	9,463.10	+6.30	.0314
10,000- 14,999	11,795.56	11,772.34	+23.22	.1146
15,000- 19,999	17,001.83	17,091.39	-89.56	.0812
20,000- 24,999	22,253.97	22,175.84	-78.13	.0643
25,000- 29,999	26,998.86	27,217.20	+218.34	.0469
30,000- 34,999	32,562.31	32,365.49	+196.82	.0421
35,000- 39,999	37,247.66	37,302.95	-53.29	.0374
40,000- 44,999	42,367.79	42,280.28	+87.51	.0363
45,000- 49,999	46,991.68	47,376.19	-384.51	.0307
50,000- 74,999	60,528.35	59,366.65	+1,161.70	.1098
75,000- 99,999	83,327.37	84,516.23	-1,188.86	.0777
100,000- 149,999	116,120.63	116,718.42	-597.80	.1130
150,000-and over	276,980.87	271,252.07	+5,728.80	.7140

SOURCE: Prepared by author.

¹Relative sampling variability, $\frac{s}{\bar{X}}$, is the standard deviation of the AGI class divided by the mean income for that class where

$$s = \sqrt{\frac{\sum Xi^2 - \bar{X} \sum Xi}{n}} \quad \text{and} \quad \bar{X} = \frac{\sum Xi}{n}$$

and sampling variability, which are the standard deviation of the estimate expressed as a percent of the estimate. The standard deviation when added to and subtracted from the estimate provides the computed upper and lower limits within which approximately two out of three estimates derived from a similarly selected sample would be expected to fall.⁷ Such information is useful when compared to the information in column 4 of Table 37. There one can see the actual deviation from the population. For pay returns the error in mean income by income class is well under 1 percent in all income classes except income classes above \$50,000. For no pay returns the situation is likewise close.

The problem to contend with is error in the estimates resulting from sampling variability. The fact that mean adjusted gross income by income class is very close does not insure that the other model components are as accurate. Since, however, the estimates of tax due and personal and child credits are accurate there is every reason to believe that the remaining provision, federal tax deduction, state itemized and personal deduction and out of state taxes, are accurate. No proof can be offered, however. Problems relating to the sampling variability have very practical applications. In comparing the

⁷John Neter and William Wasserman, Fundamental Statistics (Boston: Allyn and Bacon, 1961), pp. 359-360.

impact of two methods of raising \$5 million by two different ways the error of either method using different sampled data is unknown and could vary. Very strong dependence on one or several provisions could recombine to increase the error of any estimate.

Summary

The random stratified sample for the Iowa tax model may be biased by the drawing of twenty-five non random returns per income class. In spite of such possible error, the aggregate estimates of adjusted gross income and tax due are close to known population totals. Revenue projections years before and after the sample year are close--the error in total tax paid never exceeds 2.25 percent. The estimates are low perhaps resulting from the non-random returns. Use of the trend lines for estimating future years could not be entirely checked because changes in the Iowa law had a major impact on the number and distribution of returns. The only year which could be checked, fiscal year 1966, showed an error in tax due of less than 1 percent. All variables in the model could not be checked but accuracy of estimates for total adjusted gross income tax due, and personal and child credits does not allow for any major error in the remaining variables. The Iowa tax model should estimate changes in the law accurately but cannot project those new provisions into future years with any known accuracy.

CHAPTER VII

ADVANTAGES AND WEAKNESSES OF INCOME TAX MODELS

Advantages of Income Tax Models

Dr. Ben Okner, Brookings Institution, stated in a personal interview that the national tax model was so advantageous because it provided new and more accurate data than had ever been available.¹ Joseph A. Pechman indicated three major areas where the model would be particularly useful: budgetary planning, legislative requirements related to estimates of proposed tax changes, and research into a wide range of problems never possible before.²

Stanley S. Surrey, Assistant Secretary of the Treasury for Tax Policy, gave the following general reason for the usefulness of tax models:

The computer technology offers us the opportunity of far greater knowledge than we have ever possessed in shaping and evaluating tax policy alternatives.³

¹Personal interview with Dr. Ben Okner, Brookings Institution, Washington, D.C., June 10, 1970.

²J. A. Pechman, "A New Tax Model for Revenue Estimating," Studies of Government Finance (Washington, D.C.: Brookings Institution, 1965), pp. 235, 241.

³Stanley S. Surrey, "Computer Technology and Federal Tax Policy," National Tax Journal, Vol. XIX, No. 3 (1966), p. 257.

Three particular uses of the models are suggested in the area of research--sensitivity analysis, study of horizontal equity, and cost effectiveness analysis.

One research task that can be performed with the income tax model is sensitivity analysis. The crucial variables involved in forecasting revenues under a given tax law are the level and distribution of income. . . . To deal with this problem weights are applied to increase income levels from the sample year to the later year under examination. . . . Many different sets of weights are applied to increase income levels from the sample year to the later year under examination. . . . Many different sets of weights can be tested, each of which represents a different level and/or distribution of income, and the influences of each set on the output variables, such as taxable income, tax liability, etc., can be obtained.

This type of analysis will throw considerable light on the automatic response of the tax system to changes in income levels, or, as it is commonly called, the built-in flexibility of the tax system. . . . It is not possible, however, to find out enough about the flexibility characteristics of our tax system by simply looking at aggregate tax collections. We have to know more about the detailed characteristics of the tax system which can only be revealed by analytic tools, such as the income tax model. . . .

Another important area in which the individual income tax model plays a part is the investigation of horizontal equity. . . .⁴

Using the model in this way, (study the distribution of taxable income due to the \$600 exemption or deduction for casualty losses) we have gained better insights into both the operation of the individual income tax as a whole and the effect of its component provisions.⁵

Finally using the analytic approach one might study the impact of provisions seeking to discover "What effect does a tax incentive for charitable contributions have?" Such an approach opens the tax system to cost effectiveness

⁴Ibid., pp. 252-254.

⁵Ibid., p. 252.

analysis which is being increasingly applied to government and private projects.⁶

The advantages of income tax models are stated very directly by Mr. Billy D. Cook,⁷ Assistant Director for Fiscal Planning and Research in Washington, D.C. He listed five major uses. First, they are "the only effective way to estimate the effect of adopting federal (IRS) code for income tax purposes." Second, the basic tables will provide basic information such as marital status, method of education, filing patterns, etc., for revenue estimating purposes using standard techniques. Third, the model can be reprogrammed for estimating proposed changes in the tax law. Fourth, Mr. Cook suggests that the model answers questions such as "How important is legal income to total income of lawyers? Are medical deductions and/or contributions more important to doctors, lawyers or farmers, etc.?" These are answers to questions that have been impossible to answer before. Finally, and here Mr. Cook looks at the model from the administrative standpoint:

The data types are also very useful in determining compliance scores by income class. For example, how well are dividends reported on returns when compared to interest or any other income source. By use of O.B.E. data, which estimates totals for each state,

⁶Ibid., p. 254.

⁷Personal correspondence with Mr. Billy D. Cook, Assistant Director for Fiscal Planning and Research, Washington, D.C. government, June 29, 1970.

one can compare these O.B.E. totals with the income source totals from the tax returns, adjusting for sample difference, and present an estimate of compliance scores for each income class. This type of information is extremely useful for allocation of audit resources as well as setting norms for selective audits.⁸

Finally, the model can be an aid to revenue estimating with standard techniques. In some way most forecasts of state income tax revenue relies upon the concept of income elasticity. Numerous attempts have been made to estimate the income elasticity.⁹

Estimating income elasticity becomes very difficult due to changes in distribution of income, number of taxpayers, and when there are substantial changes in the tax law. Neil M. Singer, Department of Economics and Bureau of Business and Economic Research at the University of Maryland has developed a technique to estimate elasticity when these things vary,¹⁰ but the techniques cannot be

⁸Ibid.

⁹Lee R. Soltow, "The Historic Rise in the Number of Taxpayers in a State with Constant Tax Law," National Tax Journal, December, 1955, p. 379; H. M. Groves and C. H. Kahn, "Stability of State and Local Tax Yields," American Economic Review, Vol. 42 (March, 1952), p. 87; Robert Harris, Income and Sales Taxes: The 1970 Outlook for States and Localities (State and Local Finance Project, Council of State Governments, January, 1966); N. M. Singer, "The Use of Dummy Variables in Estimating the Income Elasticity of State Income Tax Revenues," National Tax Journal, June, 1968, p. 200.

¹⁰N. M. Singer, "Forecasting Maryland's Income-Tax Revenue," Working Paper Services, Bureau of Business and Economic Research, University of Maryland, College Park, June, 1969.

tested until there are 8 to 10 years of data collected. Tax simulation models could take the provisions in question, simulate the tax revenue for the past 3 years on the basis of a single sample, and provide a relatively accurate estimate of income tax revenue elasticity. It would be this author's opinion that the income tax simulation technique is simple, systematic, and accurate enough to be an excellent revenue estimating device.

Classifying Types of Income Tax Models

It is difficult to classify tax models effectively, but there is some justification for ranking them according to complexity. The lowest level of complexity would include most of the experimentation which has taken place to date. It would include models where returns were calculated to provide estimates in the base year only. It would include both simple models like the ones used in Iowa by the Department of Revenue and also the Washington, D.C. maximum information model. At the second level of complexity would be those models which are repeatable on an annual basis and further attempt to estimate revenue effects over time. The Iowa tax model developed in Chapter III through Chapter V is a model of the second order but is one of the simplest which could be built at this level. At the third level of complexity would be generalized models estimating revenue over time, allowing for variable economic assumptions, and further, have the

ability to show the inter-relationship between the federal and state tax systems. To have this type of model, sampled returns must be drawn from Federal returns, then the state and federal tax system must be simulated. The Brookings tax model by Joseph Pechman has experimented with changing economic assumptions, but this has been done by increasing income of each return at some fixed rate. There has been no attempt to link state estimates and national tax estimates. All models are of the state or the nation.

General Weaknesses of Computer Income Tax Models

Individuals working with tax models are generally doing so because they know that the method will solve some problems which can be solved in no other way. It is, therefore, not surprising that the literature reflects the positive accomplishments of the models. Some problems with the models can be indicated in addition to the problems discussed in Chapter II relating to the early experiences of the states.

As mentioned earlier current tax models do not provide any clear link between state and federal tax systems. Second, none of the models relate the tax model to consumption and other national income accounting aggregates. With such a governmental sector, it could become part of a tax component of a GNP estimating model. Third, use and knowledge about logical tax models does

not allow the researcher to know the validity of his sample. For example, the extent to which sampled data reflects conditions in any specific future year is unknown. In Iowa, farm income is subject to considerable yearly shift. This may cause changes in other variables in the model--federal taxes charitable gifts, etc. Although one can easily justify the stability of personal and child exemptions the more detailed the model the greater the difficulty in justifying the fact that the sample data is not subject to substantial change. The drawing of a detailed sample can overcome some of these problems related to having a valid set of data in the sample year. However, no matter how carefully the sample is drawn there is no way to estimate the variability of lesser variables. When the law is reprogrammed any errors in the sampled data are summed up in the solution. Therefore, different methods of raising an equal amount of revenue may be subject to considerably different amounts of error which cannot be accurately measured.

Although these problems could be critical to an analysis a careful researcher can avoid major pitfalls. The caution necessary is well stated by Stanley S. Surrey.

No matter how much data are at our command, because of the new vistas that are thereby disclosed there will always be the tantalizing numbers that are not available--the more the analysts give us, the more we will rail at them for not knowing still more. In turn, we must be careful not to be lulled into a false security because of the quantity of numbers and the mixture of actual and apparent precision they

offer. We must constantly seek to know all the assumptions that underly the numbers and where to place the dividing lines between precision, and adjustments, indeed degrees of judgments. A good computer program and analysis should also carry with it the materials for a careful cross-examination of the results.¹¹

Improving the Iowa Tax Model

The Iowa tax model can be improved by expanding its size and moving toward the solution to the complex problems listed in the above section. First, by sampling additional readily available data on taxpayer occupation, school district, and type of filing, the model could produce similar analysis over a wider range of problems and areas. Programming problems would be minimal. One could study the tax revenue effect of a changed income tax provision by county (an important area in Iowa because 40% of the income tax is returned to the county of origin), school district, occupation and type of filing.

Changes other than the first suggestion involve considerable reworking of the Iowa tax model program. A second improvement in the Iowa tax model would be to extend the type of data gathered by drawing additional information about each return by hand, or at income tax filing time, punch additional information about selected returns. A model built with such detailed data could incorporate the concept of the Iowa tax model and the Washington, D.C. maximum information system. Third,

¹¹ Stanley S. Surrey, op. cit., p. 252.

the projection technique for the model should be modified to relate revenue projections to various economic assumptions. These assumptions would influence the rate of growth of the sampled income sources--wages and salaries, farm income, professional and business income or other income. If a more detailed sample were selected, more sources of income would be listed. Finally, if the best model is to be built, it must be from a sample of federal tax returns for Iowa residents. With that data one could simulate both the federal and state tax system and the relationship between them. The detail in federal information would expand the tax model to its practical limits and create a tax research project of major proportions.

Summary

Income tax models can be used successfully to:

- 1) estimate the effect of federal conformity, 2) provide expanded data for standard revenue estimating procedures,
- 3) estimate revenue impact of proposed state changes,
- 4) answer questions about taxpayers not before answered,
- and 5) provide information useful in allocation or audit resources.

Tax models can be conveniently classified as belonging to three levels of complexity. The simplest, recalculating the impact of a single proposed change or series of changes for the sample year, comprises most of the models built to date. More complex models allow the

variation of provisions and estimate over time. The most difficult models would, in addition, relate to other macro-economic aggregates, relate federal and state tax systems, and allow for the changes in economic conditions. No models have been built to do the latter.

Logical models are not without weaknesses: there is no clear link between state and federal tax systems, no method of relating models to national income accounts aggregates, stability of sample over time unknown, errors in sampling of data cause unmeasurable cumulative errors.

The Iowa tax model could be improved by: 1) sampling additional readily available data; 2) sampling additional data by hand from returns; 3) changing the projection method to relate to a national aggregate such as GNP; 4) allowing for various economic changes in the current or expanded sources of income. For a very effective model a sample of Iowa federal income tax returns would allow the simulation of the federal and state tax systems.

CHAPTER VIII

SUMMARY AND CONCLUSION

Summary

Joseph A. Pechman's work on income tax models led him to believe that states should use the method for revenue estimation. Nearly 2/3 of the income states sampled had enough data on tape or cards to use at least a simple revenue model. About half of those having adequate data have tried the simulation technique. State models are generally non-repeatable from year to year, using a single computer program for a single problem solution. Thus a state studying personal and child deduction or federal tax deduction in one year uses little of the program which must be rewritten in another year if a different problem is to be solved. In no case was there information available on the accuracy of estimates provided by the models. Many states will be inhibited by lack of staff available to build a more detailed model.

State experimentation with tax simulation has resulted in the study of revenue implications of structural changes in tax laws. With the possible exception of New York, none of the states have used their models for revenue

projection over some period of real time. Only Washington, D.C. uses the model for allocation of audit resources. In general, states have not developed general models to solve tax problems.

The Iowa tax model, designed to solve numerous tax problems, is designed to use a sample of Iowa individual income tax returns and make estimates of tax rates, taxes, tax losses, and other information by income bracket in the base year and future years. The data utilized in the model are similar to data which exist in many other states. Furthermore, the input data in the model are generally available each year. The pre-programmed options provide a rapid solution to many problems which face the states continually as they attempt to gain additional revenue through their income tax. Finally, the model has been given a set of instructions so that those without knowledge of the computer can easily master them and gain access to the model.

The Iowa tax model provides estimates of the tax due and the distribution of various tax losses. It also provides data to analyze the impact of no pay status of returns.

In general the Iowa income tax system turns regressive at about \$20,000, due to the federal tax deduction. The state distributes nearly as many tax savings as it collects in taxes. The effective tax rate of the lower

and higher income brackets tends to be reduced relatively more than middle income tax brackets due to the Iowa income tax provisions.

The Iowa tax model can quickly and easily solve many problems relating to the impact of a single provision or group of provisions. Although more time-consuming, due to interaction of man and machine, the model can provide solutions where a particular goal, such as reducing regressivity, is desired. Although the model is designed for easy addition of new options, technical knowledge of computer programming would be necessary. In some cases it may be necessary to write a new model to solve different types of problems. An example of this problem was shown in the discussion of the percent of federal taxation. There are some problems for which the Iowa tax model would be of no use. For example, if one wanted to examine the impact on Iowa tax revenue due to changing capital gains taxation or changing some provision of the itemized deduction it cannot be done because the sampled information in the Iowa tax model does not include these data. Whether solutions result from pre-programmed options or new programs, the analytical information can be received in a relatively short period of time.

The random stratified sample for the Iowa tax model may be biased by the drawing of twenty-five non-random returns per income class. In spite of such possible error,

the aggregate estimates of adjusted gross income and tax due are close to known population totals. Revenue projections for years before and after the sample year are close --the error in total tax paid never exceeds 2.25 percent. The estimates are low perhaps resulting from the non-random returns. Use of the trend lines for estimating future years could not be entirely checked because changes in the Iowa law had a major impact on the number and distribution of returns. The only year which could be checked, 1965, showed an error in tax due of less than 1 percent. All variables in the model could not be checked but accuracy of estimates for total adjusted gross income tax due, and personal and child credits does not allow for any major error in the remaining variables. The Iowa tax model should estimate changes in the law accurately but cannot project those new provisions into future years with any known accuracy.

Income tax models can be used successfully to:

- 1) estimate the effect of federal conformity, 2) provide expanded data for standard revenue estimating procedures,
 - 3) estimate revenue impact of proposed state changes,
 - 4) answer questions about taxpayers not before answered,
 - 5) provide information useful in allocation or audit resources.
- Tax models can be conveniently classified as belonging to three levels of complexity. The simplest, recalculating the impact of a single proposed change or

series of changes for the sample year, comprises most of the models built to date. More complex models allow the variation of provisions and estimate over time. The most difficult models would, in addition, relate to other macro-economic aggregates, relate federal and state tax systems, and allow for the changes in economic conditions. No models have been built to do the latter.

Tax models are not without weaknesses. No model built can trace the interaction between the Federal and state income tax systems. Currently tax models, as defined by the scope of this study, are not incorporated in subsections of gross national product models because model components are not tied to national income accounts aggregates. Furthermore little is known concerning the variability of tax model components over time: the extent that a single sample remains valid in future years. Finally, different components of the sample are subject to some error. When provisions are reprogrammed the errors of different variables added together. The degree of error is, therefore, different for each estimate. Models have not been studied in enough depth so some errors are not measurable.

The Iowa tax model could be improved by: 1) sampling additional readily available data; 2) sampling additional data by hand from returns; 3) changing the projection

method to relate to a national aggregate such as GNP;
4) allowing for various economic changes in the current or expanded sources of income. The model could be further improved by drawing a sample of Iowa federal income taxpayers to allow the simulation of a more detailed model as well as the interaction between the state and federal income tax systems.

Conclusion

The use of tax models can be a very valuable tool for estimating the revenue effects of changes in various state tax provisions in a sample year. Systematic research is needed if the models are to become reliable revenue estimators in future years. Particularly needed is research into the validity of tax model variables over time and the relationship of tax variables to national income aggregates.

APPENDIX A

OPERATING INSTRUCTIONS FOR THE COMPUTERIZED MODEL
OF THE IOWA INDIVIDUAL INCOME TAX SYSTEM

OPERATING INSTRUCTIONS FOR THE COMPUTERIZED MODEL OF THE IOWA INCOME TAX SYSTEM

There are basic groups of data. The following pages will allow the user to make a set of cards to operate the Iowa tax model.

Group I The basic program cards. These cards are necessary to call the correct programs.

```
// JOB
// XEQ EXPO
* FILES (8, DATA), (6, SAVE), (1, ESTH), (2, ESTL),
  (5, SAMPL), (7, YEAR)
```

Group II The marginal Tax Rates for Iowa. This allows the individual to specify both the tax brackets and the tax rates for those brackets. This group consists of two card sets.

Card Set #1. This card set consists of only 1 card. On column 1-2 you must write the number of tax brackets you desire. You may not specify more than 24 tax brackets.

Card Set #2. This set is for the tax brackets and tax rates you have chosen. The computer will read a number in every 10-space field on the card. There will be 8 10-space fields. You must put the lower limit of your first tax brackets in the column 1-10 and the rate of taxation for brackets 1 in spaces 11-20. -- This is one set of data. The second lower class limit must appear in the spaces 21-30 and the rate for that class in spaces 31-40. That is the second set of data will appear in spaces 21-40. Continue punching the sets of data until you have the number of sets you indicated on card set one. Use as many cards as you need.

Example: Assume a marginal tax rate system as follows:

\$0-1,000	3/4 of 1%
\$1,000-2,000	2%
\$2,000 and over	3.25%

Card set #1 would have a card with a 3 in column 2. Card set #2 would have the data on cards in the following manner. All data on these cards must have a decimal point. So in the first 10 spaces

you must write 0. (zero decimal point) in columns 9-10. In columns 11-20 you must write the rate of taxation for that class as .0075 in columns 16-20. The other numbers then follow in their respective fields.

Group III Federal Tax Deduction Options. This card set allows the user to determine the amount of the federal tax deduction.

Card Set #1. This set consists of one card. It must contain a number in columns 1-2. It is the number of brackets which you chose for the federal tax deduction. The number of brackets must not exceed 24.

Card Set #2. This set of cards will vary in length. The data is put on the cards similar to the instructions in Group II above. The fields are 10 space, 8 per card. You must put the lower limit of the Federal tax deduction class in spaces 1-10 and the percent of federal taxes paid that will be allowed in computing this federal tax deduction in spaces 11-20. These two numbers are one set of data. Continue using as many cards as necessary until all sets of data are recorded. Remember to write 1% as .01 and always put a decimal point.

Card Set #3. This set of cards allows the user to calculate a limit to the federal tax deduction. There are 3 alternative ways to determine the limit. First is to specify a fixed amount of federal tax beyond which no amount of federal taxes paid can be used for a deduction on the state return. Second the limit may be tied to family size. Thus an amount of federal tax would be allowed for the tax deduction depending on the number of individuals in the family. Finally the federal tax deduction may be limited to a specified percent of adjusted gross income (say 10%) for the limit of the federal tax deduction. Any federal tax paid above any of these amounts would not be allowed. Essentially the federal tax deduction will be computed with data in Card Set #1 and #2 (which may be a limit in itself) and then checked to see if the amount must be reduced to one of the 3 maximum constraining amounts.

The data consists of 1 card with 5-10 space fields (1-10, 11,20, 21-30,31-40, 41,50). The amount allowable per adult will be in the first field,

the amount per child in the second and the amount for other dependents in the third field. If you choose this limit the next field must be left blank. If you choose the limit by absolute amount put the number in the 4th field and leave the first 3 fields blank. To specify the limit as a percent of adjusted gross income put the rate in the 5th field. If you want 0% write .10. Remember each number must always have a decimal point unless indicated otherwise.

Group IV Options Relating to the State Personal Deductions. This group consists of only 1 card and is for options relating to the state personal deductions. Provisions below are for both those itemizing and declaring standard deductions.

The information must be put in 6-10 space fields on the card. If you elect to have no standard or itemized deductions insert a blank card. To allow the computation of a standard put the rate of deduction in field 6 and in field 4 put the maximum standard deduction. If you choose as standard deduction of 10% of the first \$10,000 put 1000. (\$10,000 . 10% = \$1,000) in columns 16-20 and .10 in columns 58-60. If the limit is to be computed by family size rather than an absolute amount put the amount per adult, child and other in fields 1-3 respectively. Determine the number to go in column 24 of the selection card (Group VIII). State itemized deductions are federal itemized deductions plus contributions to political parties less state taxes. Therefore the itemized state personal deduction may have a limit expressed as a percent of adjusted gross income. This rate must be put in field 5. The limit may be expressed by an amount allowable for adults, child and other dependents and must be written in fields 1 through 3 respectively. Note that if there is a limit fixed by family size for BOTH itemized and standard it must be the same. Determine the number to go in column 18 of the selection card.

Group V Options Relating to the Personal and/or Child Credits or Exemptions. It is possible to give an income deduction for family members or a tax credit. Either can be specified in this program.

This card set consists of 3-10 space fields and of 1 card. The first is for data relating to adults, the second for children, the third is for other dependents. The number in each field indicates

the amount of credit or deduction for each adult, child or other dependent listed on the return. To specify whether you wish the amounts to be credits or deductions determine the number to be put in column 32 of the selection card.

Group VI Options Relating to Income Taxes paid to other states. The instructions for this section are identical to Group III only the credits are for taxes paid to other states not a deduction for federal taxes paid.

Card Set #1. Number of brackets (one card).

Card Set #2. Number of cards vary. Continue until all sets of data are recorded.

Card Set #3. Amounts allowable for adults, child and other dependents and other information.

Determine the number for column 40 of the selection card in Group VIII.

Group VII Options for the Sales Tax Credit. Iowa had a sales tax credit to offset the regressiveness of the sales tax. This was a disappearing credit that could be received as a return (a negative tax or subsidy from overpayment of sales tax) even if no tax was due in the form of income tax.

Card Set #1. 1 card. One number appears on the card in column 1-2 which is the number of brackets in the sales tax credit schedule.

Card Set #2. Use as many cards as necessary to indicate the brackets and rates allowable in alternate 10 space fields.

To specify whether the sales tax credit is determined on adjusted gross income or net taxable income determine the number to appear in column 48 of the selection card (Group VIII).

Group VIII Selection card. This single card contains 9 numbers indicating options referred to in the previous groups. These numbers appear in columns as indicated. Do not use a decimal point.

A. Determining the Federal Tax Deduction Options. In column 8 put a:

- 1 if you use a schedule for the deductions and the limit is specified by the use as an absolute amount.

- 2 if you use a schedule for the deduction and the limit is set by family characteristics.
- 3 if you are allowing the federal tax deduction limit to be a fixed percent of adjusted gross income.
- 4 if you wish to allow no federal tax deduction. (You must still fill out cards in Group III. Card Set #1 should contain all in column 2 and Card Set #2 should have one blank card.)

B. Determining the Options for itemized State Personal Deductions. In column 16 put a:

- 1 if the itemized deduction is subject to a limit which is a fixed rate of adjusted gross income.
- 2 if the itemized deduction is subject to a limit based on family size.
- 3 if 100% of itemized deduction is allowed.
- 4 if all itemized deductions are omitted.

C. Determining the Options for Standard State Personal Deductions. In column 24 put a:

- 1 if the rate and absolute limit are specified.
- 2 if the rate is set but limit is by family size.
- 3 if standard state personal deductions are not allowed.

D. Determining the Options for State Personal and Child Credits or Deductions. In column 32 put a:

- 1 if the amounts specified are a credit.
- 2 if the amounts specified are a deduction.
- 3 if no credit or deduction is allowed.

E. Determining the Options for Income Taxes Paid to Other States for Column 40. (See instructions for "A" above).

F. Determining the Options for Sales Tax Credit. In column 48 put a:

- 1 if the sales tax credit is based on adjusted gross income.
- 2 if the sales tax credit is based on net taxable income.
- 3 if no sales tax credit is to be allowed.

- G. In column 54-56 put the number 828.
- H. In column 64 put the number 1. (A 2 indicates future years will be estimated)
- I. In column 72 put the number 1 (A 2 is for classifying results on some basis other than income and program modification may be needed.)

Group IX Tax Projection Card. Unless you are using the dynamic model to estimate future years put a 1 in columns 8, 16, and 24.

ADDITIONAL INSTRUCTIONS FOR ESTIMATING FUTURE YEARS WITH THE IOWA TAX MODEL

The following instructions modify the general instructions above. These instructions must be used in addition to the instructions above if you wish to estimate years other than the sample year.

A Methodological note: The number of returns in each pay and no pay income class are computed on the basis of linear trend lines. The slopes of the lines and the intercepts are stored on the disk. A high estimate is on file 1 and the low estimate is on file 2. The data has been subject to change and exact contents must be checked on files 1 and 2.

Group VIII. Instructions in Group I through Group IX must be filled out with one single exception. In Group VIII the selection must contain a 2 in column 64.

Group IX. The tax projection card

This card contains three numbers.

Column 8. This column requires a 1 or 2. It determines the file number. A high estimate is file 1 and is indicated by the number 1; additional files indicated similarly.

Column 16. This is the number of years to be estimated with the file in column 8.

Column 24. This is the number of years to be estimated in all files.

Group X. Year Card. This card contains the number of years to be estimated with the file indicated in column 8 of the projection card A. Code the years as follows. Year 1 is 1957, year 2 1958 etc. Format is 10 I 8. You must have two cards even though only 1 contains data.

Group XI. Return to group X and repeat for additional files if estimates are required. The year and file used will appear on the computer printout before the data is printed. A complete set of data will be printed for each year requested.

APPENDIX B

IOWA TAX MODEL PRINTCUT FOR THE SAMPLE YEAR--FISCAL 1967

—THE STATE TAX IS CALCULATED MARGINALLY USING THE FOLLOWING BRACKETS AND RATES.

BRACKET		RATE
0.-	1000.	0.0075
1000.-	2000.	0.0150
2000.-	3000.	0.0225
3000.-	4000.	0.0300
4000.-	9000.	0.0375
9000.-	0.	0.0450

PROVISION- 1-

THE FEDERAL TAX DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD-
MARGINALLY BY THE FOLLOWING BRACKETS AND RATES

BRACKET		RATE
0.-	0.	1.0000

AND CAN BE NO GREATER THAN 8000001.01.

PROVISION- 2-

THE STATE PERSONAL DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD IF ITEMIZED-

THE ITEMIZED AMOUNT IS EQUAL TO THE STATE PERSONAL DEDUCTION.

AND IF NOT ITEMIZED THE STATE PERSONAL DEDUCTION IS EQUAL TO-

$(AGI - FTD) * 0.05$.

AGI = ADJUSTED GROSS INCOME.

FTD = FEDERAL TAX DEDUCTION.

AND CAN BE NO GREATER THAN 250.00.

PROVISION- 3-

THE PERSONAL AND CHILD CREDIT IS EQUAL TO-

$\text{NUMBER OF ADULTS} * 15.00 + \text{NUMBER OF CHILDREN} * 7.50 + \text{NUMBER OF OTHER DEPENDENTS} * 7.50$.

PROVISION- 4-

THE OUT OF STATE TAX CREDIT IS CALCULATED marginally USING THE FOLLOWING BRACKETS AND RATES-

BRACKET	RATE
0.- 0.	1.0000
AND CAN BE NO GREATER THAN	8000001.01.

PROVISION- 5-

THE SALES TAX CREDIT IS NOT USED.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.- 0.	0.0000	-38.3613	3836.1333	-37.1743	3717.4365	3.0941	-35.0554	3505.5483
0.- 500.	0.7499	0.7499	0.0000	0.7124	5.0000	5.0000	0.7124	5.0000
500.- 1000.	0.7499	1.3208	-76.1171	1.2083	-61.1104	8.5208	0.6526	12.9746
1000.- 2000.	1.0915	0.9939	8.9453	0.9169	15.9987	7.7464	0.1001	90.8259
2000.- 3000.	1.3556	1.1621	14.2766	1.0056	25.8188	13.4645	0.3556	73.7679
3000.- 4000.	1.7225	1.4580	15.3585	1.2380	28.1281	15.0866	0.6087	64.6576
4000.- 5000.	2.0805	1.7647	15.1781	1.4590	29.8695	17.3202	0.8333	59.9429
5000.- 6000.	2.3870	2.0548	13.9161	1.6579	30.5441	19.3159	1.0671	55.2961
6000.- 7000.	2.5958	2.2521	13.2405	1.8405	29.0971	18.2765	1.3033	49.7914
7000.- 8000.	2.7467	2.3890	13.0213	1.9615	28.5845	17.8931	1.4580	46.9157
8000.- 9000.	2.8647	2.4996	12.7422	2.0758	27.5379	16.9563	1.6070	43.9004
9000.- 10000.	2.9952	2.5789	13.8969	2.1533	28.1066	16.5031	1.7251	42.4016
10000.- 15000.	3.2919	2.8008	14.9182	2.3396	28.9282	16.4665	1.9735	40.0493
15000.- 20000.	3.6618	3.0893	15.6348	2.6837	26.7108	13.1285	2.4354	33.4906
20000.- 25000.	3.8596	3.2154	16.6911	2.7969	27.5340	13.0152	2.6128	32.3042
25000.- 30000.	3.9722	3.1448	20.8295	2.7788	30.0439	11.6386	2.6233	33.9575
30000.- 35000.	4.0623	3.1053	23.5589	2.7499	32.3068	11.4440	2.6284	35.2985
35000.- 40000.	4.1174	3.1551	23.3707	2.7431	33.3775	13.0588	2.6207	36.3493
40000.- 45000.	4.1636	3.0654	26.3768	2.6053	37.4275	15.0097	2.5037	39.8559
45000.- 50000.	4.1967	3.1196	25.6645	2.7513	34.4406	11.8059	2.6590	36.6392
50000.- 75000.	4.2645	2.9740	30.2610	2.5309	40.6524	14.9004	2.4572	42.3808
75000.- 100000.	4.3289	2.6601	38.5506	2.3960	44.6509	9.9273	2.3465	45.7478
100000.- 150000.	4.3772	2.6198	40.1485	2.0844	52.3811	20.4381	2.0578	52.9877
150000.- 0.	4.4485	2.6212	41.0762	2.2730	48.9028	13.2826	2.2611	49.1721

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.- 0.	0.0000	-38.3613	3836.1333	-37.1743	3717.4365	3.0941	-35.0554	3505.5483
0.- 500.	0.7499	0.7499	0.0000	0.7124	5.0000	5.0000	0.7124	5.0000
500.- 1000.	0.7499	1.3208	-76.1171	1.2083	-61.1104	8.5208	0.6526	12.9746
1000.- 2000.	1.0915	0.9939	8.9453	0.9169	15.9987	7.7464	0.1001	90.8259
2000.- 3000.	1.3556	1.1621	14.2766	1.0056	25.8188	13.4645	0.3556	73.7679
3000.- 4000.	1.7225	1.4580	15.3585	1.2380	28.1281	15.0866	0.6087	64.6576
4000.- 5000.	2.0805	1.7647	15.1781	1.4590	29.8695	17.3202	0.8333	59.9429
5000.- 6000.	2.3870	2.0548	13.9161	1.6579	30.5441	19.3159	1.0671	55.2961
6000.- 7000.	2.5958	2.2521	13.2405	1.8405	29.0971	18.2765	1.3033	49.7914
7000.- 8000.	2.7467	2.3890	13.0213	1.9615	28.5845	17.8931	1.4580	46.9157
8000.- 9000.	2.8647	2.4996	12.7422	2.0758	27.5379	16.9563	1.6070	43.9804
9000.- 10000.	2.9952	2.5789	13.8969	2.1533	28.1066	16.5031	1.7251	42.4018
10000.- 15000.	3.2919	2.8008	14.9182	2.3396	28.9282	16.4665	1.9735	40.0493
15000.- 20000.	3.6618	3.0893	15.6348	2.6837	26.7108	13.1285	2.4354	33.4906
20000.- 25000.	3.8596	3.2154	16.6911	2.7969	27.5340	13.0152	2.6122	32.3042
25000.- 30000.	3.9722	3.1448	20.8295	2.7788	30.0439	11.6386	2.6233	33.9575
30000.- 35000.	4.0623	3.1053	23.5589	2.7499	32.3068	11.4440	2.6284	35.2935
35000.- 40000.	4.1174	3.1551	23.3707	2.7431	33.3775	13.0588	2.6207	36.3493
40000.- 45000.	4.1636	3.0654	26.3768	2.6053	37.4275	15.0097	2.5037	39.8659
45000.- 50000.	4.1967	3.1196	25.6645	2.7513	34.4406	11.6059	2.6590	36.6392
50000.- 75000.	4.2645	2.9740	30.2610	2.5309	40.6524	14.9004	2.4572	42.3808
75000.- 100000.	4.3289	2.6601	38.5506	2.3960	44.6509	9.9273	2.3465	45.7478
100000.- 150000.	4.3772	2.6198	40.1485	2.0844	52.3811	20.4381	2.0578	52.9877
150000.- 0.	4.4485	2.6212	41.0762	2.2730	48.9028	13.2826	2.2611	49.1721

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	8.6176	5.6998	-35.0554	3505.5483	8.6176	5.6998	0.0000
0.-	500.	5.0000	0.0000	0.7124	5.0000	5.0000	0.0000	0.0000
500.-	1000.	50.5866	45.9840	0.6526	12.9746	50.5866	45.9840	0.0000
1000.-	2000.	89.9246	89.0786	0.1001	90.8259	89.9246	89.0786	0.0000
2000.-	3000.	69.3992	64.6379	0.3546	73.8421	69.4857	64.7378	0.2825
3000.-	4000.	58.2446	50.8258	0.6087	64.6576	58.2446	50.8258	0.0000
4000.-	5000.	52.7750	42.8820	0.8311	60.0514	52.9029	43.0368	0.2709
5000.-	6000.	49.0694	35.6371	1.0664	55.3246	48.1025	35.6781	0.0638
6000.-	7000.	42.1290	29.1869	1.2995	49.9371	42.2969	29.3923	0.2900
7000.-	8000.	39.9686	25.6683	1.4547	47.0355	39.1063	25.8360	0.2256
8000.-	9000.	35.7082	22.5808	1.6064	43.9243	35.7356	22.6138	0.0426
9000.-	10000.	33.1055	19.8838	1.7227	42.4845	33.2016	19.9989	0.1436
10000.-	15000.	29.5375	15.6476	1.9653	40.2969	29.8286	15.9961	0.4130
15000.-	20000.	21.1648	9.2507	2.4322	33.5797	21.2704	9.3723	0.1339
20000.-	25000.	18.7411	6.5827	2.6128	32.3042	18.7411	6.5827	0.0000
25000.-	30000.	16.5819	5.5943	2.6233	33.9575	16.5819	5.5943	0.0000
30000.-	35000.	15.3577	4.4194	2.6284	35.2985	15.3577	4.4194	0.0000
35000.-	40000.	16.9369	4.4606	2.6084	36.6486	17.3274	4.9098	0.4701
40000.-	45000.	18.3217	3.8968	2.4996	39.9642	18.4553	4.0540	0.1635
45000.-	50000.	14.7636	3.3536	2.6558	36.7168	14.8681	3.4720	0.1225
50000.-	75000.	17.3788	2.9123	2.4572	42.3808	17.3788	2.9123	0.0000
75000.-	100000.	11.7124	1.9818	2.3485	45.7478	11.7124	1.9818	0.0000
100000.-	150000.	21.4516	1.2738	2.0423	53.3425	22.0445	2.0190	0.7548
150000.-	0.	13.7395	0.5268	2.2611	49.1721	13.7395	0.5268	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.- 0.	-35.0554	3505.5483	8.6176	5.6998	0.0000	0.0000
0.- 500.	0.7124	5.0000	5.0000	0.0000	0.0000	0.0000
500.- 1000.	0.6526	12.9746	50.5866	45.9840	0.0000	0.0000
1000.- 2000.	0.1001	90.8259	89.9246	89.0786	0.0000	0.0000
2000.- 3000.	0.3546	73.8421	69.4857	64.7378	0.2825	0.0000
3000.- 4000.	0.6087	64.6576	58.2446	50.8258	0.0000	0.0000
4000.- 5000.	0.8311	60.0514	52.9029	43.0368	0.2709	0.0000
5000.- 6000.	1.0664	55.3246	48.1025	35.6761	0.0638	0.0000
6000.- 7000.	1.2995	49.9371	42.2969	29.3923	0.2900	0.0000
7000.- 8000.	1.4547	47.0355	39.1063	25.8360	0.2256	0.0000
8000.- 9000.	1.6064	43.9243	35.7356	22.6138	0.0426	0.0000
9000.- 10000.	1.7227	42.4845	33.2016	19.9989	0.1436	0.0000
10000.- 15000.	1.9653	40.2969	29.8286	15.9961	0.4130	0.0000
15000.- 20000.	2.4322	33.5797	21.2704	9.3723	0.1339	0.0000
20000.- 25000.	2.6128	32.3042	18.7411	6.5827	0.0000	0.0000
25000.- 30000.	2.6233	33.9575	16.5819	5.5943	0.0000	0.0000
30000.- 35000.	2.6284	35.2985	15.3577	4.4194	0.0000	0.0000
35000.- 40000.	2.6084	36.6486	17.3274	4.9098	0.4701	0.0000
40000.- 45000.	2.4996	39.9642	18.4553	4.0540	0.1635	0.0000
45000.- 50000.	2.6558	36.7168	14.8681	3.4720	0.1225	0.0000
50000.- 75000.	2.4572	42.3808	17.3788	2.9123	0.0000	0.0000
75000.- 100000.	2.3485	45.7478	11.7124	1.9818	0.0000	0.0000
100000.- 150000.	2.0423	53.3425	22.0445	2.0190	0.7548	0.0000
150000.- 0.	2.2611	49.1721	13.7395	0.5268	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCD	TLOST	TLSTC
-99999.-	0.	2.	-4247.	0.	-1629.	50.	90.	0.
0.-	500.	1.	200.	1.	0.	0.	0.	0.
500.-	1000.	3.	2699.	20.	-15.	3.	15.	0.
1000.-	2000.	14988.	27524776.	300459.	26877.	21192.	224825.	0.
2000.-	3000.	72224.	181698400.	2463175.	351657.	284305.	1181071.	1825.
3000.-	4000.	88474.	311681856.	5368744.	824595.	685598.	1961249.	0.
4000.-	5000.	97032.	435900096.	9068916.	1376497.	1332343.	2727332.	9841.
5000.-	6000.	100038.	550506113.	13141028.	1828726.	2185084.	3252675.	3749.
6000.-	7000.	91954.	597543553.	15511300.	2053777.	2459564.	3209964.	22591.
7000.-	8000.	75628.	565355393.	15528658.	2022042.	2416759.	2846584.	18601.
8000.-	9000.	56737.	480671552.	13769928.	1754601.	2037357.	2253107.	3291.
9000.-	10000.	39333.	372480832.	11156596.	1550421.	1585326.	1594854.	9232.
10000.-	15000.	70179.	827829505.	27251468.	4065447.	3817929.	3030655.	67486.
15000.-	20000.	16668.	283398400.	10377674.	1622537.	1149424.	703584.	9249.
20000.-	25000.	7001.	155824672.	6014323.	1003863.	652122.	286896.	0.
25000.-	30000.	3623.	97835632.	3886233.	809483.	358092.	152092.	0.
30000.-	35000.	2209.	71930944.	2922108.	688417.	255624.	87420.	0.
35000.-	40000.	1393.	51923672.	2137919.	499646.	213938.	63534.	6398.
40000.-	45000.	899.	38131376.	1587660.	418775.	175446.	38713.	1561.
45000.-	50000.	657.	30873752.	1295695.	332534.	113710.	28487.	1006.
50000.-	75000.	1331.	80624240.	3438278.	1040458.	357286.	59427.	0.
75000.-	100000.	348.	29081340.	1258926.	485324.	76798.	13809.	0.
100000.-	150000.	162.	18811584.	823434.	330597.	100726.	4995.	2922.
150000.-	0.	91.	25482244.	1133590.	465635.	88722.	3051.	0.
TOTAL		740986.	5235102733.	148436160.	23550240.	20367368.	23724408.	157755.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	-1578.	-1488.	-1488.	-1488.	1488.
0.- 500.	0.	0.	0.	0.	1.
500.- 1000.	-12.	2.	2.	2.	17.
1000.- 2000.	48069.	272895.	272895.	272895.	27564.
2000.- 3000.	635963.	1817034.	1818860.	1818860.	644311.
3000.- 4000.	1510183.	3471433.	3471433.	3471433.	1897472.
4000.- 5000.	2709841.	5436173.	5446014.	5446014.	3622914.
5000.- 6000.	4013810.	7266485.	7270234.	7270234.	5870756.
6000.- 7000.	4513341.	7723305.	7745896.	7745896.	7765386.
7000.- 8000.	4438901.	7285385.	7303985.	7303986.	8224742.
8000.- 9000.	3791958.	6045065.	6048356.	6048356.	7721584.
9000.- 10000.	3135747.	4730502.	4739834.	4739834.	6416784.
10000.- 15000.	7883376.	10914032.	10981513.	10981518.	16270026.
15000.- 20000.	2771962.	3475546.	3484795.	3484795.	6892877.
20000.- 25000.	1655985.	1942982.	1942982.	1942982.	4071442.
25000.- 30000.	1167576.	1319668.	1319668.	1319668.	2566563.
30000.- 35000.	944041.	1031461.	1031461.	1031461.	1090647.
35000.- 40000.	713585.	777120.	783518.	783518.	1354401.
40000.- 45000.	594222.	632935.	634497.	634497.	953163.
45000.- 50000.	446245.	474732.	475738.	475738.	819956.
50000.- 75000.	1397744.	1457171.	1457171.	1457171.	1981106.
75000.- 100000.	562122.	575931.	575931.	575931.	682994.
100000.- 150000.	431324.	436319.	439241.	439241.	384193.
150000.- 0.	554358.	557410.	557410.	557410.	576180.
TOTAL	43917608.	67642016.	67799760.	67799760.	80636512.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
99999.-	0.	0.0000	-4.3990	439.9076	-4.2877	428.7709	2.5316	-2.6346	263.4608
0.-	500.	0.7500	1.0908	-45.4406	1.0181	-35.7490	6.6636	0.1176	84.3142
500.-	1000.	0.7500	0.7035	6.1913	0.6247	16.7001	11.2024	-0.1401	118.6923
1000.-	2000.	0.9908	0.9033	8.8284	0.7551	23.7888	16.4091	0.0007	99.9227
2000.-	3000.	1.3301	1.2238	7.9913	0.8886	33.1945	27.3921	-0.0285	102.1469
3000.-	4000.	1.6737	1.5376	8.1294	1.0355	38.1257	32.6506	0.0071	99.5732
4000.-	5000.	2.0363	1.8489	9.2025	0.9500	53.3463	48.6179	0.0129	99.3659
5000.-	6000.	2.3630	2.0632	12.6853	0.6512	72.4419	68.4382	-0.0715	103.0261
6000.-	7000.	2.5751	1.9442	24.4987	0.5581	78.3256	71.2926	-0.0119	100.4650
7000.-	8000.	2.7388	2.2540	17.7032	0.6504	76.2514	71.1428	0.1345	95.0887
8000.-	9000.	2.8611	1.8112	36.6945	0.2903	89.8512	83.9686	-0.0690	102.4144
9000.-	10000.	2.9813	1.8603	37.6021	0.1057	96.4542	94.3174	-0.1688	105.6641
10000.-	15000.	3.2894	0.2213	93.2714	-1.3740	141.7716	720.8117	-1.6723	150.8392
15000.-	20000.	3.6903	0.3713	89.9371	-2.5297	168.5502	781.2230	-2.6945	173.0171
20000.-	25000.	3.8670	1.6036	58.5295	0.0777	97.9881	95.1486	-0.0689	101.7541
25000.-	30000.	3.9645	1.0303	74.0101	-0.1601	104.0388	115.5400	-0.2790	107.0578
30000.-	35000.	4.0518	0.5831	85.6074	-0.3946	109.7401	167.6751	-0.4730	111.8749
35000.-	40000.	4.1171	0.1584	96.1508	-0.7916	119.2292	599.5762	-0.8954	121.7740
40000.-	45000.	4.1551	1.0388	74.9981	-0.4001	109.6307	138.5199	-0.4609	111.0939
45000.-	50000.	4.1949	-1.8445	143.9705	-2.3159	155.2082	-25.5574	-2.3641	156.3564
50000.-	75000.	4.2581	-4.6228	208.5644	-6.0827	242.8472	-31.5782	-6.1318	243.9999
75000.-	100000.	4.3326	-6.5110	250.2806	-7.0323	262.3116	-8.0056	-7.1248	264.4467
100000.-	150000.	4.3926	-0.5754	113.1013	-0.7281	116.5762	-26.5231	-0.7592	117.2835
150000.-	0.	4.4692	1.4684	67.1434	-0.1215	102.7188	108.2748	-0.1344	103.0065

TAX RATES AND PERCENTAGE DROP IN-TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	40.1099	38.5544	-2.6346	263.4608	40.1099	29.5544	0.0000
0.-	500.	89.2150	88.4450	0.1176	84.3142	89.2150	88.4450	0.0000
500.-	1000.	119.9260	122.4398	-0.1401	118.6923	119.9260	122.4398	0.0000
1000.-	2000.	99.9152	99.8985	-0.0004	100.0410	100.0449	100.0538	153.0751
2000.-	3000.	102.3334	103.2137	-0.0291	102.1934	102.3839	103.2833	-2.1644
3000.-	4000.	99.5354	99.3102	-0.0064	100.3881	100.4225	100.6274	190.9633
4000.-	5000.	99.2995	98.6367	0.0100	99.5072	99.4573	98.9438	22.5221
5000.-	6000.	103.4681	110.9884	-0.0715	103.0281	103.4681	110.9884	0.0000
6000.-	7000.	100.6159	102.1457	-0.0119	100.4650	100.6159	102.1457	0.0000
7000.-	8000.	94.0323	79.3198	-0.0655	102.3933	102.9082	110.0780	146.7329
8000.-	9000.	103.8139	123.7907	-0.2167	107.5762	111.9676	174.6518	-213.7853
9000.-	10000.	109.0774	259.7434	-0.3223	110.8114	117.3265	404.9094	-90.8744
10000.-	15000.	855.5750	-21.7076	-1.8867	157.3577	952.4525	-37.3125	-12.8216
15000.-	20000.	825.6135	-6.5162	-2.8034	175.9669	854.9281	-10.8195	-4.0399
20000.-	25000.	104.3022	188.6813	-0.2914	107.5380	118.1769	474.6822	-322.5043
25000.-	30000.	127.0790	-74.2531	-0.6090	115.3622	159.1087	-280.3631	-118.2819
30000.-	35000.	181.1180	-19.8637	-0.4730	111.6749	181.1180	-19.8637	0.0000
35000.-	40000.	665.6905	-13.2340	-0.8964	121.7740	665.6905	-13.2340	0.0000
40000.-	45000.	144.3722	-15.1929	-0.4609	111.0939	144.3722	-15.1929	0.0000
45000.-	50000.	-28.1685	-2.0796	-2.3641	156.3564	-28.1685	-2.0796	0.0000
50000.-	75000.	-32.6400	-0.8069	-6.1318	243.9999	-32.6400	-0.8069	0.0000
75000.-	100000.	-9.4263	-1.3154	-7.1248	264.4467	-9.4263	-1.3154	0.0000
100000.-	150000.	-31.9224	-4.2674	-0.7592	117.2835	-31.9224	-4.2674	0.0000
150000.-	0.	109.1567	-10.6576	-0.1344	103.0085	109.1567	-10.6576	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	-2.6346	263.4608	40.1099	38.5544	0.0000	0.0000
0.-	500.	0.1176	84.3142	89.2150	88.4450	0.0000	0.0000
500.-	1000.	-0.1401	118.6923	119.9260	122.4398	0.0000	0.0000
1000.-	2000.	-0.0004	100.0410	100.0449	100.0538	153.0751	0.0000
2000.-	3000.	-0.0291	102.1934	102.3839	103.2833	-2.1644	0.0000
3000.-	4000.	-0.0064	100.3881	100.4225	100.6274	190.9633	0.0000
4000.-	5000.	0.0100	99.5072	99.4573	98.9438	22.5221	0.0000
5000.-	6000.	-0.0715	103.0281	103.4681	110.9884	0.0000	0.0000
6000.-	7000.	-0.0119	100.4650	100.6159	102.1457	0.0000	0.0000
7000.-	8000.	-0.0655	102.3933	102.9082	110.0780	148.7329	0.0000
8000.-	9000.	-0.2167	107.5762	111.9676	174.6518	-213.7853	0.0000
9000.-	10000.	-0.3223	110.8114	117.3265	404.9094	-90.8744	0.0000
10000.-	15000.	-1.8867	157.3577	952.4525	-37.3125	-12.8216	0.0000
15000.-	20000.	-2.8034	175.9669	854.9281	-10.8195	-4.0399	0.0000
20000.-	25000.	-0.2914	107.5390	118.1769	474.6823	-322.5043	0.0000
25000.-	30000.	-0.6090	115.3622	159.1087	-280.3631	-118.2819	0.0000
30000.-	35000.	-0.4730	111.6749	181.1180	-19.8637	0.0000	0.0000
35000.-	40000.	-0.8964	121.7740	665.6905	-13.2340	0.0000	0.0000
40000.-	45000.	-0.4609	111.0939	144.3722	-15.1929	0.0000	0.0000
45000.-	50000.	-2.3641	156.3564	-28.1685	-2.0796	0.0000	0.0000
50000.-	75000.	-6.1318	243.9999	-32.6400	-0.8069	0.0000	0.0000
75000.-	100000.	-7.1248	264.4467	-9.4263	-1.3154	0.0000	0.0000
100000.-	150000.	-0.7592	117.2835	-31.9224	-4.2674	0.0000	0.0000
150000.-	0.	-0.1344	103.0085	109.1567	-10.6576	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	8463.	-17137944.	0.	-1239763.	0.	0.	0.
0.-	500.	14285.	4240905.	31806.	-14730.	2454.	27861.	0.
500.-	1000.	43252.	33020132.	247651.	15332.	24230.	208086.	0.
1000.-	2000.	108269.	159471424.	1580072.	139240.	235771.	1183499.	0.
2000.-	3000.	47466.	116103888.	1544346.	123413.	375358.	1044873.	704.
3000.-	4000.	23218.	78779808.	1318549.	107190.	393857.	803738.	5281.
4000.-	5000.	7446.	32592560.	663697.	61076.	292981.	302446.	758.
5000.-	6000.	2015.	10901534.	257607.	32678.	153512.	71416.	0.
6000.-	7000.	683.	4366543.	112445.	27547.	60344.	24552.	0.
7000.-	8000.	303.	2254944.	61760.	10933.	36159.	11633.	3033.
8000.-	9000.	149.	1265683.	36213.	13288.	18805.	3251.	868.
9000.-	10000.	79.	750683.	22380.	5935.	12849.	1677.	613.
10000.-	15000.	170.	2012894.	66212.	33826.	21529.	1951.	3282.
15000.-	20000.	44.	792019.	29228.	16040.	11225.	603.	861.
20000.-	25000.	22.	517780.	20022.	10980.	7096.	297.	1023.
25000.-	30000.	12.	345980.	13716.	8692.	2329.	256.	989.
30000.-	35000.	7.	222589.	9018.	6927.	1760.	54.	0.
35000.-	40000.	5.	186114.	7662.	6409.	357.	0.	0.
40000.-	45000.	5.	206607.	8584.	6124.	2394.	20.	0.
45000.-	50000.	2.	93432.	3919.	3882.	0.	0.	0.
50000.-	75000.	7.	412534.	17566.	16278.	583.	0.	0.
75000.-	100000.	2.	170263.	7376.	6738.	0.	0.	0.
100000.-	150000.	2.	265507.	11662.	11565.	0.	0.	0.
150000.-	0.	1.	463310.	20706.	13903.	6803.	0.	0.
TOTAL	255920.	432298560.	6092200.	-576496.	1661405.	3686218.	17416.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.-	0.	-1239763.	-1239763.	-1239763.	-1239763.	0.
0.-	500.	-12275.	15585.	15585.	15585.	0.
500.-	1000.	39563.	247650.	247650.	247650.	0.
1000.-	2000.	375011.	1558510.	1558510.	1558510.	0.
2000.-	3000.	498772.	1543646.	1544350.	1544350.	0.
3000.-	4000.	501048.	1304787.	1310069.	1310069.	0.
4000.-	5000.	354058.	656505.	657263.	657263.	0.
5000.-	6000.	186190.	257607.	257607.	257607.	0.
6000.-	7000.	87892.	112445.	112445.	112445.	0.
7000.-	8000.	47093.	58727.	61760.	61760.	0.
8000.-	9000.	32093.	35345.	36213.	36213.	0.
9000.-	10000.	18785.	20462.	21076.	21076.	0.
10000.-	15000.	55356.	57307.	60589.	60589.	0.
15000.-	20000.	27265.	27869.	28730.	28730.	0.
20000.-	25000.	18077.	18374.	19397.	19397.	0.
25000.-	30000.	12011.	12268.	13258.	13258.	0.
30000.-	35000.	8688.	8742.	8742.	8742.	0.
35000.-	40000.	6766.	6766.	6766.	6766.	0.
40000.-	45000.	8518.	8539.	8539.	8539.	0.
45000.-	50000.	3882.	3882.	3882.	3882.	0.
50000.-	75000.	16861.	16861.	16861.	16861.	0.
75000.-	100000.	6738.	6738.	6738.	6738.	0.
100000.-	150000.	11565.	11565.	11565.	11565.	0.
150000.-	0.	20706.	20706.	20706.	20706.	0.
TOTAL		1084908.	4771127.	4788543.	4788543.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS		NFTD	UNFTD	NSPD	UNSPD	NPCC	UNPC	NOST	UNOS	NSTC	UNSTC
-99999.-	0.	8463.	485852.	0.	19085.	0.	283307.	0.	0.	0.	0.
0.-	500.	430.	277.	172.	627.	13683.	10327.	0.	0.	0.	0.
500.-	1000.	0.	0.	1052.	1794.	42199.	44498.	0.	0.	0.	0.
1000.-	2000.	103.	255.	623.	615.	107542.	19471.	0.	1869.	0.	0.
2000.-	3000.	0.	0.	615.	13866.	46748.	19991.	102.	13.	0.	0.
3000.-	4000.	95.	0.	95.	1658.	22739.	6476.	287.	5464.	0.	0.
4000.-	5000.	79.	0.	0.	0.	7288.	2970.	79.	192.	0.	0.
5000.-	6000.	0.	0.	196.	425.	1819.	7375.	0.	0.	0.	0.
6000.-	7000.	0.	0.	22.	180.	661.	342.	0.	0.	0.	0.
7000.-	8000.	0.	0.	0.	0.	279.	0.	24.	1478.	0.	0.
8000.-	9000.	0.	0.	34.	444.	109.	1298.	5.	1001.	0.	0.
9000.-	10000.	6.	2479.	6.	322.	63.	383.	3.	538.	0.	0.
10000.-	15000.	34.	27931.	61.	10583.	54.	4052.	20.	1033.	0.	0.
15000.-	20000.	7.	10247.	10.	11751.	25.	701.	1.	0.	0.	0.
20000.-	25000.	4.	738.	7.	804.	9.	462.	2.	128.	0.	0.
25000.-	30000.	4.	1469.	2.	789.	5.	154.	1.	152.	0.	0.
30000.-	35000.	2.	793.	2.	415.	3.	120.	0.	0.	0.	0.
35000.-	40000.	4.	958.	1.	1411.	0.	195.	0.	0.	0.	0.
40000.-	45000.	1.	313.	2.	579.	2.	105.	0.	0.	0.	0.
45000.-	50000.	2.	1759.	0.	440.	0.	45.	0.	0.	0.	0.
50000.-	75000.	4.	20359.	3.	5439.	0.	202.	0.	0.	0.	0.
75000.-	100000.	2.	11724.	0.	887.	0.	157.	0.	0.	0.	0.
100000.-	150000.	2.	1625.	0.	405.	0.	82.	0.	0.	0.	0.
150000.-	0.	0.	0.	1.	562.	0.	60.	0.	0.	0.	0.
TOTAL		9246.	566785.	2910.	73090.	243235.	402780.	528.	11872.	0.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	TOTAL NUM	UNTOT
-99999.- 0.	8463.	788245.
0.- 500.	14285.	11232.
500.- 1000.	43252.	46292.
1000.- 2000.	108269.	22210.
2000.- 3000.	47466.	33870.
3000.- 4000.	23218.	13599.
4000.- 5000.	7446.	3163.
5000.- 6000.	2015.	7800.
6000.- 7000.	683.	522.
7000.- 8000.	303.	1478.
8000.- 9000.	149.	2743.
9000.- 10000.	79.	3724.
10000.- 15000.	170.	43601.
15000.- 20000.	44.	22701.
20000.- 25000.	22.	2134.
25000.- 30000.	12.	2565.
30000.- 35000.	7.	1329.
35000.- 40000.	5.	2564.
40000.- 45000.	5.	998.
45000.- 50000.	2.	2245.
50000.- 75000.	7.	26001.
75000.- 100000.	2.	12769.
100000.- 150000.	2.	2112.
150000.- 0.	1.	622.
TOTAL	255920.	1054529.

TOTAL EXEMPTIONS BY AGI CLASS

PAYS

AGI CLASS	TAGI	TFTD	TSPD	TPCC	TOST	TSTC
-99999.-	0.	-4247.	-46667.	1162.	90.	0.
0.-	500.	200.	0.	10.	0.	0.
500.-	1000.	2699.	-936.	242.	15.	0.
1000.-	2000.	27524776.	1802817.	1406202.	224825.	0.
2000.-	3000.	181698400.	16178696.	13992254.	1181071.	1825.
3000.-	4000.	311661856.	28735952.	26083272.	1961249.	0.
4000.-	5000.	435900096.	38818936.	41401512.	2727332.	9841.
5000.-	6000.	550506113.	48857000.	59628376.	3252675.	3749.
6000.-	7000.	597543552.	54787576.	65753360.	3209964.	22591.
7000.-	8000.	565355393.	53920952.	64526576.	2846584.	18601.
8000.-	9000.	480671552.	46794192.	54363696.	2253107.	3291.
9000.-	10000.	372480832.	38037528.	42032816.	1594854.	9232.
10000.-	15000.	827825505.	90776336.	90360416.	3030555.	67486.
15000.-	20000.	283398400.	36056984.	25595300.	703584.	9249.
20000.-	25000.	155824672.	22308092.	14491636.	286896.	0.
25000.-	30000.	97835632.	17988544.	7959226.	152092.	0.
30000.-	35000.	71930944.	15298194.	5680536.	87420.	0.
35000.-	40000.	51923672.	11103278.	4754201.	63534.	6398.
40000.-	45000.	38131376.	9306126.	3893827.	38713.	1561.
45000.-	50000.	30873752.	7389664.	2526906.	28487.	1006.
50000.-	75000.	80624240.	23121316.	7946895.	59427.	0.
75000.-	100000.	29081340.	10784984.	1706634.	13809.	0.
100000.-	150000.	18811584.	7346623.	2238374.	4995.	2922.
150000.-	0.	25482244.	10347470.	1971607.	3051.	0.
TOTAL		5235102733.	589713025.	538319617.	23724408.	157755.

EFFECTIVE TAX RATES BY AGI CLASS

AGI CLASS	TTDUE/(AGI(I)+AGI(I+24))
-99999.- 0.	-0.00868
0.- 500.	0.00003
500.- 1000.	0.00005
1000.- 2000.	0.01474
2000.- 3000.	0.21635
3000.- 4000.	0.48595
4000.- 5000.	0.77331
5000.- 6000.	1.04572
6000.- 7000.	1.29012
7000.- 8000.	1.44901
8000.- 9000.	1.60219
9000.- 10000.	1.71925
10000.- 15000.	1.96061
15000.- 20000.	2.42544
20000.- 25000.	2.60418
25000.- 30000.	2.61409
30000.- 35000.	2.62031
35000.- 40000.	2.59913
40000.- 45000.	2.48621
45000.- 50000.	2.64782
50000.- 75000.	2.44470
75000.- 100000.	2.33489
100000.- 150000.	2.01389
150000.- 0.	2.22072

APPENDIX C

COMPUTER PROGRAMS IN THE IOWA TAX MODEL

Information in this appendix in addition to the text explanations in Chapters III, IV, and V and operational instructions in Appendix A should allow this study to be duplicated if tax data were available identical to that used in this model. Adaption to other data will be easy or difficult depending on needed changes due to different state provisions and/or availability of data. Some reference may be necessary to Appendix E where a 1966 Iowa income tax return and instructional book are filed.

The following pages very briefly indicate the function of each program. The program listings and permanent data in the files (with the exception of file data containing the data on 10776 Iowa Income tax payers) follow.

Preliminary Programs:

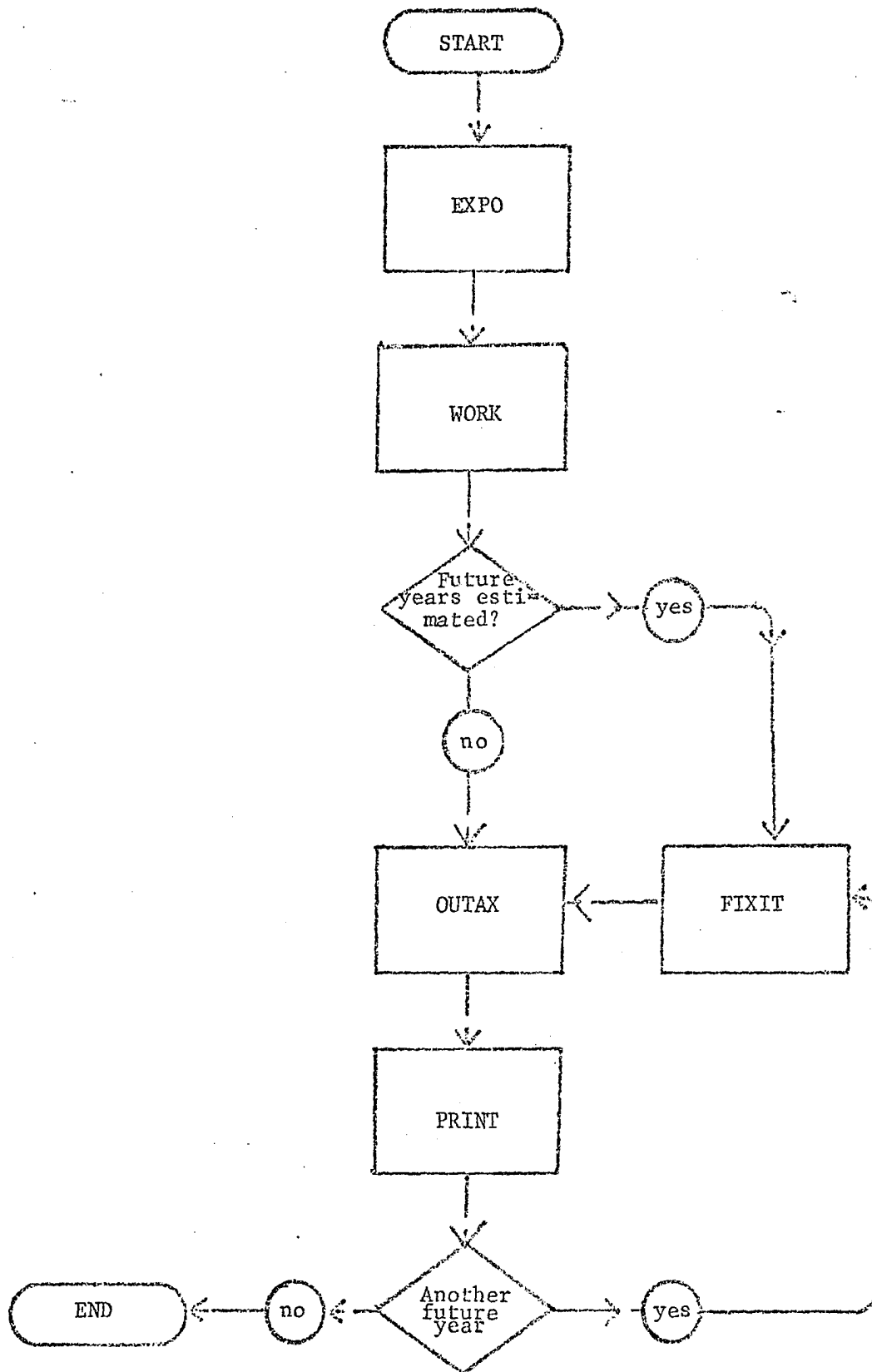
1. Program #1. This program takes data cards received from the Iowa Department of Revenue and stores them on the disk in a file called DATA. This program is written with IDEAL sub-routines all other programs are written in Fortran IV.
2. Program #2. The program stores weights for the sample year and then the number of returns in the sample in a file called SAMPL. CORF 1 is the number of pay returns for each class followed by the number of no pay returns for each class. CORF2 is the number of returns in the sample by income class for pay returns followed by no pay returns.
3. Program #3. Stores the fixed income brackets in file named SAMPL.
4. Program #4. Files SAVE and NYR are created as permanent files on the disk. SAVE is used only internally in the program sequences. NYR received data as input from cards when projections are made for years other than the base year.
5. Program #5. Subroutine ITAX must be stored on the disk. This key to the program logic contained in the program WORK.
6. Program #6.
 - 6a. This brief program stores intercepts and slopes of equations used to estimate the total number of returns by income class. The contents of the file were created by least squares regression for the years 1959-1966.
 - 6b. This file is used to store intercepts and slopes of adjusted trend lines. The intercepts have been adjusted so that the equation of the estimating line estimates the known number of returns in fiscal 1967.
7. Program #7. This is not a program but a listing of the programs and subroutines necessary to run the Iowa Tax Model. Many system subroutines had to be removed to allow for the tax model data and programs.

Main Programs:

- Program #1. Stored on the disk is program EXPO. The purpose of this program is to make an exposition of the program options used and print them out in detail. The first 2 pages of the sample print out in appendix B is the output of EXPO. This program calls WORK.
- Program #2. Stored on the disk is program WORK. This program does all the major calculations of the model. The comments on the program listing indicate the provision being dealt with. Key to the program is its use of calculated go to statements to allow easy programming of additional options. WORK calls FIXIT or OUTAX.
- Program #3. Stored on the disk is program FIXIT. This program is used to estimate future years. The program always calls OUTAX.
- Program #4. Stored on the disk is program OUTAX. It makes final preparation in data and prints out most of the remaining output. This program always calls PRINT.
- Program #5. The program PRINT prints out additional output. If the sample year is being estimated the program ends. If additional years are being computed, the program returns to FIXIT until all years are completed then ends.

Due to the size of the Iowa Tax Model it was necessary to segment model into the series of related programs described above. The flow diagram on the following page shows the logical relationships among the main programs.

DIAGRAMATIC REPRESENTATION OF MAIN PROGRAMS IN THE IOWA TAX MODEL



Preliminary Program #1

```

M 01 PHASE NONX
// JOB
// FOR
*LIST ALL
*IOCS(CARD,TYPEWRITER,KEYBOARD,1132PRINTER,DISK)
*ONE WORD INTEGERS
  DEFINE FILE 1(10776,24,U,NFILE)
  DIMENSION ID(8),D(8),JPRT(80)
  NFILE=1
100 CALL READ(JPRT,80,NPR)
  CALL MASI(JPRT, 1, 2, ID(1))
C
  IF(ID(1))10,10,2
2  CALL MASI(JPRT, 3, 3, ID(2))
  CALL MASI(JPRT, 4, 4, ID(3))
  CALL MASI(JPRT, 5, 6, ID(4))
  CALL MASI(JPRT, 7, 7, ID(5))
  CALL MASI(JPRT, 8, 8, ID(6))
  CALL MASI(JPRT, 9, 9, ID(7))
  CALL MASI(JPRT,80,80, ID(8))
  CALL MADI(JPRT,10,18, D(1))
  CALL DFLT(D(1))
  CALL MADI(JPRT,19,27, D(2))
  CALL DFLT(D(2))
  CALL MADI(JPRT,28,36, D(3))
  CALL DFLT(D(3))
  CALL MADI(JPRT,37,45, D(4))
  CALL DFLT(D(4))
  CALL MADI(JPRT,46,53, D(5))
  CALL DFLT(D(5))
  CALL MADI(JPRT,54,61, D(6))
  CALL DFLT(D(6))
  CALL MADI(JPRT,62,70, D(7))
  CALL DFLT(D(7))
  CALL MADI(JPRT,71,75, D(8))
  CALL DFLT(D(8))
  DO 9 I=1,7
9  D(I)=D(I)/100
7  WRITE(1,NFILE)(ID(I),I=1,8),(D(I),I=1,8)
  GO TO 100
10 CONTINUE
  CALL EXIT
  END
CUTOFF MUST HAVE DOUBLE PUNCH

VARIABLE ALLOCATIONS
D      =0016 ID      =001F JPRT =006F NFILE=0070 NPR  =0071 I      =0072

UNREFERENCED STATEMENTS
7

STATEMENT ALLOCATIONS
100 =00A8 2      =00C0 9      =01D7 7      =01EB 10      =0217

FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS

CALLED SUBPROGRAMS
READ  MASI  MADI  DFLT  FLD  FSTQ  FSTOX  FDVRX  FLOAT  TYPEZ  SFIO
SDWRT SDCOM SDFX  SDIX

INTEGER CONSTANTS
1=0074 80=0075 2=0076 3=0077 4=0078 5=0079 6=007A
10=007E 18=007F 19=0080 27=0081 28=0082 36=0083 37=0084
54=0088 61=0089 62=008A 70=008B 71=008C 75=008D 100=008E

CORE REQUIREMENTS FOR
COMMON 0 VARIABLES 116 PROGRAM 420

END OF COMPILEATION

```

Preliminary Program #2

```

// FOR
*LIST ALL
*ONE WORD INTEGERS
*IOCS(CARD,1132 PRINTER,DISK)
      DIMENSION CORF1(48),CORF2(48), WATE(48)
      DEFINE FILE 5(3,96,U,LOC)
      SUM1=0.0
C      THIS PROGRAM USES CORF1 AND CORF2 TO CALCULATE WATE AND PUTS ON
C      FILE 5CALLED SAMPL.

      SUM =0.0
      READ(2,10)(CORF1(I),I=1,48)
      READ(2,10)(CORF2(I),I=1,48)
10  FORMAT(10F8.2)
      DO 20 I=1,48
      WATE(I)=CORF1(I)/CORF2(I)
      IF(CORF2(I))45,46,45
46  WATE(I) = 0.0
45  SUM1=SUM1+CORF1(I)
      SUM=SUM+CORF2(I)
20  CONTINUE
      WRITE(5,1)(WATE(I),I=1,48)
      WRITE(5,3)(CORF2(I),I=1,48)
      READ(5,1)(WATE(I),I=1,48)
      READ(5,3)(CORF2(I),I=1,48)
      WRITE(3,35) WATE
      WRITE(3,40)
40  FORMAT(1H ,///)
35  FORMAT(8F12.2)
      WRITE(3,35) CORF2
      WRITE(3,35) SUM1,SUM
      CALL EXIT
      END

```

VARIABLE ALLOCATIONS
CORF1=0066 CORF2=00C6 WATE =0126 SUM1 =0128 SUM =012A LOC =012C I =012D

STATEMENT ALLOCATIONS
10 =0137 40 =013A 35 =0140 46 =01A2 45 =01AB 20 =018E

FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS

CALLED SUBPROGRAMS
FADDX FDIVX FLDX FSTO FSTOX SRED SWRT SCOMP SFIO SIOAF SIOFX SIOF SUBSC CARDZ
PRNTZ SDFIO SDRED SDWRT SDCOM SDFX

REAL CONSTANTS
.0000000E 00=0130

INTEGER CONSTANTS
2=0132 1=0133 48=0134 5=0135 3=0136

CORE REQUIREMENTS FOR
COMMON 0 VARIABLES 304 PROGRAM 268

END OF COMPILATION

```
// XEQ 1
*FILES(5,SAMPL)
```

1.00	1.00	1.00	64.28	94.36	97.24	98.41	98.66
98.19	97.66	96.81	95.00	97.59	87.26	73.70	58.42
47.00	35.74	26.47	20.53	34.15	12.03	6.00	3.53
78.37	86.06	95.69	103.84	102.52	95.94	79.22	49.17
22.80	12.16	5.76	3.20	6.84	1.80	1.04	1.08
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

2.00	1.00	3.00	203.00	763.00	910.00	987.00	1016.00
938.00	777.00	587.00	415.00	721.00	192.00	95.00	63.00
47.00	39.00	34.00	32.00	39.00	29.00	27.00	26.00
108.00	166.00	452.00	1043.00	463.00	242.00	94.00	41.00
30.00	25.00	26.00	25.00	25.00	25.00	22.00	12.00
7.00	5.00	5.00	2.00	7.00	2.00	2.00	1.00
956037.12	10776.00						

Preliminary Program #3

```
// JOB
// FOR
*ONE WORD INTEGERS
*IOCS(1132 PRINTER,DISK, TYPEWRITER,CARD)
*LIST ALL
  DIMENSION AGIBR(24)
  DEFINE FILE 5(3,96,U,LOC)
  READ(2,10) (AGIBR(I),I=1,24)
  Z7=0.0
10 FORMAT(8F10.0)
  WRITE(5,2) (AGIBR(I),Z7,I=1,24)
  READ(5,2) (AGIBR(I),Z7,I=1,24)
  WRITE(3,10) AGIBR
  CALL EXIT
END
```

VARIABLE ALLOCATIONS
AGIBR=0036 Z7 =0038 LOC =003A I =003B

STATEMENT ALLOCATIONS
10 =0045

FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS

CALLED SUBPROGRAMS
FLD FSTO WRTYZ SRED SWRT SCOMP SFIO SIOAF SIOFX SUBSC CARDZ PRNTZ SOFIO SDRED SDWRT
SDCOM SDFX SDF

REAL CONSTANTS
•000000E 00=003E

INTEGER CONSTANTS
2=0040 1=0041 24=0042 5=0043 3=0044

CORE REQUIREMENTS FOR
COMMON 0 VARIABLES 62 PROGRAM 114

END OF COMPILATION

// XEQ
*FILES(5,SAMPL) 1

-99999:	0:	500:	1000:	2000:	3000:	4000:	5000:
6000:	7000:	8000:	9000:	10000:	15000:	20000:	25000:
30000:	35000:	40000:	45000:	50000:	75000:	100000:	150000:

Preliminary Program #4

This is not actually a program, just an operation to reserve space so no program follows.

Preliminary Program #5

```
// JOB
// FOR
*ONE WORD INTEGERS
```

```
*LIST ALL
SUBROUTINE ITAX (NBRAK,BRAKT,RATE,BAL,TAX)
  DIMENSION BRAKT(1),RATE(1)
  DO 10 I=1,NBRAK
    IF (BAL-BRAKT(I)) 11,10,10
  10 CONTINUE
    MAX=NBRAK
    GO TO 15
  11 MAX=I-1
  15 TAX=(BAL-BRAKT(MAX))*RATE(MAX)
    N=MAX-1
    IF(N) 25,25,19
  19 DO 20 I=1,N
  20 TAX=TAX+(BRAKT(I+1)-BRAKT(I))*RATE(I)
  25 RETURN
  END
```

```
VARIABLE ALLOCATIONS
  I      =0000  MAX  =0001  N      =0002
```

```
STATEMENT ALLOCATIONS
  10      =002C  11      =003A  15      =0040  19      =0057  20      =005B  25      =007B
```

```
FEATURES SUPPORTED
  ONE WORD INTEGERS
```

```
CALLED SUBPROGRAMS
  FADD  FSUBX  FMPYX  FLD  FLDX  FSTO  SUBSC  SUBYN
```

```
INTEGER CONSTANTS
  1=0006
```

```
CORE REQUIREMENTS FOR ITAX
  COMMON      0  VARIABLES      6  PROGRAM      120
```

```
END OF COMPILE
```

Preliminary Program #6a

```
// JOB
// FOR
// ONE WORD INTEGERS
// IOCS(1132PRINTER,TYPEWRITER,DISK,CARD)
*LIST ALL
```

```
DEFINE FILE2(48,4,U,LOC)
DIMENSION YCEPT(48),SLOPE(48)
C DATA FOR THIS PROGRAM IS WITH THE 'H' SERIES PROGRAMS AND DATA IS
C MARKED: ONLY THE FIRST 50 CARDS ARE USED. PLACE CARD 1124 AT THE
C BEGINNING OF THE FIRST 25 CARDS AND REMOVE CARD 1125. PLACE
C 1124 FOLLOWED BY THE SECOND 25 CARDS. REMOVE CARD 1225. THERE
C WILL BE ONLY 48 CARDS AND THEY MUST BE IN THE CORRECT ORDER.
```

```
DO 5 I=1,48
  READ(2,100) YCEPT(I),SLOPE(I)
5 CONTINUE
100 FORMAT(30X,2F15.2)
LOC=1
DO 10 I=1,48
  WRITE(2,1) YCEPT(I),SLOPE(I)
  READ(2,1) YCEPT(I),SLOPE(I)
  WRITE(3,110) YCEPT(I),SLOPE(I)
110 FORMAT(2F15.3)
10 CONTINUE
CALL EXIT
END
```

```
VARIABLE ALLOCATIONS
YCEPT=0066 SLOPE=00C6 LOC =00C8 1 =00C9
```

```
STATEMENT ALLOCATIONS
100 =00D0 110 =00D4 5 =00FC 10 =012F
```

```
FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS
```

```
CALLED SUBPROGRAMS
FLD FSTD WRTY2 SRED SWRT SCOMP SF10 SIOFX SUBSC CARD2 PRNT2 SDF10
SDFX
```

```
INTEGER CONSTANTS
1=00CC 48=00CD 2=00CE 3=00CF
```

```
CORE REQUIREMENTS FOR
COMMON 0 VARIABLES 204 PROGRAM 108
```

```
END OF COMPILATION
```


Preliminary Program #6b


```
// JOB
// FOR
*ONE WORD INTEGERS
*IOCS(1132PRINTER,TYPEWRITER,DISK,CARD)
*LIST ALL
```

```
DEFINE FILE2(48,4,U,LOC)
DIMENSION YCEPT(48),SLOPE(48)
C DATA FOR THIS PROGRAM IS WITH THE 'H' SERIES PROGRAMS AND DATA IS
C MARKED: ONLY THE FIRST 50 CARDS ARE USED. PLACE CARD 1124 AT THE
C BEGINNING OF THE FIRST 25 CARDS AND REMOVE CARD 1125. PLACE
C 1124 FOLLOWED BY THE SECOND 25 CARDS. REMOVE CARD 1125. THERE
C WILL BE ONLY 48 CARDS AND THEY MUST BE IN THE CORRECT ORDER.
DO 5 I=1,48
  READ(2,100) YCEPT(I),SLOPE(I)
  5 CONTINUE
100 FORMAT(30X,2F15.2)
LOC=1
DO 10 J=1,48
  WRITE(2,1) YCEPT(J),SLOPE(J)
  READ(2,1) YCEPT(J),SLOPE(J)
  WRITE(3,110) YCEPT(J),SLOPE(J)
110 FORMAT(2F15.3)
10 CONTINUE
CALL EXIT
END
```

```
VARIABLE ALLOCATIONS
YCEPT=0065 SLOPE=00C6 LOC =00C8 1 =00C9
```

```
STATEMENT ALLOCATIONS
100 =00D0 110 =00D4 5 =00FC 10 =012F
```

```
FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS
```

```
CALLED SUBPROGRAMS
FLD FSTO WRTYZ SRED SWRT SCOMP SFIO SIOFX SUBSC CARDZ PRNTZ SDFIO
SDFX
```

```
INTEGER CONSTANTS
1=00CC 48=00CD 2=00CE 3=00CF
```

```
CORE REQUIREMENTS FOR
COMMON 0 VARIABLES 204 PROGRAM 108
```

```
END OF COMPILATION
```


Preliminary Program #7

SFAR 0004 126A
 SFARX 0004 126E
 SFARX 0004 126E
 SCIF 0003 1272
 SCIF 0003 1275
 SGOIO 0003 1278
 SIAP 0004 1278
 SIARX 0003 127F
 SLITF 0005 1282
 SLITT 0002 1287
 SPFD 0015 1289
 STOP 0002 129E
 SUPIN 0003 12A0
 SURSC 0003 12A3
 TSTOP 0002 12A6
 TSTRT 0002 12A8
 TTEST 0002 12AA
 TS-T 0006 12AC
 XOD 0006 12B2
 XMD 0005 12B8
 XMS 0003 12BD
 IL501 0003 12C0

0001 0000 3813 0075 0000

SDFIO 0013 12C3

SDAF
 SDAI
 SDCOM
 SDF
 SDFX
 SDI

SDIX
 SDRED
 SDWRT

SFIO 003F 12D6

SIOI
 SIOAI
 SIOF
 SIOAF
 SIOFX
 SCOMP

SWRT

SRD

SDIX

TYPEO 0013 1314

WRTYZ 0009 1327

HOLEF 0009 132C

IOLOG 0002 1335

CPLQG 0004 1337

IL502 0019 133B

FOUR 0004 1354

NOV 0002 1358

NOV 0002 1358

DFLT 0002 1358

TYPE 0004 1358

PACK 0004 1358

WRTS 0007 1359

WRTN 0003 1370

DFIX 0003 1373

SKSPD 0007 1376

PRCH 0013 137D

MAS1

MSIA

MSIA

CAVRT 0012 1380

DATA 0010 4780 0000 0000 33D0

ESTL 0010 4780 0000 0000 0010

ESTL 0010 4780 0000 0000 0010

YEAR 0010 4780 0000 0000 0010

SAVPL 0010 4780 0000 0000 0010

SAVE	0070	47CC	0000	0000	0070
ITAX	0000	4830			
EXPO	0075	4839			
WOPK	00A7	48AE			
FIXIT	0034	4950			
OUTAX	0094	4984			
PRINT	0046	4A18			
ACPTS	0005	4A5E			
STNDV	006F	4A63			
EBCTB	0004	4AD2			

10RD 3A56

Main Program #1

```

// JOB
// FOR
*ONE WORD INTEGERS
*IOCSICARD,1132 PRINTER,DISK,TYPEWRITER)
*LIST ALL
COMMON NUMYR,NEXIT,J1,J2,M,INDIC,NROUT
COMMON BRAKT(24),RATE(24),BRAKF(24),RATEF(24),AMTF1,AMTF2,AMTF3,
1SIMF,FTDLR,AMTS1,AMTS2,AMTS3,SIMS,SPDLR,RATES,AMTP1,AMTP2,AMTP3,
2BRAKO(24),RATEO(24),AMTO1,AMTO2,AMTO3,SIMCO,OSTLR,BRAKE(24),
3AMTEX(24),IFTD,ISPD1,ISPD2,IPCC,IOST,ISTC,IN,NBRAK,MBRAK,
4LBRAK,JBRAK,IBRAK
NUMYR=0.0
NEXIT=0.0
J1=0.0
J2=0.0
M=0.0
READ(2,10) NBRAK,IBRAKT(1),RATE(1),I=1,NBRAK)
READ(2,10) MBRAK,IBRAKF(1),RATEF(1),I=1,MBRAK)
READ(2,20) AMTF1,AMTF2,AMTF3,SIMF,FTDLR
READ(2,20) AMTS1,AMTS2,AMTS3,SIMS,SPDLR,RATES
READ(2,20) AMTP1,AMTP2,AMTP3
READ(2,10) LBRAK,IBRAKO(1),RATEO(1),I=1,LBRAK)
READ(2,20) AMTO1,AMTO2,AMTO3,SIMCO,OSTLR
READ(2,10) JBRAK,IBRAKE(1),AMTEX(1),I=1,JBRAK)
READ(2,30) IFTD,ISPD1,ISPD2,IPCC,IOST,ISTC,IN,NROUT,IBRAK
10 FORMAT(12/4(F10.0,F10.2))
20 FORMAT(8F10.0)
30 FORMAT(10I8)

C
,THIS PROGRAM IS EXPO
IT PRINTS OUT THE OPTIONS CONCERNING THE RUN WITH WORK
BRAKT(NBRAK+1)=0.0
BRAKF(MBRAK+1)=0.0
BRAKO(LBRAK+1)=0.0
BRAKE(JBRAK+1)=0.0
K=1
WRITE(3,50)
50 FORMAT(1H1, 'THE STATE TAX IS CALCULATED MARGINALLY USING THE FOLLO
1WING BRACKETS AND RATES: /1H, 15X, 'BRACKET', 18X, 'RATE')
DO 70 I=1,NBRAK
WRITE(3,60) BRAKT(I),BRAKT(I+1),RATE(I)
60 FORMAT(1H, 9X,F8.0, '- ',F8.0,12X,F6.4)
70 CONTINUE
WRITE(3,80) K
80 FORMAT(//,1H, 55X 'PROVISION- '12, '- //')
85 FORMAT(//,1H1,55X 'PROVISION- '12, '- //')
K=K+1
GO TO (150,150,150,250),IFTD
150 WRITE(3,140)
140 FORMAT(1H, 'THE FEDERAL TAX DEDUCTION IS CALCULATED BY THE FOLLO
1NG METHOD-')
WRITE(3,160)
160 FORMAT(1H, 10X, 'MARGINALLY BY THE FOLLOWING BRACKETS AND RATES',/
11H, 15X, 'BRACKET', 18X, 'RATE')
DO 190 I=1,MBRAK
WRITE(3,180) BRAKF(I),BRAKF(I+1),RATEF(I)
180 FORMAT(1H, 10X,F8.0, '- ',F8.0,12X,F6.4)
190 CONTINUE
GO TO (290,200,230,300),IFTD
200 WRITE(3,210)
210 FORMAT(1H, 'AND CAN BE NO GREATER THAN THE LIMIT WHICH EQUALS-')
WRITE(3,220) AMTF1,AMTF2,AMTF3
220 FORMAT(1H, 15X, 'NUMBER OF ADULTS *',F5.2, '+ NUMBER OF CHIL
1DREN *',F5.2, ' + NUMBER OF OTHER DEPENDENTS * /1H, 15X,F5.2, '.')
GO TO 300
230 WRITE(3,210)
WRITE(3,240) FTDLR
240 FORMAT(1H, 'ADJUSTED GROSS INCOME*',F6.4, '.')
GO TO 300
250 WRITE(3,260)
260 FORMAT(1H, 'THE FEDERAL TAX DEDUCTION IS NOT USED,')
GO TO 300
290 WRITE(3,295) SIMF
295 FORMAT(1H, 'AND CAN BE NO GREATER THAN',F14.2, '.')
300 WRITE(3,80) K
K=K+1
GO TO (305,305,305,390),ISPD1
305 WRITE(3,310)
310 FORMAT(1H, 'THE STATE PERSONAL DEDUCTION IS' ' CALCULATED BY THE
1FOLLOWING METHOD IF ITEMIZED-')

```

280
300


```

GO TO (320,340,370,390),ISPDI
320 WRITE (3,330) SPDLR
330 FORMAT(1H,10X,'CAN BE NO GREATER THAN',F5.2,'*ADJ GROSS INCOME.'/)
GO TO 500
340 WRITE (3,350)
350 FORMAT(1H,10X,'CAN BE NO GREATER THAN-.'/)
WRITE (3,220) AMTS1,AMTS2,AMTS3
GO TO 500
370 WRITE (3,380)
380 FORMAT(1H,10X,'THE ITEMIZED AMOUNT IS EQUAL TO THE STATE PERSONAL
1 DEDUCTION.')
GO TO 500
390 WRITE (3,400)
400 FORMAT(1H,10X,'THE STATE PERSONAL DEDUCTION (ITEMIZED) IS NOT USED
1.')
GO TO (505,505,570),ISPDI
505 WRITE (3,510) RATES
510 FORMAT(1H,10X,'AND IF NOT ITEMIZED THE STATE PERSONAL DEDUCTION IS EQ
1UAL TO-.'/1H,15X,'(AGI-FTD)*',F5.2,'.'/1H,25X,'AGI = ADJUSTED GRO
2SS INCOME.'/1H,25X,'FTD = FEDERAL TAX DEDUCTION.')
IF (ISPDI-2) 520,540,600
520 WRITE (3,530) SIMS
530 FORMAT(1H,25X,'AND CAN BE NO GREATER THAN',F8.2,'.')
GO TO 600
540 WRITE (3,550)
550 FORMAT(1H,10X,'AND IS LIMITED BY THE FORMULA-')
WRITE (3,220) AMTS1,AMTS2,AMTS3
GO TO 600
570 WRITE (3,580)
580 FORMAT(1H,10X,'THE STATE PERSONAL DEDUCTION NON-ITEMIZED IS NOT U
1SED.')
600 WRITE (3,600) K
K=K+1
GO TO (630,610,650),IPCC
610 WRITE (3,620)
620 FORMAT(1H,10X,'THE PERSONAL CHILD SUBPROGRAM IS A DEDUCTION AND IS E
1QUAL TO-')
WRITE (3,220) AMTP1,AMTP2,AMTP3
GO TO 700
630 WRITE (3,640)
640 FORMAT(1H,10X,'THE PERSONAL AND CHILD CREDIT IS EQUAL TO-')
WRITE (3,220) AMTP1,AMTP2,AMTP3
GO TO 700
650 WRITE (3,660)
660 FORMAT(1H,10X,'THE PERSONAL AND CHILD CREDIT IS NOT USED.')
700 WRITE (3,680) K
K=K+1
GO TO (710,710,710,800),IOST
710 WRITE (3,720)
720 FORMAT(1H,10X,'THE OUT OF STATE TAX CREDIT IS CALCULATED MARGINALLY U
1SING THE FOLLOWING BRACKETS AND RATES-.'/1H,15X,'BRACKET',15X,'RAT
2E')
DO 740 I=1,LBRK
WRITE (3,730) BRAKE(I),BRAKE(I+1),RATE(I)
730 FORMAT(1H,9X,F8.0,'-',F8.0,12X,F6.4)
740 CONTINUE
GO TO (750,760,780,800),IOST
750 WRITE (2,295) SIMO
GO TO 900
760 WRITE (3,770)
770 FORMAT(1H,10X,'AND CAN BE NO GREATER THAN-')
WRITE (3,220) AMT01,AMT02,AMT03
GO TO 900
780 WRITE (3,210)
790 WRITE (3,790) OSTLR
790 FORMAT(1H,10X,'ADJUSTED GROSS INCOME',F6.4,'.')
GO TO 900
800 WRITE (3,810)
810 FORMAT(1H,10X,'THE OUT OF STATE TAX CREDIT IS NOT USED.')
900 WRITE (3,830) K
GO TO (910,910,990),ISTC
910 WRITE (3,920)
920 FORMAT(1H,10X,'THE SALES TAX CREDIT IS EQUAL TO THE AMOUNT MULTIPLIED
1 BY THE NUMBER OF ADULTS AND CHILDREN IN THE FAMILY.'
2/1H,15X,'BRACKET',23X,'AMOUNT')
DO 940 I=1,LBRK
WRITE (3,930) BRAKE(I),BRAKE(I+1),AMTEX(I)

```

```

930 FORMAT(1H,9X,F8.0,'-',F8.0,'-',12X,F9.4)
940 CONTINUE
950 IF(IJSTC-2)950,970,1100
950 WRITE(3,960)
960 FORMAT(1H,'THE AMOUNT EQUALS ADJUSTED GROSS INCOME.'////)
970 GO TO 1100
970 WRITE(3,980)
980 FORMAT(1H,'THE AMOUNT EQUALS NET TAXABLE INCOME.'////)
990 GO TO 1100
990 WRITE(3,1000)
1000 FORMAT(1H,'THE SALES TAX CREDIT IS NOT USED.'////)
1100 CALL LINKWORK)
END

```

VARIABLE ALLOCATIONS

NUMYR=7FFF	NEXIT=7FFF	J1 =7FFD	J2 =7FFC	M =7FFB	INDIC=7FFA	NROUT=7FF9	BRACKT=7FF6	PA
RATEF=7F66	AMTF1=7F36	AMTF2=7F34	AMTF3=7F32	SIME=7F30	FTDLR=7F2E	AMTS1=7F2C	AMTS2=7F2A	PA
SDCLR=7F24	RATFS=7F22	AMTP1=7F20	AMTP2=7F1E	AMTP3=7F1C	BRACKC=7F1A	RATEO=7F18	AMTS3=7F16	PA
SIMO =7FE4	CSLTX=7E92	BRACK=7E90	AMTEX=7E80	IFTD =7E51	ISPD1=7E50	ISPD2=7E4F	IPCC =7E4E	PA
IN =7E43	NERAK=7E4A	MERAK=7E49	LBRAK=7E48	JBRAK=7E47	IBRAK=7E46	I =0000	K =0001	PA

STATEMENT ALLOCATIONS

10 =000D	20 =0014	30 =0017	50 =001A	60 =0052	80 =005C	85 =006E	140 =0080	PA
210 =00D7	220 =00F5	240 =0129	260 =013B	295 =0152	310 =0166	330 =0193	330 =01AF	PA
210 =0204	230 =025A	250 =026F	280 =0282	320 =02A2	340 =02C5	360 =02DE	370 =02F7	PA
290 =0352	310 =0364	320 =037C	330 =03C3	350 =03CF	380 =03E3	400 =0404	410 =043F	PA
200 =059D	230 =059D	250 =05A9	290 =05AF	330 =05B5	350 =05C9	370 =05D5	380 =05DD	PA
200 =05F7	230 =05FE	250 =060C	290 =0614	330 =0624	350 =0638	370 =0649	380 =0649	PA
210 =0675	240 =0691	250 =06A1	260 =06A9	280 =06B9	300 =06C5	310 =06C9	320 =06D6	PA
270 =070A	290 =0710	1100 =0714						PA

FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS

CALLED SUBPROGRAMS

FLD	FSTO	FSTOX	IFIX	WRTYZ	SRED	SWRT	SCOMP	SFIO	SIOFX	SIOF	SIOI	SL
-----	------	-------	------	-------	------	------	-------	------	-------	------	------	----

REAL CONSTANTS
.000000E 00=0008

INTEGER CONSTANTS
2=000A 1=000B 3=000C

CORE REQUIREMENTS FOR
COMMON 442 VARIABLES 8 PROGRAM 1808

END OF COMPILATION

Main Program #2

```

// JOB
// FOR
*ONE WORD INTEGERS
*IOCS(CARD,TYPEWRITER,DISK,1132PRINTER)
*LIST ALL
REAL MST
DIMENSION AGIBR(25),TAGI(48),TMST(48),TFTD(48),
1TSPD(48),TPCC(48),TOSTA(48),TSTC(48),RLFTD(48),RLSPD(48),
2RLPCC(48),RLOST(48),RLSTC(48),UNFTD(24),UNSPD(24),UNPC(24),
3UNOS(24),UNSTC(24),SFTD(24),SSPD(24),SPCC(24),SOST(24),SSTC(24),
4RNUM(48),TTDUE(48), WATE(48),BGIBR(24)
DIMENSION IO3(13),ID4(13),ID5(13),ID8(13),D1(13),D2(13),D3(13),
1D4(13),D5(13),D6(13),D8(13)
COMMON NMYR,NEXIT,J1,J2,M,INDIC,AROUT
COMMON BRAKT(24),RATE(24),BRAKF(24),RATEF(24),AMTF1,AMTF2,AMTF3,
1SIMF,FTDLR,AMTS1,AMTS2,AMTS3,SIMS,SPDLR,RATES,AMTP1,AMTP2,AMTP3,
2BRAKO(24),RATEO(24),AMTO1,AMTO2,AMTO3,SIMO,OSTLR,BRAKE(24),
3AMTEX(24),IFTD,ISPDI,ISPD2,IPCC,IOST,ISTC,IN, NBRK,MBRAK,
4LBRK,JBRK,IBRAK
DEFINE FILE 8(629,312,U,NFILE),6(72,28,U,LOC), 5(3,96,U,LOC)
WRITE(1,5000) IFTD,ISPDI,ISPD2,IPCC,IOST,ISTC,IN,NBRK,MBRAK,
1LBRK,JBRK,IBRAK
5000 FORMAT(12I4)

```

220

```

THIS PROGRAM CALCULATES THE IOWA STATE INCOME TAX FOR THE YEAR OF 1966.
THE FOLLOWING ABBREVIATIONS ARE USED
FEDERAL TAX DEDUCTION = FTD
STATE PERSONAL DEDUCTION = SPD
PERSONAL AND CHILD CREDIT = PCC
NOTE THAT UNDER THE PROVISIONS OF THIS PROGRAM PCC CAN ALSO BE
A DEDUCTION.
OUT OF STATE TAX CREDIT = OST
SALES TAX CREDIT = STC
THIS PROGRAM CALLED WORK CONTAINS FIVE SUBPROGRAMS. EACH OF THESE
SUBPROGRAMS CONTAINS A NUMBER OF OPTIONS.
FOR AN EXPLANATION OF THESE OPTIONS CONSULT EITHER BILL PERRY OR
JOHN PABST.

```

```

20 FORMAT(8F10.0)
GO TO (1,5),NROUT
1 READ(5,1)(WATE(I),I=1,48)
GO TO 30
5 DO 6 I=1,48
6 WATE(I)=1.0
30 GO TO (35,40), IBRAK
35 READ(5,2)(AGIBR(I),D7,I=1,24)
GO TO 45
40 READ(5,2)(BGIBR(I),D7,I=1,24)
READ(2,20)(AGIBR(I),I=1,24)
45 BGIBR(25)=0.0
NFILE=1
IACC=0
INDEX=13
IS=1
LI=0
AGIBR(25)=0.0
DO 110 I=1,24
C-----NFTD,NSPD,NPCC,NOST,NSTC INDICATE WHERE GOES NOPAY
SFTD(I)=0.0
SSPD(I)=0.0
SPCC(I)=0.0
SOST(I)=0.0
SSTC(I)=0.0
UNFTD(I)=0.0
UNSPD(I)=0.0
UNPC(I)=0.0
UNOS(I)=0.0
110 UNSTC(I)=0.0
DO 120 J=1,48
RNUM(I)=0.0
TAGI(I)=0.0
TMST(I)=0.0
TFTD(I)=0.0
TSPD(I)=0.0
TPCC(I)=0.0

```

180

460

480

500

520

540

560

580

600

620

640

660

680

700

720

740

760

780

800

820

840

860

880

900

920

```

TOSTA(I)=0.0
TSTC(I)=0.0
RLFTD(I)=0.0
RLSPD(I)=0.0
RLPCC(I)=0.0
RLOST(I)=0.0
RLSTC(I)=0.0
TTDUE(I)=0.0
120 DO 3000 KN=15,IN
130 READ(8,INFILE) (ID1,ID2,ID3(I),ID4(I),ID5(I),ID6,ID7,ID8(I),
ID1(I),D2(I),D3(I),D4(I),D5(I),D6(I),D7,D8(I),I=1,INDEX)
DO 2500 M=1,INDEX
AGI=D1(M)+D2(M)+D3(M)+D4(M)
FTD=D5(M)
OST=D8(M)
FTA=0.0
SPA=0.0
PCCA=0.0
ITEO=2
ITEM=2
ITEN=2
TLFTD=0.0
TLSPD=0.0
TLPCC=0.0
TLOST=0.0
TLSTC=0.0
C----- DETERMINE AGI CLASS
GO TO (150,160),IBRAK
150 AMT=AGI
GO TO 170
160 AMT=FTD
170 IF (AMT)180,180,190
180 ICLAS=1
GO TO 6800
190 DO 200 I=2,24
IF (AMT-AGIBR(I)) 210,200,200
200 CONTINUE
ICLAS=24
GO TO 6800
210 ICLAS=I-1
C----- DETERMINING WEIGHT CLASS
6800 GO TO (7035,6900),IBRAK
6900 IF (AGI) 7000,7000,7010
7000 KCLAS=1
GO TO 7040
7010 DO 7020 I=2,24
IF (AGI-AGIBR(I)) 7030,7020,7020
7020 CONTINUE
KCLAS=24
GO TO 7040
7030 KCLAS=I-1
GO TO 7040
7035 KCLAS=ICLAS
7040 KK=ID8(M)
GO TO (7050,7060),KK
7050 K=KCLAS
GO TO 215
7060 K=KCLAS+24
C----- CALCULATE MAXIMUM STATE TAX
215 IF (AGI)230,230,220
220 CALL ITAX(ABRAK,BRAKT,RATE,AGI,TAX)
MST=TAX
GO TO 300
230 MST=0.0
C----- FEDERAL TAX DEDUCTION SUBPROGRAM
300 GO TO (320,310,330,400),IFTD
310 SUMF=ID3(M)*AMTF1+ID4(M)*AMTF2+ID5(M)*AMTF3
320 IF (ID5(M))322,324,325
322 FTD=D5(M)
CALL ITAX(ABRAK,BRAKF,RATE,FTD,TAX)
FTD=TAX
GO TO 340
324 FTD=0.0
GO TO 340
325 CALL ITAX(ABRAK,BRAKF,RATE,FTD,TAX)
FTD=TAX
GO TO 340

```

940
960
980
1000
1020
1040
1060
1080

1120
1140
1160
1180
1200
1220
1240
1260
1280
1300
1320
1380

1420
1460
1500
1520
1560

1580
1600
1620
1640
1660
1680
1700

1820
1840
1860
1880
1920
1940

```

330 SIMF=AGI*FTDLR
GO TO 320
340 IF (FTD-SIMF)360,360,350
350 FTD=SIMF
360 BAL=AGI-FTD
IF (BAL)390,390,370
370 CALL ITAX(NBRAK,BRAKT,RATE,BAL,TAX)
T1=TAX
TLFTD=MST-T1
GO TO 500
390 CAL=-BAL
CALL ITAX(NBRAK,BRAKT,RATE,CAL,TAX)
FTA=TAX*WATE(K)
UNFTD(ICLAS)=UNFTD(ICLAS)+FTA
SFTD(ICLAS)=SFTD(ICLAS)+WATE(K)
TLFTD=MST-T1
T1=0.0
ITEO=1
GO TO 500
400 FTD=0.0
C-----STATE PERSONAL DEDUCTION SUBPROGRAM
T1=MST
GO TO 500
500 IF (D6(M))560,560,510
510 SPD=D6(M)
GO TO (520,530,600,660),ISPD1
520 SIMS=SPDLR*AGI
GO TO 540
530 SIMS=ID3(M)*AMTS1+ID4(M)*AMTS2+ID5(M)*AMTS3
540 IF (SPD-SIMS)600,600,550
550 SPD=SIMS
GO TO 600
560 IF (AGI-FTD)570,570,580
570 SPD=0.0
GO TO 585
580 SPD=RATES*(AGI-FTD)
585 GO TO (540,530,660),ISPD2
600 BAL=BAL-SPD
IF (T1)610,610,620
610 CAL=-BAL
CALL ITAX(NBRAK,BRAKT,RATE,CAL,TAX)
TAX=TAX*WATE(K)
SPA=TAX-FTA
UNSPD(ICLAS)=UNSPD(ICLAS)+TAX-FTA
T2=0.0
GO TO 700
620 IF (BAL)640,640,630
630 CALL ITAX(NBRAK,BRAKT,RATE,BAL,TAX)
T2=TAX
TLSPD=T1-T2
GO TO 700
640 CAL=-BAL
CALL ITAX(NBRAK,BRAKT,RATE,CAL,TAX)
TAX=TAX*WATE(K)
SPA=TAX-FTA
TLSPD=T1
UNSPD(ICLAS)=UNSPD(ICLAS)+SPA
SSPD(ICLAS)=SSPD(ICLAS)+WATE(K)
T2=0.0
ITEO=1
GO TO 700
660 SPD=0.0
T2=T1
C-----PERSONAL AND CHILD CREDIT SUBPROGRAM
700 PCC=ID3(M)*AMTP1+ID4(M)*AMTP2+ID5(M)*AMTP3
GO TO (710,760,820),IPCC
710 IF (T2)720,720,730
720 UNPC(ICLAS)=UNPC(ICLAS)+(PCC*WATE(K))
T3=0.0
GO TO 900
730 T3=T2-PCC
IF (T3)750,750,740
740 TLPCC=T2-T3
GO TO 900
750 TLPCC=T2
SPCC(ICLAS)=SPCC(ICLAS)+WATE(K)
ITEO=1

```

1980
2000
2020
2040
2060
2080
2100
2120
2140
2160
2200
2220
2240
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2280
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3320
3340
3360
3440

```

T3=0.0
GO TO 900
760 BAL=BAL-PCC
IF(T2)770,770,780
770 CAL=-BAL
CALL ITAX(NBRK, BRAKT, RATE, CAL, TAX)
TAX=TAX+WATE(K)
PCCA=TAX-FTA-SPA
UNPC (ICLAS)=UNPC (ICLAS)+PCCA
T3=0.0
GO TO 900
780 IF(BAL)790,790,800
790 CAL=-BAL
CALL ITAX(NBRK, BRAKT, RATE, CAL, TAX)
TAX=TAX+WATE(K)
PCCA=TAX-FTA-SPA
UNPC (ICLAS)=UNPC (ICLAS)+PCCA
TLPCC=T2
SPCC(ICLAS)=SPCC(ICLAS)+WATE(K)
T3=0.0
ITEO=1
GO TO 900
800 CALL ITAX(NBRK, BRAKT, RATE, BAL, TAX)
T3=TAX
TLPCC=T2-T3
GO TO 900
820 PCC=0.0
T3=T2
900 GO TO (920,910,930,1100),IOST
910 SIMO=ID3(M)*AMT01+ID4(M)*AMT02+ID5(M)*AMT03
920 IF(OST)922,925,925
922 ITEN=1
OST=-OST
925 CALL ITAX(LBRK, BRAKO, RATE, OST, TAX)
GO TO (927,928),ITEN
927 OST=-TAX
GO TO 940
928 OST=TAX
GO TO 940
930 SIMO=AGI*OSTLR
GO TO 920
940 IF(OST-SIMO)960,960,950
950 OST=SIMO
960 IF(T3)970,970,980
970 UNOS(ICLAS)=UNOS(ICLAS)+(OST*WATE(K))
T4=0.0
GO TO 1200
980 T4=T3-OST
IF(T4)990,990,1000
990 TLOST=T3
UNOS(ICLAS)=UNOS(ICLAS)-(T4*WATE(K))
SOST(ICLAS)=SOST(ICLAS)+WATE(K)
T4=C.0
ITEO=1
GO TO 1200
1000 T4=T3-OST
TLOST=T3-T4
GO TO 1200
1100 T4=T3
OST=0.0
C-----SALES TAX CREDIT SUB PROGRAM
1200 GO TO (1210,1220,1240),ISTC
1210 DAL=AGI
IF(DAL)1245,1245,1230
1220 DAL=(AGI-FTD-SPD)
IF(DAL)1245,1245,1230
1230 DO 1240 I=1,JBRK
IF(DAL-BRAKE(I))1250,1240,1240
1240 CONTINUE
KCLAS=JBRK
GO TO 1260
1245 KCLAS=1
GO TO 1260
1250 KCLAS=1-1
1260 STC=(ID3(M)+ID4(M))*AMTEX(KCLAS)
IF(T4)1290,1290,1300
1290 UNSTC(ICLAS)=UNSTC(ICLAS)+(STC*WATE(K))

```

```

T5=0.0
GO TO 1500
1300 T5=T4-STC
      IF (T5) 1310,1310,1320
1310 TLSTC=T4
      UNSTC(ICLAS)=UNSTC(ICLAS)+(WATE(K)*STC)
      SSTC(ICLAS)=SSTC(ICLAS)+WATE(K)
      T5=0.0
      ITEO=1
      GO TO 1500
1320 T5=T4-STC
      TLSTC=T4-T5
      GO TO 1500
1400 STC=0.0
      T5=T4
1500 IF (T5) 1510,1510,1520
1510 ICLAS=ICLAS+24
1520 TDUE=T5
      TMST(ICLAS)=TMST(ICLAS)+(MST*WATE(K))
      RLFTD(ICLAS)=RLFTD(ICLAS)+(TLFTD*WATE(K))
      RLSPD(ICLAS)=RLSPD(ICLAS)+(TLSPD*WATE(K))
      RLPCD(ICLAS)=RLPCD(ICLAS)+(TLPCD*WATE(K))
      RLOST(ICLAS)=RLOST(ICLAS)+(TLOST*WATE(K))
      RLSTC(ICLAS)=RLSTC(ICLAS)+(TLSTC*WATE(K))
      TFTD(ICLAS)=TFTD(ICLAS)+(FTD*WATE(K))
      TSPD(ICLAS)=TSPD(ICLAS)+(SPD*WATE(K))
      TPCC(ICLAS)=TPCC(ICLAS)+(PCC*WATE(K))
      TOSTA(ICLAS)=TOSTA(ICLAS)+(OST*WATE(K))
      TSTC(ICLAS)=TSTC(ICLAS)+(STC*WATE(K))
      TAGI(ICLAS)=TAGI(ICLAS)+(AGI*WATE(K))
      RNUM(ICLAS)=RNUM(ICLAS)+(1*WATE(K))
      TDUE(ICLAS)=TDUE(ICLAS)+(TDUE*WATE(K))
2500 CONTINUE
3000 CONTINUE
      LI=LI+1
      IS=IN
      INDEX=12
      GO TO (130,3005),LI
3005 LOC=1
      DO 3010 I=1,24
3010 WRITE(6,LOC)SFTD(I),SSPD(I),SPCC(I),SOST(I),SSTC(I),UNFTD(I),
      1UNSPD(I),UNPC(I),UNOS(I),UNSTC(I),AGIBR(I)
      DO 3020 I=1,48
3020 WRITE(6,LOC)TAGI(I),RNUM(I),TMST(I),TFTD(I),TSPD(I),TPCC(I),
      1TOSTA(I),TSTC(I),RLFTD(I),RLSPD(I),RLPCD(I),RLSTC(I),RLOST(I),
      2TDUE(I)
      GO TO (3030,3040),NROUT
3030 CALL LINK(OUTAX)
3040 CALL LINK(FIXIT)
      END

```

4980
5000
5020
5040
5060

5120
5140
5160
5180
5200
5220
5240
5260

5300
5320

5640

VARIABLE ALLOCATIONS

NUMVR=7FFF	NEXIT=7FFE	J1=7FFD	J2=7FFC	M=7FFB	INDIC=7FFA	NROUT=7FF9	BRACKT=7FF6
RATEF=7F66	AMTF1=7F36	AMTF2=7F34	AMTF3=7F32	SIMF=7F30	FTDLR=7F2E	AMTS1=7F2C	AMTS2=7F2A
SPDLR=7F24	RATES=7F22	AMTPI=7F20	AMTP2=7F1E	AMTP3=7F1C	BRACK=7F1A	RATEC=7F18	AMT3C=7F16
SIMO=7F14	OSTLR=7F12	PRAKE=7F10	AMTEX=7F0E	IFTD=7F0D	ISPD1=7F0B	ISPD2=7F0A	ISPD3=7F09
IN=7F08	NRBRK=7F04	NRBRK=7F04	LERAK=7F08	JBRAK=7F07	IBRAK=7F06	AGIBR=0046	AGIBR=0046
TSPD=01C6	TPCC=0226	TOSTA=0336	TSTC=0226	RLFTD=0346	RLSPD=03A6	RLPCD=0406	RLSTC=0406
UNSPD=0526	UNPC=0586	UNOS=0586	UNSTC=0586	SFTD=05E6	SSPD=0616	SPCC=0646	SPCC=0646
TDUE=0766	WATE=07C6	EGIBR=07F6	D1=0810	D2=082A	D3=0844	D4=0858	D5=0872
MST=08AE	D7=08B6	AGI=08B2	FTD=08B4	OST=08B6	FTA=08B8	SPA=08BA	SPCC=08BC
TLPCD=08C2	TLOST=08C4	TLSTC=08C6	AMT=08C8	TAX=08CA	BAL=08CC	T1=08CE	T2=08D0
PCC=08D6	T3=08D8	T4=08DA	DAL=08DC	STC=08DE	T5=08E0	TDUE=08E2	IS=08E4
IDB=0918	NFILE=091C	LOC=091D	I=091E	IACC=091F	INDEX=0920	IS=0922	IS=0924
ID2=0925	ID6=0926	ID7=0927	ITEO=0928	ITEM=0929	ITEN=092A	ICLAS=092B	ICLAS=092C

STATEMENT ALLOCATIONS

5000=0940	20=0943	1=097B	5=0993	6=0997	30=09A8	35=09AE	40=09B8
120=0A06	130=0A04	150=0B52	160=0B58	170=0B5C	180=0B61	190=0B67	200=0B73
6900=0B91	7000=0B96	7010=0B9C	7020=0BAC	7030=0BBA	7035=0BC2	7040=0BC6	7045=0BCA
220=0BEE	230=0BF3	300=0BF7	310=0BFF	320=0C1D	322=0C29	324=0C35	326=0C41
350=0CC3	360=0CC7	370=0CC7	380=0CC5	400=0CC3	500=0CC9	510=0CCD	520=0CE1
550=0CD5	560=0CD1B	570=0CD22	580=0CD8	585=0D30	600=0D37	610=0D42	620=0D47
660=0DDC	700=0DD4	710=0DF9	720=0DF5	730=0DF1	740=0E23	750=0E28	760=0E34
790=0E8F	800=0ED3	820=0EE6	900=0F0E	910=0F06	920=0F14	922=0F19	924=0F1E
930=0F3C	940=0F44	950=0F43	960=0F47	970=0F54	980=0F6E	990=0F79	1000=0F86
1210=0FCA	1220=0FCF	1230=0FDC	1240=0FEC	1245=0FFA	1250=1000	1260=1006	1270=1012

1320 =1071 1400 =107F 1500 =1087 1510 =108C 1520 =1092 2500 =1147 PAGE 06
 3030 =11D1 3040 =1105 3000 =114F 3065 =116B 30

FEATURES SUPPORTED
 ONE WORD INTEGERS
 IOCS

CALLED SUBPROGRAMS

ITAX	FADD	FADDX	FSUB	FSUBX	FMPLY	FMPLYX	FLD	FLDX	FSTO	FSTOX	FSBRX	FL
SWRT	SCOMP	SFIO	SIOFX	SIOI	SUBSC	SNR	CARDZ	PRNTZ	SDFIO	SDRED	SDART	SD
SDF	SDI											

REAL CONSTANTS
 .100000E 01=0932 .000000E 00=0934

INTEGER CONSTANTS
 1=0936 5=0937 48=0938 2=0939 24=093A 0=093B 13=093C 8=093D

CORE REQUIREMENTS FOR
 COMMON 442 VARIABLES 2354 PROGRAM 2216

END OF COMPILATION

Main Program #3

```

// JOB
// FOR
*ONE WORD INTEGERS
*IOCS(CARD,TYPEWRITER,DISK,1132 PRINTER)
*LIST ALL
      DIMENSION NYR(20),YCEPT(48),SLOPE(48),WATE(48),CORF2(48)
      COMMON NUMYR,NEXIT,J1,J2,M,INDIC,NROUT
      COMMON AGIBR(25),TAGI(48),TMST(48),TTDUE(48),RLFTD(48),RLPCC(48),
1RLSPD(48),RLOST(48),SFTD(24),UNFTD(24),SSPD(24),SPCC(24),UNPC(24),
2UNSPD(24),TFTD(48),TSPD(48),TPCC(48),TOSTA(48),SOST(24),UNOS(24),
3STOT(24),UNTOT(24),RNUM(48),UNSTC(24),TSTC(48),SSTC(24),RLSTC(48)
      DEFINE FILE 1(48,4,U,LOC),2(48,4,U,LOC),5(3,96,U,LOC),
16(72,28,U,LOC),7(1,20,U,LOC)
      IF(NUMYR-J2) 20,20,30
C
10 FORMAT(10I8)
20 READ(2,10)INDIC,NUMYR,NEXIT
   J2=0
   M=0
   READ(2,10) (NYR(I),I=1,20)
   WRITE(7,1) (NYR(I),I=1,20)
   GO TO 40
30 READ(7,1) (NYR(I),I=1,20)
40 M=M+1
   READ(5,3) (CORF2(I),I=1,48)
   DO 80 J=1,48
   READ(INDIC,J)YCEPT(J),SLOPE(J)
80 WATE(J)=(YCEPT(J)+SLOPE(J)*NYR(M))/CORF2(J)
   LOC=1
   DO 100 I=1,24
   READ(6,LOC)SFTD(I),SSPD(I),SPCC(I),SOST(I),SSTC(I),UNFTD(I),
1UNSPD(I),UNPC(I),UNOS(I),UNSTC(I),AGIBR(I)
100 CONTINUE
   DO 110 J=1,48
   READ(6,LOC)TAGI(J),RNUM(J),TMST(J),TFTD(J),TSPD(J),TPCC(J),
1TOSTA(J),TSTC(J),RLFTD(J),RLSPD(J),RLPCC(J),RLSTC(J),RLOST(J),
2TTDUE(J)
110 CONTINUE
   DO 120 I=1,24
   J=1+24
   STOT(I)=(SFTD(I)+SSPD(I)+SPCC(I)+SOST(I)+SSTC(I))*WATE(J)
   SFTD(I)=SFTD(I)*WATE(J)
   SSPD(I)=SSPD(I)*WATE(J)
   SPCC(I)=SPCC(I)*WATE(J)
   SOST(I)=SOST(I)*WATE(J)
   SSTC(I)=SSTC(I)*WATE(J)
   UNFTD(I)=UNFTD(I)*WATE(J)
   UNSPD(I)=UNSPD(I)*WATE(J)
   UNPC(I)=UNPC(I)*WATE(J)
   UNOS(I)=UNOS(I)*WATE(J)
   UNSTC(I)=UNSTC(I)*WATE(J)
120 UNTOT(I)=(UNFTD(I)+UNSPD(I)+UNPC(I)+UNOS(I)+UNSTC(I))
   DO 130 I=1,48
   TAGI(I)=TAGI(I)*WATE(I)
   RNUM(I)=RNUM(I)*WATE(I)
   TMST(I)=TMST(I)*WATE(I)
   TFTD(I)=TFTD(I)*WATE(I)
   TSPD(I)=TSPD(I)*WATE(I)
   TPCC(I)=TPCC(I)*WATE(I)
   TOSTA(I)=TOSTA(I)*WATE(I)
   TSTC(I)=TSTC(I)*WATE(I)
   RLFTD(I)=RLFTD(I)*WATE(I)
   RLSPD(I)=RLSPD(I)*WATE(I)
   RLPCC(I)=RLPCC(I)*WATE(I)
   RLSTC(I)=RLSTC(I)*WATE(I)
   RLOST(I)=RLOST(I)*WATE(I)
130 TTDUE(I)=TTDUE(I)*WATE(I)
   NYEAR=NYR(M)+1957
   WRITE(3,200) NYEAR,INDIC
200 FORMAT(1H1,' THIS OUTPUT IS FOR YEAR NUMBER',I5,' AND ESTIMATE '
1,' FILE NUMBER',I4,'/' ONE INDICATES A HIGH ESTIMATE AND TWO A LOW
1ESTIMATE.')
   CALL LINK (OUTAX)
   END

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VARIABLE ALLOCATIONS

NUMYR=7FFF	NEXIT=7FFE	J1=7FFD	J2=7FFC	M=7FFB	INDIC=7FFA	NROUT=7FF9	AGIBR=7FF5	
TTDUE=7FD4	RLFTD=7EA4	RLPCC=7E44	RLSPD=7DE4	RLOST=7D84	SFTD=7D24	UNFTD=7CF4	SSPD=7CC4	
UNSPD=7C34	TFTD=7C04	TSPD=7BA4	TPCC=7B44	TOSTA=7AE4	SOST=7A84	UNOS=7A54	STOT=7A24	

UNSTC=7964 JSTC =7934 SSTC =7804 RLSTC=78A4 YCEPT=0082 SLOPE=00E2 PAGE 02
 =01BB J =01BC NYEAR=01BD WATE =0142 CORF2=01A2 N

STATEMENT ALLOCATIONS
 10 =01CB 200 =01CE 20 =022E 30 =026E 40 =0284 80 =02B0 100 =02F8 110 =0328 1

FEATURES SUPPORTED
 ONE WORD INTEGERS
 IOCS

CALLED SUBPROGRAMS
 FADDX FMPY FMPYX FDIVX FLD FLDX FSTO FSTOX FLOAT WRTYZ SRED SWRT 5
 S101 SUBSC CARDZ PRNT2 SDFIO SDRED SDWRT SDCOM SDFX SDIX

INTEGER CONSTANTS
 2=01C0 0=01C1 1=01C2 20=01C3 7=01C4 5=01C5 3=01C6 48=01C7
 1957=01CA

CORE REQUIREMENTS FOR
 COMMON 1978 VARIABLES 448 PROGRAM 696

END OF COMPILATION

Main Program #4

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// JOB
// FOR
*ONE WORD INTEGERS
*IOCS(CARD,TYPEWRITER,KEYBOARD,1132PRINTER,DISK)
*LIST ALL
DIMENSION RA(24),RF(24),RARF(24),RS(24),RARS(24),RFRS(24),RP(24),
1RARP(24),RFRP(24),RSRP(24),RT(24),RART(24),RFRT(24),RSRT(24),
2RPRT(24),RC(24),RARC(24),RFRC(24),RSRC(24),RPRC(24),RTRC(24),
3TLFS(24),TLFSP(24),RLSP(24),JPRT(24),RLSPT(24)
COMMON NUMYR,NEXIT,J1,J2,M,INDIC,NROUT
COMMON AGIBR(25),TAGI(48),TMST(48),TTDUE(48),RLFTD(48),RLPCC(48),
1RLSPD(48),RLOST(48),SFTD(24),UNFTD(24),SSPD(24),SPCC(24),UNPC(24),
2UNSPD(24),TFTD(48),TSPD(48),TPCC(48),TOSTA(48),SCST(24),UNOS(24),
3STOT(24),UNTOT(24),RNUM(48),UNSTC(24),TSTC(48),SSTC(24),RLSTC(48)
DEFINE FILE 5(48,2,U,LOC),6(72,28,U,LOC)
GO TO (20,90),NROUT
20 READ(2,10) INDIC,NUMYR,NEXIT
10 FORMAT(1018)
LOC=1
DO 1 I=1,24
READ (6,LOC) SFTD(I),SSPD(I),SPCC(I),SOST(I),SSTC(I),UNFTD(I),
1UNSPD(I),UNPC(I),UNOS(I),UNSTC(I),AGIBR(I)
1 CONTINUE
DO 2 I=1,48
READ(6,LOC) TAGI(I),RNUM(I),TMST(I),TFTD(I),TSPD(I),TPCC(I),
1TOSTA(I),TSTC(I),RLFTD(I),RLSPD(I),RLPCC(I),RLSTC(I),RLOST(I),
2TTDUE(I)
2 CONTINUE
90 IADD=0
JPRT=1
100 IF (JPRT)102,102,101
101 JPRT(1)=16448
JPRT(2)=-10492
C
JPRT(3)=-16064
JPRT(4)=-6080
JPRT(5)=-7616
JPRT(6)=16448
GO TO 103
102 JPRT(1)=-10944
JPRT(2)=-10688
JPRT(3)=24640
JPRT(4)=-10432
JPRT(5)=-16064
JPRT(6)=-6080
103 WRITE(3,104) (JPRT(I),I=1,6)
104 FORMAT(1H,40X,TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE'1H',
141X'TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS'1H0,57X,6A1//1H0)
WRITE(3,110)
110 FORMAT(1H,48X'PC DROP'19X'PC DROP'6X'PC DROP'15X'PC DROP'1H,2X',
1AGI CLASS'15X'RA'10X'RF'9X'RA-RF'9X'RS'10X'RA-RS'8X'RF-RS'9X'RP',
210X'RA-RP'1H0)
IF(IADD)208,208,207
208 DO 50 I=1,24
K=1+IADD
RA(I)=(TMST(K) / TAGI(K))*100
RF(I)=(TMST(K)-RLFTD(K))/TAGI(K)*100
RS(I)=(TMST(K)-RLFTD(K)-RLSPD(K))/TAGI(K)*100
RP(I)=(TMST(K)-RLFTD(K)-RLSPD(K)-RLPCC(K))/TAGI(K)*100
RT(I)=(TMST(K)-RLFTD(K)-RLSPD(K)-RLPCC(K)-RLOST(K))/TAGI(K)*100
50 RC(I)=(TMST(K)-RLFTD(K)-RLSPD(K)-RLPCC(K)-RLOST(K)-RLSTC(K))/
1TAGI(K)*100
GO TO 209
207 DO 211 I=1,24
K=1+IADD
RS(I)=(TMST(K)-RLFTD(K)-UNFTD(I)-RLSPD(K)-UNSPD(I))/TAGI(K)*100
RA(I)=(TMST(K)/TAGI(K))*100
RF(I)=(TMST(K)-RLFTD(K)-UNFTD(I))/TAGI(K)*100
RP(I)=(TMST(K)-RLFTD(K)-UNFTD(I)-RLSPD(K)-UNSPD(I)-RLPCC(K)-
1UNPC(I))/TAGI(K)*100
RT(I)=(TMST(K)-RLFTD(K)-UNFTD(I)-RLSPD(K)-UNSPD(I)-RLPCC(K)-
2UNPC(I)-RLOST(K)-UNOS(I))/TAGI(K)*100
1UNPC(I)-RLOST(K)-UNOS(I))/TAGI(K)*100
RC(I)=(TMST(K)-RLFTD(K)-UNFTD(I)-RLSPD(K)-UNSPD(I)-RLPCC(K)-UNPC
1(I)-RLOST(K)-UNOS(I)-RLSTC(K)-UNSTC(I))/TAGI(K)*100
211 CONTINUE
209 DO 210 I=1,24
RPRT(I) = ((RP(I)-RT(I)) / RP(I)) *100
RSRT(I) = ((RS(I)-RT(I)) / RS(I)) *100
RFRT(I) = ((RF(I)-RT(I)) / RF(I)) *100

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RART(I) = ((RA(I)-RT(I)) / RA(I)) * 100
RSRP(I) = ((RS(I)-RP(I)) / RS(I)) * 100
RFRP(I) = ((RF(I)-RP(I)) / RF(I)) * 100
RARP(I) = ((RA(I)-RP(I)) / RA(I)) * 100
RFRS(I) = ((RF(I)-RS(I)) / RF(I)) * 100
RARS(I) = ((RA(I)-RS(I)) / RA(I)) * 100
RARF(I) = ((RA(I)-RF(I)) / RA(I)) * 100
RARC(I) = ((RA(I)-RC(I)) / RA(I)) * 100
RFRC(I) = ((RF(I)-RC(I)) / RF(I)) * 100
RSRC(I) = ((RS(I)-RC(I)) / RS(I)) * 100
RPRC(I) = ((RP(I)-RC(I)) / RP(I)) * 100
RTRC(I) = ((RT(I)-RC(I)) / RT(I)) * 100
210 CONTINUE
DO 115 I=1,24
  K=I+1
115 WRITE (3,116) AGIBR(I),AGIBR(K),RA(I),RF(I),RARF(I),RS(I),RARS(I),
  1RFRS(I),RP(I),RARP(I)
116 FORMAT(1H,F7.0,'F8.0,8(F13.4) )
  WRITE(3,104) (JPRT(I),I=1,6)
  WRITE(3,120)
120 FORMAT(1H,23X'PC DROP'6X'PC DROP'19X'PC DROP'6X'PC DROP'6X'PC DR
  10P'6X'PC DROP'1H,24X,'RF-RP'EX'RS-RP'9X'RT'10X'RA-RT'8X'RF-RT'
  28X'RS-RT'8X'RP-RT'1H0)
  DO 125 I=1,24
    K=I+1
125 WRITE(3,126) AGIBR(I),AGIBR(K),RFRP(I),RSRP(I),RT(I),RART(I),RFRT(
  1),RSRT(I),RPRT(I)
  WRITE(3,104) (JPRT(I),I=1,6)
  WRITE(3,130)
130 FORMAT(1H,35X'PC DROP'6X'PC DROP'6X'PC DROP'6X'PC DROP'6X'PC DROP
  171H,2X'AGI CLASS'15X'RC'8X'RA-RC'8X'RF-RC'8X'RS-RC'8X'RP-RC'
  28X'RT-RC')
  DO 136 I=1,24
    K=I+1
  WRITE(3,134) AGIBR(I),AGIBR(K),RC(I),RARC(I),RFRC(I),RSRC(I),
  1RPRC(I),RTRC(I)
134 FORMAT(1H,F7.0,'F8.0,6(F13.4))
136 CONTINUE
126 FORMAT(1H,F7.0,'F8.0,7(F13.4) )
  WRITE(3,104) (JPRT(I),I=1,6)
  WRITE(3,149)
149 FORMAT(1H,3X'AGI CLASS'9X'NUM'10X'AGI'8X'MST'5X'TLFTD'5X'TLSPD'5X
  1'TLPC'5X'TLST'5X'TLSTC')
  DO 51 K=1,24
    I=K+1
    TLFS(K)=0.0
    TLFSI(K)=0.0
    RLSP(K)=0.0
    RLSP(I)=0.0
    RLSP(K)=RLFTD(I)+RLSPD(I)
    TLFS(K)=TLFS(K)+RLPCC(I)
    RLSP(K)=TLFS(K)+RLOST(I)
51 RLSP(K)=RLSP(K)+RLSTC(I)
    TTAGI=0.0
    TTMSI=0.0
    TTFTD=0.0
    TTSPD=0.0
    TTPCC=0.0
    TTOST=0.0
    TODUE=0.0
    TTLFS=0.0
    TTSTC=0.0
    TTLST=0.0
    TTLFP=0.0
    TTLSP=0.0
    TNUM=0.0
    DO 150 I=1,24
      K=I+1
      TNUM=TNUM+RNUM(K)
      L=I+1
      TTAGI=TTAGI+TAGI(K)
      TTMSI=TTMSI+TMST(K)
      TTFTD=TTFTD+RLFTD(K)
      TTSPD=TTSPD+RLSPD(K)
      TTPCC=TTPCC+RLPCC(K)
      TTOST=TTOST+RLOST(K)
      TTSTC=TTSTC+RLSTC(K)

```

```

TODUE = TODUE + TTDUE(K)
TTLFS = TTFID + TTSPD
TTLFP = TTFID + TTSPD + TTPCC
TTLSP = TTFID + TTSPD + TTPCC + TTOST
TTLST = TTFID + TTSPD + TTPCC + TTOST + TTSTC
150 WRITE(3,151) AGIBR(I),AGIBR(L),RNUM(K),TAGI(K),TMST(K),RLFTD(K),
      1 RLSPD(K),RLPCC(K),RLOST(K),RLSTC(K)
151 FORMAT(1H,'F7.0','F8.0,F8.0,F13.0,F11.0,5F10.0)
      WRITE(3,53) TNUM,TTAGI,TTMST,TTFID,TTSPD,TTPCC,TTOST,TTSTC
53  FORMAT(1H,'2X',TOTAL'9X,F8.0,F13.0,F11.0,5F10.0)
      WRITE(3,104) (JPRT(I),I=1,6)
      WRITE(3,160)
160  FORMAT(1H,'3X'AGI CLASS'10X'A=FTD+SPD'5X'B=A+PCC'5X'C=B+OST'4X
      1'C+STC'6X'TDUE'///)
      DO 165 I=1,24
      K=I+1
      L=I+1
165  WRITE(3,166) AGIBR(I),AGIBR(L),TLFS(I),TLFSP(I),RLSPI(I),RLSPT(I)
      1,TTDUE(K)
166  FORMAT(1H,'F7.0','F8.0,5F12.0)
54  FORMAT(1H,'5X',TOTAL'6X,5F12.0)
      WRITE(3,54) TTLFS,TTLFP,TTLSP,TTLST,TODUE
      IF(IPT) 200,200,170
170  IPT=-1
      IADD=24
      GO TO 100
200  CALL LINK (PRINT)
      END

```

2680
2700
2720
2740
2760
2800
2820
2840
2860
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2900
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2940
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140
3160
3180
3200

```

VARIABLE ALLOCATIONS
NUMYR=7FFF NEXIT=7FFF J1 =7FFD J2 =7FFC M =7FFB INDIC=7FFA NROUT=7FF9 AGIBR=7FF6 TA
TTDUE=7F04 RLFTD=7EA4 RLSPD=7DE4 RLOST=7D84 SFTD =7D24 UNFTD=7CF4 SSPD =7CC4 SP
UNSPD=7C34 TFD =7C04 TSPD =7BA4 TPCC =7B44 TOSTA=7AE4 SQST =7A84 UNOS =7A54 STOT =7A24 U
UNSTC=7964 TSTC =7934 SSTC =78D4 RLSTC=78A4 RA =003C RF =006C RARF =009C RS =00CC RA
RP =015C RARP =018C RFRP =015C RSRP =01EC RT =021C RART =024C RFRF =027C RSRT =02AC R
RARC =032C RARC =036C RSRC =039C RPRC =03CC RTRC =03FC TLFS =042C TLFSP=045C RLSP1=048C RL
TTMST=04C0 TTFID=04C2 TTSPD=04C4 TTPCC=04C6 TTOST=04C8 TCDUE=04CA TTLFS=04CC TTSTC=04CE TT
TTLSP=04D4 TNUM =04D6 JPRT =04F1 LOC =04F2 I =04F3 IADD =04F4 IPT =04F5 K =04F6 L

```

```

STATEMENT ALLOCATIONS
10 =0510 104 =0513 110 =0553 116 =059B 120 =05A5 130 =05F3 134 =063A 126 =0644 14
53 =0689 160 =0697 166 =06BF 54 =06C8 20 =06EE 1 =071D 2 =074D 90 =0755 10
102 =0798 103 =07B4 208 =07D3 50 =084E 207 =0873 211 =0963 209 =096B 210 =0A71 11
136 =0B43 51 =0BB0 150 =0C77 165 =0CE2 170 =0D1F 200 =0D2A

```

FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS

```

CALLED SUBPROGRAMS
FADD FADDX FSUBX FMPY FDIYX FLD FLDX FSTO FSTOX FLCAT TYPE2 SRED SW
SIOFX SIOIX SIOF SIOI SUBSC CARDZ PRNTZ SDFIO SDRED SDFX

```

REAL CONSTANTS
.000000E 00=04FE

```

INTEGER CONSTANTS
2=0500 1=0501 24=0502 6=0503 48=0504 0=0505 16448=0506 10432=0507 15
7616=050A 10944=050B 10688=050C 24640=050D 3=050E 100=050F

```

CORE REQUIREMENTS FOR
COMMON 1978 VARIABLES 1278 PROGRAM 2096
END OF COMPILE

Main Program #5

```

// JOB
// FOR
*ONE WORD INTEGERS
*IOCS(CARD,TYPEWRITER,KEYBOARD,1132PRINTER,DISK)
*LIST ALL
COMMON NUMYR,NEXIT,J1,J2,M,INDIC,NROUT
COMMON AGIBR(25),TAGI(48),TMST(48),TTQUE(48),RLFTD(48),RLPCC(48),
1RLSPD(48),RLQST(48),SFTD(24),UNFTD(24),SSPD(24),SPCC(24),UNPC(24),
2UNSPD(24),TFTD(48),TSPD(48),TPCC(48),TOSTA(48),SOST(24),UNOS(24),
3STOT(24),UNTOT(24),RNUM(48),UNSTC(24),TSTC(48),SSTC(24),RLSTC(48)
80
100
120
140
C
C----- THIS PROGRAM IS CALL PRINT
C
TUNFT=0.0
TUNSP=0.0
TUNPC=0.0
TUNOS=0.0
TUNST=0.0
TNFTD=0.0
TNSPD=0.0
TNPC=0.0
TNOST=0.0
TNSTC=0.0
DO 200 I=1,24
K=I+24
TUNFT=TUNFT+UNFTD(I)
TUNSP=TUNSP+UNSPD(I)
TUNPC=TUNPC+UNPC(I)
TUNOS=TUNOS+UNOS(I)
TUNST=TUNST+UNSTC(I)
TNFTD=TNFTD+SFTD(I)
TNSPD=TNSPD+SSPD(I)
TNPC=TNPC+SPCC(I)
TNOST=TNOST+SOST(I)
TNUM=TNUM+RNUM(K)
200 TNSTC=TNSTC+SSTC(I)
WRITE(3,201)
201 FORMAT(1H,40X'UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS'///
11H0,3X'AGI CLASS'10X'UNFTD'5X'UNFTD'6X'NSPD'5X'UNSPD'6X'NPCC'6X'UNP
2C'6X'NOST'6X'UNOS'6X'NSTC'6X'UNSTC'/1H0)
DO 205 I=1,24
K=I+1
205 WRITE(3,206) AGIBR(I),AGIBR(K),SFTD(I),UNFTD(I),SSPD(I),UNSPD(I),
1SPCC(I),UNPC(I),SOST(I),UNOS(I),SSTC(I),UNSTC(I)
206 FORMAT(1H,7F,0'-F8.0,10F10.0)
WRITE(3,203) TNFTD,TUNFT,TNSPD,TUNSP,TNPC,TUNOS,TUNST
1 TNSTC,TUNST
203 FORMAT(1H,2X'TOTAL'9X,10F10.0)
300 FORMAT(1H,40X'UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS'///
11H0,3X'AGI CLASS'10X'TOTAL NUM'7X'UNTOT'/1H0)
WRITE(3,300)
DO 305 I=1,24
UNTOT(I)=UNFTD(I)+UNSPD(I)+UNPC(I)+UNOS(I)+UNSTC(I)
STOT(I)=SFTD(I)+SSPD(I)+SPCC(I)+SOST(I)+SSTC(I)
K=I+1
305 WRITE(3,306) AGIBR(I),AGIBR(K),STOT(I),UNTOT(I)
306 FORMAT(1H,7F,0'-F8.0,2F12.0)
TTTUN=0.0
TTTUN=TUNFT+TUNSP+TUNPC+TUNOS+TUNST+0
WRITE(3,308) TNUM,TTTUN
308 FORMAT(1H,2X'TOTAL'9X,2F12.0)
L=0
NNN=1
390 WRITE(3,400)
400 FORMAT(1H,40X'TOTAL EXEMPTIONS BY AGI CLASS'//
GO TO (410,430),NNN
410 WRITE(3,420)
420 FORMAT(1H,49X'PAYS'///)
GO TO 450
430 WRITE(3,440)
440 FORMAT(1H,49X'NO PAY'///)
450 WRITE(3,460)
460 FORMAT(1H0,3X'AGI CLASS'10X'TAGI'7X'TFTD'7X'TSPD'8X'TPCC'
17X'TOST'8X'TSTC'///)
T1=0.0
T2=0.0
T3=0.0
T4=0.0
3220
3240
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4080

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T5=0.0
T6=0.0
DO 500 I=1,24
  K=1+L
  WRITE(3,470) AGIBR(I),AGIBR(I+1),TAGI(K),TFTD(K),TSPD(K),TPCC(K),
  1TOSTA(K),TSTC(K)
  T1=T1+TAGI(K)
  T2=T2+TFTD(K)
  T3=T3+TSPD(K)
  T4=T4+TPCC(K)
  T5=T5+TOSTA(K)
  T6=T6+TSTC(K)
470 FORMAT(1H,'F7.0','F8.0,6F12.0)
500 CONTINUE
WRITE(3,1000) T1,T2,T3,T4,T5,T6
1000 FORMAT(1H,'3X','TOTAL',8X,6F12.0)
GO TO (510,540),NNN
510 L=24
  NNN=2
  GO TO 390
540 WRITE(3,550)
550 FORMAT(1H,1,40X,'EFFECTIVE TAX RATES BY AGI CLASS')
  WRITE(3,560)
560 FORMAT(1H,'3X','AGI CLASS',8X,'TTDUE',1AGI(I)+AGI(I+24))'///)
  DO 590 I=1,24
    TAX=TTDUE(I)/(TAGI(I)+TAGI(I+24))*100
  WRITE(3,570) AGIBR(I),AGIBR(I+1),TAX
570 FORMAT(1H,'F7.0','F8.0,10X,F8.5)
590 CONTINUE
  J1=J1+1
  J2=J2+1
  GO TO (310,320),NROUT
310 IF(NEXIT-J1)330,330,340
320 IF(NEXIT-J1)330,330,350
330 CALL EXIT
340 CALL LINK(OUTAX)
350 CALL LINK(FIXIT)
  END

```

VARIABLE ALLOCATIONS									
NUMYR=7FFF	NEXIT=7FFF	J1 =7FFD	J2 =7FFC	M =7FFB	INDIC=7FFA	NROUT=7FF9	AGIBR=7FF6	T	
TTDUE=7E04	RLFTD=7EA4	RLPCC=7E44	RLSPD=7DE4	RLCST=7D84	SFTD =7D24	UNFTD=7CF4	SSPD =7CC4	S	
UNSPD=7C34	TFTD =7C04	TSPD =7BA4	TPCC =7B44	TOSTA=7AE4	SOST =7AE4	UNCS =7A54	STGT =7A24	U	
UNSTC=7964	TSTC =7934	SSTC =7804	RLSTC=7EA4	TUNFT=0000	TUNSP=0002	TUNPC=0004	TUNOS=0006	I	
TNSPD=000C	TNPCC=000E	TNOST=0010	TNSTC=0012	TNUM =0014	TTTUN=0016	T1 =0018	T2 =001A	T	
T5 =0020	T6 =0022	TAX =0024	I =0026	K =0029	L =002A	NNN =002B			

STATEMENT ALLOCATIONS									
201 =0036	206 =008F	203 =0097	303 =00A2	306 =00D9	308 =00E2	400 =00ED	420 =0102	4	
470 =013C	1000 =0145	550 =0150	560 =0165	570 =0181	200 =0227	205 =0245	305 =026A	3	
430 =030E	450 =0312	500 =035B	510 =03A9	540 =03B3	590 =03EF	310 =0409	320 =0411	3	
350 =041C									

FEATURES SUPPORTED
ONE WORD INTEGERS
IOCS

CALLED SUBPROGRAMS									
FADD	FADDX	FMPI	FLD	FLDX	FSTO	FSTOX	FDVRX	FLOAT	TYPEZ
SUBSC	CARDZ	PRNTZ	SDFIO						SCOMP

REAL CONSTANTS
.000000E 00=0030

INTEGER CONSTANTS
1=0032 24=0033 3=0034 0=0035 2=0036 100=0037

CORE REQUIREMENTS FOR
COMMON 1978 VARIABLES 48 PROGRAM 1008

END OF COMPILATION

APPENDIX D

COVER LETTER AND QUESTIONNAIRE SENT TO
ALL INCOME TAX STATES

DRAKE UNIVERSITY
Des Moines, Iowa 50311

July 24, 1969

Dear

Recently Joseph A. Pechman of the Brookings Institute has published an article in the National Tax Journal concerning the federal tax model. This model is designed to estimate revenue and tax rates when provisions of the federal law are changed. This idea can easily be applied to the states.

During the past 18 months such a project has been undertaken at Drake University with the cooperation of the Iowa Department of Revenue and the Drake University Research Council.

The basic idea is to provide a relatively standard computer program for Iowa which contains most of the current provisions subject to possible change--tax rates, federal tax deduction, personal exemptions and credits, etc. and to allow the user to specify changes in the provisions which are currently used in Iowa or other states. The program estimates the total revenue and revenue by income class and compares it to the current tax law.

Answers to the enclosed questionnaire, which has been kept to minimum length, will be important to the future direction of the project.

Sincerely,

William A. Perry
Department of Economics

1. Do you make any continuing studies concerning the burden of income taxation (amount of tax rate) by income class, occupation or geographic area within your state?

NO ____ YES ____ If yes, please send a copy of such report(s)

2. Have you ever published or made studies of the burden of taxation or effect or proposed changes in various income tax provisions (credits, exemptions, tax rates, etc.) on the basis of sample statistics?

NO ____ YES ____ If yes, please send a sample report(s)

3. Please indicate the nature of the last legal change in the income tax law and the date. Use back if necessary.

4. Estimated changes in revenue (check one) for the provision listed above

- ____ 1. were not made
____ 2. were made only by department personnel
____ 3. were made only by consultants
____ 4. were made by department and/or with help of consultants

5. Revenue predictions were in error no more than

- ____ 1. 5%
____ 2. 10%
____ 3. 15%
____ 4. 20%
____ 5. 30%
____ 6. more than 30%
____ 7. not available

6. Has your department ever made computer models to recalculate returns for some changed income tax provision to estimate revenue effects? Use back if necessary.

NO ____ YES ____ Please list in a few sentences what was done.

7. Does your department punch or have on tape enough information about each income tax return to recalculate the tax due for that return by computer?

NO _____ YES _____

8. A computerized model to calculate tax revenue by income class and geographical area with 15 minutes of computer time for current income tax provision and other provisions popular in most income tax using states

- ____ 1. would add very little to current estimating procedures
____ 2. would aid in current procedures
____ 3. be a very important tool for the department

Please return this questionnaire in the prepaid envelope to:

William A. Perry
Drake University
Department of Economics
Des Moines, Iowa 50311

APPENDIX E

SAMPLE IOWA INCOME TAX RETURNS AND INSTRUCTIONAL BOOKLET

INFORMATION AND INSTRUCTIONS
FOR PREPARING YOUR
IOWA INCOME TAX RETURN
FORM IT-1 AND FORM IT-1C
FOR 1966

You can save money for yourself and your Government, if you—

File your return early — Make sure the figures are correct.

The final date for filing your return is April 30, but taxpayers who wait until the last minute often make costly mistakes. It is especially important that you check to see that you have reported all of your income, including not only salary and wages but also other types of income such as dividends, interest, farm and business income.

Use your
Social Security Number
and Postal Zip Code

Sign your return

Attach all forms IT-5A
for tax withheld
by employers

You should be able to prepare your return with the assistance of the information contained in this pamphlet. The instructions are arranged in the same order as the lines and pages of Form IT-1. If you need help you may ask questions by phone of our nearest office or come in for assistance.

To assist you by answering questions and giving helpful information, our Auditors will be stationed in County Courthouses located as follows:

Burlington	Fort Dodge
Cedar Rapids	Mason City
Clinton	Sioux City
Council Bluffs	State Tax Commission office (Des Moines, Iowa)
Davenport	Waterloo
Dubuque	

This Booklet also contains a Declaration of Estimated Income Tax (Form IT-W12) and instructions

PAGE TWO

CONTENTS		Page
Accounting methods and records (same requirements as Fed.)		1
Adjusted Gross Income (same requirements as Federal)		1
Annuities (same requirements as Federal)		10
Capital Gains and Losses		9
Casualty losses, thefts and Child Care		4, 5, 7, 15
Computation of tax		9
Contributions		5, 8, 9, 10
Credits against tax		2
Definitions		11
Domicile residence		9
Dependents		10
Depreciation (same requirements as Federal)		11
Dividend Income		11
Education expenses (same requirements as Federal)		11
Employee expenses		4
Estates and Trusts		5, 8, 9
Exemptions (husband and wife)		3, 6, 9
Farm Income (same requirements as Federal)		8
Federal Income Tax Deduction		3 - 8
Head of Household		9
How to fill in your return		13
Interest		9
Income from Sub-Chapter "S" Corporation		9
Itemized Deductions		6, 9
Joint return		

DEFINITIONS

NET INCOME

Net income is the sum of income derived from all sources or your Adjusted Gross Income as properly reported on your Federal return with the following adjustments:

1. Subtract interest and dividends from federal securities.
2. Add interest and dividends from foreign securities and from securities of state and other political subdivisions exempt from federal income tax under the Internal Revenue Code of 1954, except bonds issued under authority of Chapter 262, Code of Iowa, and exempted by reason of Section 262.51.
3. Where the adjusted gross income includes capital gains or losses, or gains or losses from property other than capital assets, and such gains or losses have been determined by using a basis established prior to January 1, 1934, an adjustment may be made, under rules and regulations prescribed by the state tax commission, to reflect the difference resulting from the use of a basis of cost or January 1, 1934, fair market value, less depreciation allowed or allowable, whichever is higher. Provided that the basis shall be fair market value as of January 1, 1955, less depreciation allowed or allowable, in the case of property acquired prior to that date if use of a prior basis is declared to be invalid.
4. Subtract installment payments received by a beneficiary under an annuity which was purchased under an employee's pension or retirement plan when the commuted value of said installments has been included as a part of the decedent employee's estate for Iowa inheritance tax purposes.
5. Exclude income from pensions and annuities received pursuant to retirement systems for policemen and firemen. Reference: Section 411.13, Code 1966.

SINGLE

A person is classified as single if unmarried, widowed, or married and not living with husband (wife).

HEAD OF HOUSEHOLD

A person who provides more than one-half the cost of maintaining a household for the entire tax year for at least one relative. (See page 8 of these instructions for more information.)

MARRIED

A person is classified as married if on the last day of the tax year husband and wife are living together.

JOINT RETURN

A joint return is a return on which the earnings of husband and wife (even though one spouse may not have any earnings) are joined together to report such earnings on a single income tax return.

SEPARATE RETURN

A separate return may be filed by a husband and a wife if each have separate income and each files his or her individual return

	Page
Marital status	2
Married persons	9
Medical and Dental expense	9
Members of Armed Forces	2
Miscellaneous expenses	9
Moving in or out of Iowa	10
Net operating loss	10
Non-resident taxpayers	12
Nontaxable Income (Partnership)	11
Optional method of filing	6, 10
Optional standard deductions	9
Other State Income	12
Partnership form IT-3	11
Payment of taxes	3
Penalties	3
Reimbursed expenses	11
Sale or exchange of property—Sale of personal residence	10
Self-employment Tax, Social Security (not deductible)	4
Sick pay exclusion	9
Signature on return	3
Tax credit, State and Foreign	5, 8, 12
Tax deductions	9
Tax rate schedule	15
Tax table	16
Travel expense	11
Who must file a return	2

independently of the return of the spouse and husband and wife do not join together in filing a joint return.

SEPARATE RETURN — OPTIONAL FORM

An optional form has been authorized for the use of husband and wife who wish to file separate returns and combine their individual tax liabilities and their individual tax current payments for the purpose of determining a combined balance of tax due or a combined refund.

Form IT-1C is available where returns are distributed for the convenience of married taxpayers eligible and desirous of using this method of filing returns. Use of this return will eliminate the possibility of one spouse owing additional tax and the other spouse having a refund due wherein the tax owed might be paid previous to the receipt of the refund.

GENERAL INSTRUCTIONS

WHO MUST MAKE AND FILE A RETURN

Every resident of the State of Iowa shall file a return whose net income (defined above) equals or exceeds the amounts indicated as follows:

1. Single person with a net income of \$1,500 or more.
2. Married couple with a net income of \$2,350 or more filing a joint return.
3. Married couple with a combined net income of both husband and wife of \$2,000 or more, if such couple has elected to file separate returns.

MEMBERS OF THE ARMED FORCES

- a. Residents. Persons who were residents of Iowa at the time of becoming members of the armed forces will be considered as continuing to be residents of Iowa, notwithstanding absence from the state by reason of such service.
- b. Non-Resident. Conversely, persons who were non-residents of this state at the time of becoming members of the armed forces will not be held subject to the Iowa income tax by reason of their presence in this state in pursuance of military orders or duties. Individuals of the armed forces not required to report income in Adjusted Gross Income on their Federal Income Tax Return need not include that income in computation of income for their Iowa Return. This will be of primary interest to military personnel receiving military pay while in Vietnam.

WHEN AND WHERE TO FILE

Please file as early as possible. Returns filed later than April 30, 1967, on a calendar year basis will not be timely filed and consequently will subject the taxpayer to applicable interest and penalty. Returns filed by mail are to be mailed to: STATE INCOME TAX DIVISION, STATE OFFICE BUILDING, DES MOINES, IOWA 50315. Addressed envelopes are provided with return blanks. Returns may be filed by delivery to: STATE INCOME TAX DIVISION, STATE OFFICE BUILDING, DES MOINES, IOWA.

WHERE TO GET FORMS

As far as practical, forms are mailed directly to taxpayers. Additional forms may be obtained from the State Tax Commission, all banks and County Treasurers.

HOW TO PAY

Balance of tax shown to be due on Line 22, Page 1, Form IT-1, must be paid in full with your return. Payments of tax by check, draft or money order must be made payable to the Treasurer, State of Iowa, and be enclosed with your return. If check or money order is not duly honored when presented for collection, the person by whom such check or money order has been issued shall remain liable for the payment of tax, all penalties, interest and additions as though the check or money order had never been tendered.

Beginning with the tax year 1966, full payment of the liability shown to be due at Line 22, Page 1, Form IT-1, is required.

HOW TO CLAIM A REFUND

If tax payments, by withholding and/or by declaration of estimated tax, exceed the balance shown to be due for this tax year at Line 20, Form IT-1, a refund is due. Line 24 provides that the refund can be paid directly to you, or credited to you, or paid partly to you and credited partly to you. If part of the refund is to be applied to your estimation of tax for 1967, indicate the amount to be so credited in the box at Line 24. Then indicate the amount to be refunded to you in the right-hand column at Line 24.

In case payments for 1966 exceed liabilities for 1966, the income tax return itself is a sufficient claim for refund, or credit to estimated tax, or both, as you may indicate at Line 24, if the amount of refund claimed is one dollar (\$1.00) or more.

If the payments of 1966 tax exceed the balance of the tax due be less than one dollar (\$1.00), the income tax return will not be regarded as a claim for refund and Form IT-6 must be executed in order to make claim for refunds in amounts less than one dollar (\$1.00).

Properly claimed refunds are due to be paid over to taxpayers within 45 days after the final due date of the return which is required to be filed not later than four months after the close of the tax year. Delay in filing beyond the final due date extends the date that the refund is required to be made to a date 45 days after the actual filing of the return.

If refunds claimed are delayed in payment in excess of the 45 day period explained above, interest at the rate of 6% per annum will be paid upon the proper amount to be refunded along with the refund amount. Such interest amounts are ordinary interest receipts.

Improperly prepared returns and returns claiming an incorrect amount of refund require additional time for processing. An improperly prepared return is not a proper claim for refund. Until a properly prepared return is filed claiming the correct amount of refund due, if any, the time limitation for making refunds does not apply.

Returns will have to be considered to be incomplete and improper claims for refund if:

1. They do not bear the social security number (or taxpayer's account number) of the taxpayer(s).
2. Verification of payments through withholding and estimation declarations are not submitted with the return.
3. Returns are not properly signed.
4. Supporting schedules are not presented with the return.
5. Claims for exemption and dependency credits are not substantiated as required.
6. Any information requested with the return is not submitted with the return filed.
7. Any additional information requested under provisions of Section 422.22, Code 1966, is denied or is not submitted promptly.

SIGNATURE AND VERIFICATION

A joint return covering separate income of husband and wife must be signed by each. A separate return must be signed by the individual whose income is reported thereon. Unsigned returns are not considered as having been timely filed and may subject the taxpayer to applicable interest and penalty and will further delay eligibility for the refund claimed thereon, if any.

SOCIAL SECURITY NUMBER

Be sure to enter your social security number in the space provided

exactly as shown on your card. If you need a number, file Federal Application Form SS-5 with the district office of the Social Security Administration. Form SS-5 may be obtained from the local post office. File the application early to make certain you receive your card before April 30, the deadline for filing your calendar year return.

PENALTIES

Generally, failure to comply with the above requirements for filing and payment of the proper amount of tax due will subject the taxpayer to a penalty equal to five percent of the tax due for each month during which such failure continues to a maximum penalty of twenty-five percent of the tax, in addition to interest at six percent per annum computed from May 1, 1967. In case of failure to comply, as just described, failure for a month or a portion thereof will result in the application of the penalty for that entire month, and an application of one-twelfth of the annual interest rate for such corresponding month.

Iowa law provides for three other types of penalties being applied where appropriate: (1) "In case of willful failure to file a return with intent to evade tax, in lieu of the five percent monthly penalty above provided, there shall be added to the amount required to be shown as tax on such return fifty percent of the amount of such tax, and

(2) In case of willful filing of a false return with intent to evade tax, there shall be added to the amount required to be shown as tax on such return fifty percent of the amount of the tax." (Final sentence Sec. 422.25-2 Code, 1966)

(3) "Any person required to supply any information, to pay any tax, or to make, sign, or file any return or supplemental return, who willfully makes any false or fraudulent return, or willfully fails to pay such tax, supply such information, or make, sign, or file such return, at the time or times required by law, shall upon conviction for each such offense be punished by imprisonment in the county jail for a term not exceeding one year, or by a fine not exceeding twenty five hundred dollars, or both such fine and imprisonment." (Section 422.25-5 Code, 1966).

INSTRUCTIONS ON FILLING OUT YOUR IOWA INDIVIDUAL INCOME TAX RETURN IT-1

STEP 1. Complete your Federal return first as information needed for your Iowa return is to come from your Federal form. At Number 1 at the top of Page 1, Form IT-1, indicate the year for which the return is filed. If it is for the "calendar year" no further entry is necessary in Step 1.

STEP 2. Complete the entire section marked Number 2 by filling in your name(s) and address. Indicate whether your address has changed since you last filed a return and the last year for which a return was filed. Show your city, town, or post office, the county of your residence, the state in which your post office is located, your zip code number, and the official name of your school district (or the code number of your school district if you know it). Fill in your social security number, a descriptive name for your occupation; if married, your spouse's social security number and a descriptive name for your spouse's occupation.

STEP 3. Check the appropriate block at Line 3 indicating your marital status and write in the name of your spouse if you and your spouse are filing separate returns. (People using Form IT-1C, follow the directions for that form.)

STEP 4. At lines provided under Schedule 4, enter the Federal income tax withheld from wages received, name(s) of employer(s), place(s) of employment, and gross wages received. If the space provided is not large enough, make a summary schedule showing this information and enter totals on the return. Total the amount of Federal income tax withheld at Line IV. Enter the amount of the deductible cost of travel, transportation and other expenses directly attributable to the production of compensation in the lower line of Schedule 4 in the column at the right-hand of Page 1, Form IT-1. This amount of deductible expenses directly related to the production of compensation may be substantiated by completing and filing Form IT-13, which is available at the Tax Commission Office, or a facsimile or copy of Federal Form 2106, with your return.

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In totaling the amount to be shown in Schedule 4 at the line marked "Enter Total From Salaries Here" the amount of deductions from Form IT-13 or facsimile of Federal Form 2106 is to be subtracted from the total compensation recorded on Schedule 4. Total the amount of compensation received at the right-hand column marked "Enter Total From Salaries Here" as adjusted by the cost of production of income deduction, from Form IT-13 or Federal Form 2106.

At the line marked V, enter the amount of Federal tax paid in 1966 for prior years, which payments were not made by the withholding method. At the line marked VI, enter payments made during the year for which the tax return is being prepared on estimated tax returns filed with the Federal government. At the line marked VII, insert the total of amounts appearing at Lines IV, V, and VI. Repeat the amount shown at VII of the line marked VIII just below Schedule B on the left-hand side of Page 1, Form IT-1. At line IX, enter the:

- Amount of Federal income tax refund received in the year for which the return is being prepared; and
- Amount of self-employment tax (social security tax paid by self-employed individuals) if such self-employment tax has been included in any of the amounts shown at Lines IV, V, and VI and included in the amount shown at line VII.

Enter the total of Lines IXA and IXB in the column immediately to the right of line IXB. This will place this total immediately beneath line VIII. Subtract this total from the amount of line VIII and if the result be a plus figure then you will have a Federal income tax deduction to apply in determining your Iowa state taxable income; if this figure be a minus figure, you will have a Federal income tax refund excess which must be added to your other income in determining the amount of income taxable by Iowa. See illustration below.

\$ 300.00	IV Federal Tax withheld in 1966.
100.00	V Federal Tax paid in 1966 for Prior years.
600.00	VI Payments on 1965 Federal Estimated Tax.
\$1000.00	VII TOTAL Federal Tax withheld and paid in 1966. Enter on line VIII below.

VIII. Federal tax paid in 1966		Am't line VII	\$1000	00
IX.	A. Refund Rec'd in 1966	50	00	
	B. Self-Employment Tax included in VIII above	100	00	
X. Federal tax deduction or addition			\$850	00

STEP 5. If you receive a continuation of wages during the period when you were away from your employment due to sickness or injury, you may be entitled to exclude all or part of these wages so received from your Adjusted Gross income. In determining the amount of this exclusion, the Federal laws, regulations, and procedures are to be followed. A facsimile or copy of Federal Form 2440 may be submitted to show computation of the amount of sick pay exclusion; or a separate schedule setting forth essentially all of the necessary facts to properly determine the amount of sick pay exclusion may be submitted. If there is an amount of sick pay to be excluded from your wages, enter such amount at line 5.

STEP 6. Subtract the amount, if any, properly entered at line 5 from the total indicated in Schedule 4 at the line marked "Enter Total From Salaries Here" and enter the balance at line 6.

STEP 7. If you have profit or loss from a trade, business, or profession individually operated, enter at line 7c the net amount shown at line 27, Schedule C on Page 4, Form IT-1A, or the amount shown as "Net Profit" on a facsimile of Federal Schedule 1040C. Include a copy of the schedule used to determine the amount of this income (or loss) with this return.

If you have a profit or loss from the operation of an agricultural enterprise, enter at line 7f the amount shown at line 6 of Schedule F, Page 3 of Form IT-1A, if such profit (or loss) is computed on a cash basis. If the profit or loss is determined upon an accrual basis, enter the amount shown at line 9 of Schedule F, Page 3 of Form IT-1A, at line 7f. In lieu of Schedule F on Form

IT-1A, a facsimile or other copy of Federal Form 1040F may be submitted. The net farm profit shown on Federal Form 1040F should be entered at line 7f. Include a copy of the schedule used to determine the amount of farm income (or loss) with this return.

STEP 8. If you have income from any of the sources enumerated in Schedule B, enter the amount shown on your Federal return in the left-hand column of Schedule B, Page 1 of Form IT-1, and enter the amount includable for Iowa tax purposes on the right-hand column of Schedule B. Enter the total of amounts shown on your Federal return at line 8A at the bottom of the left-hand column in Schedule B. Enter the total of the amounts shown in the right-hand column of Schedule B at line 8B just to the right of Schedule B. Enter the total of lines 8, 7c, 7f, and 8B at line 8C, Page 1 of Form IT-1.

If you have deductible payments as a self-employed person to a qualified retirement plan, enter the amount of such deductible payments at line 8D. The amount, if any, to be entered at line 8D may be developed by use of Federal Form 2950SE, a facsimile of same to be attached to your return.

STEP 9. Subtract the amount, if any, shown at line 8D from the amount shown at line 8C and enter the balance at line 9. THIS IS YOUR IOWA ADJUSTED GROSS INCOME. Those who are submitting facsimiles of their Federal tax return should make appropriate entries at lines 6, 7c, 7f, 8B, 8C, and 8D, taking into account the adjustments indicated on Page 1 of this pamphlet under the caption "Net Income".

STEP 10. Enter at line 10 the amount of Federal income tax deductible or the amount of excess Federal income tax refund from line X.

STEP 11. If line 10 shows a Federal income tax deduction, subtract the amount at line 10 from the amount at line 9 and enter the balance at line 11. If line 10 shows an amount of excess Federal tax refund received during the tax year, add the amount at line 10 to the amount at line 9 and enter the sum at line 11.

STEP 12. Allowable deductions may be applied in three ways:

- If you itemize your deductions on your Federal return, mark the blank space at line 12 after the word Itemized and enter the amount shown as deductible on your Federal return after having subtracted from this amount the State income tax included in the Federal deductions. The total deductions should be determined by completing the itemized Deduction Schedule on Page 2 of Form IT-1. If husband and wife file a joint Federal return and find it to their advantage to utilize separate filing privileges on their State return, Form IT-1C is recommended although Form IT-1 may likewise be utilized. In either case Schedule A, Page 2 of either Form IT-1C or Form IT-1 should be completed if the itemized deductions are paid from common funds or are paid in such a way that the deductions of each are not separately paid by each. Schedule A allows for the deductions of each to be in direct ratio to the adjusted gross income of each. If husband and wife utilizing the privileges of separate filing of State income tax returns do not elect to use Form IT-1C and do not elect to separately itemize deductions on Page 2 but have itemized deductions on Federal Form 1040, then Schedule A, Page 2 of Form IT-1, should be completed and each should furnish a copy of Federal Form 1040 with his and her return.
- If the amount at line 11 is less than \$5,000 you may use the Tax Table provided on the back of this pamphlet. Mark the blank space at line 12 after the words Tax Table. This Tax Table takes into account all of the factors between line 11 and line 18. If it is used, do not enter any amounts between lines 12 and 18; but exemption and dependency credits information must be given at lines 15 and 16.
- If you have not itemized your deductions on your Federal return, you may not itemize them on the State return. If you elect to use the State Standard Deductions, mark the blank space after the words Standard deduction of 5% of line 11 not to exceed \$750.00 and enter such standard deductible amount at line 12.

STEP 13. Subtract the amount shown at line 12 from the amount shown at line 11 and enter the balance at line 13 if you have not exercised option 2 at Step 12.

STEP 14. Those who have not utilized option 2 at Step 12 will be computing their tax on the taxable income shown at Line 13. The income tax may be computed as demonstrated in the computation as illustrated or it may be computed in accordance with the tax rate schedule on Page 15. The amount of computed income tax is to be entered at Line 14a. In addition to the tax computed at progressive rates to and including three and three-fourths per cent (3 3/4 %), there is an additional tax of three-fourths of one per cent (3/4 of 1 %) imposed on all taxable income in excess of \$9,000. This additional tax is to be computed and the amount entered at Line 14b. The sum of the amounts shown at Lines 14a and 14b is to be entered at Line 14c on the extreme right-hand side of Page 1 of your return Form IT-1.

COMPUTATION OF TAX (see instructions Form IT-Inf.)				
Schedule of Rates	Amount of Taxable Income	Rate of Tax	Amount of Tax	
\$ 0 to \$1,000	\$ 1,000 00	1% of 1%	\$ 7 50	
\$1,000 to \$2,000	1,000 00	1 1/2%	15 00	
\$2,000 to \$3,000	1,000 00	2 1/2%	25 00	
\$3,000 to \$4,000	1,000 00	3%	30 00	
All over \$4,000	5,980 67	3 3/4%	224 28	
Taxable Income Over \$9,000	980 67	1/4 of 1%	7 36	
Total tax (to line 14)			\$ 306 64	

STEP 15. Taxpayers are entitled to personal exemption credits against their total tax (or gross tax) liability. At Line 15 mark as many boxes as are applicable to you. To determine the number of boxes to mark, you should read instructions relating to unmarried head of household and exemptions for age and blindness. To determine the amount of personal exemption credits against your tax, multiply the number of boxes marked by \$15.00 and enter this total at Line 15. See illustration below.

STEP 16. You may be entitled to credit against your total or gross tax based upon your support of dependents. In the box marked "Number of children" write the number of your children for whom a dependency credit would have been allowed on your Federal return. In the box marked "Number of other dependents" write the number of other dependents for whom a dependency credit would have been claimable on your Federal return. The sum of credits for dependents (the sum in the box marked "Number of children" plus the sum in the box marked "Number of other dependents") should be multiplied by \$7.50 and the total entered at Line 16 in the block provided. See illustration below. As shown in the illustration, the first names of your children who qualify as dependents are to be listed on Page 1. For other dependents, use Schedule 2 on Page 2 of your return and complete all the parts thereof so as to substantiate your right to the dependency credits for other dependents.

STEP 17. Enter at Line 17, in the column at the right-hand side of Page 1, Form IT-1, the sum of the amounts shown at Line 15 and Line 16.

STEP 18. Subtract the amount at Line 17 from the amount at Line 14c. If there is a balance, enter it at Line 18. If the amount at Line 17 exceeds the amount at Line 14c, enter zero at Lines 18, 19 and 20. The amount at Line 18 is the Tax Balance.

STEP 19. If any income reported to Iowa for taxation and forming a portion of the taxable income at Line 13 has been taxed by another state or country, you are entitled to a credit equal to the lesser of: (1) the amount of tax computed for Iowa purposes on the income taxed by another state or country; or (2) the tax paid such other state or country. To compute the amount of credit for tax paid another state or country, turn to Page 2 and complete the schedule entitled "Credit for income tax paid to another state or country". Enter the amount shown at Line G on this schedule at Line 19, Page 1 of Form IT-1. (If the amount at Line 18 is zero, this operation is not necessary.)

STEP 20. Subtract the amount, if any, shown at Line 19 from the amount, if any, shown at Line 18 and enter the balance, if any, at Line 20.

STEP 21. At Line 21a enter the amount of Iowa income tax withheld at the source and shown on your earnings statements (Form IT-SA or W-2 state copies) attached at the margin at the left of Schedule 4.

At Line 21b enter the amount of estimated tax payments for the year 1966 as confirmed by your confirmation of payments issued on Form IT-W13, which are to be attached at the margin at the left of Schedule 4, plus any amounts that may have been paid for 1966 for which no confirmation statement, Form IT-W13, has been issued.

At Line 21c, in the extreme right-hand column of Page 1, Form IT-1, enter the sum of payments shown at Lines 21a and 21b.

STEP 22. Compare the total payments of 1966 income tax with the amount shown at Line 20; if the amount shown at Line 20 is greater than the amount shown at Line 21c, enter at Line 22 the amount by which the figure at Line 20 exceeds the figure at Line 21c. This is the tax which is due and payable with your return. Your total previous payments plus your current payment will equal the total amount of tax due.

STEP 23. If the payments shown at Line 21c are greater than the amount of tax shown at Line 20, enter the amount by which the figure at Line 21c exceeds the figure at Line 20 at Line 23. This is your possible refund.

STEP 24. If you wish to have a portion of your possible refund applied in payment of your 1967 estimated tax, enter the amount to be applied to your 1967 estimated tax in the block near the center of Line 24. Now subtract the amount entered in the block near the center of Line 24 from the amount shown at Line 23 and this is your net refund claimed to be shown in the right-hand column at Line 24. You need not execute any other claim for this refund if the amount shown at the right-hand column at Line 24 is one dollar (\$1.00) or more.

If you do not wish to apply any of the amount shown at Line 23 as a payment on your 1967 estimated tax, enter the same

15. Personal exemptions:		Yourself <input checked="" type="checkbox"/> 65 or over <input type="checkbox"/> blind <input type="checkbox"/> Wife <input checked="" type="checkbox"/> 65 or over <input type="checkbox"/> blind <input type="checkbox"/>	Unmarried Head of Household <input type="checkbox"/> number of boxes x \$15.00 = \$30.00
16. List first names of your children who qualify as dependents list other dependents on Page 2.		Credit for dependents: number of children <input checked="" type="checkbox"/> x \$7.50 = \$22.50 Number of other dependents <input type="checkbox"/>	\$52.50
MICHAEL, CHERYL		17. Total of lines 15 and 16 →	

PART 2 EXEMPTIONS Complete only for dependents other than your children claimed on line 16, page 1					
(a) NAME (if more space is needed attach schedule)	(b) Relationship	(c) Months lived in your home. If born or died during year write "B" or "D"	(d) Did dependent have income of \$500 or more?	(e) Amount YOU furnished for dependent's support, if 100% write "All"	(f) Amount furnished by OTHERS including dependent.
1 ELIZABETH ANDERSON	MOTHER	12	NO	\$743.50	\$149.75
2					
3 Total number of dependents listed above. Enter here and on page 1, line 16					1

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figure that appears at Line 23 in the right-hand column of Line 24. No further claim for refund need be executed if the amount shown at Line 24 is one dollar (\$1.00) or more.

Refunds of one dollar (\$1.00) or more will be paid if claimed on properly completed returns. Refunds claimable in amounts less than one dollar (\$1.00) will be paid only upon receipt of a properly executed Form IT-6. Forms IT-6 may be obtained from the State Tax Commission Office, Des Moines, Iowa 50319, or from any of the offices of the State Tax Commission listed on Page 1 of this pamphlet.

STEP 25. Be sure to sign your return and date it the date you sign it. If it is a joint return, both husband and wife must sign it. If there is an amount due at Line 22, submit the entire amount in a

remittance payable to the Treasurer, State of Iowa. Please mail your return in the goldenrod colored envelope furnished with the return. On the front of this envelope, you will note there are two squares. If this return is a claim for refund, check the square opposite the expression indicating that a refund is due taxpayer. If a remittance is due with the return, check the square opposite the expression indicating that a payment is enclosed. If you misplace this goldenrod colored envelope, address your return to the INCOME TAX DIVISION, STATE OFFICE BUILDING, DES MOINES, IOWA 50319, and be certain to mark on the outside of the envelope in the lower left-hand corner whether this return is a claim for refund. We suggest that if the return is a claim for refund that you write in the lower left-hand corner of the envelope the words "Refund Due Taxpayer".

SPECIFIC INFORMATION AND INSTRUCTIONS

INSTRUCTIONS FOR USE OF FORM IT-1C, A COMBINATION RETURN BLANK TO ACCOMMODATE HUSBAND AND WIFE FILING SEPARATE RETURNS OF INCOME ON A SINGLE TAX RETURN BLANK WHERE THEY AGREE TO COMBINE THEIR TAX LIABILITIES AND TAX PAYMENTS BY WITHHOLDING AND/OR PAYMENTS ON ESTIMATES SO AS TO DETERMINE A COMBINED TAX LIABILITY DUE WITH THE RETURN OR A COMBINED TAX REFUND CLAIMED UPON THE RETURN.

STEP 1. Having completed your Federal return, you will have all of the general information needed for completing your 1966 combined income tax return. Reference may be needed to your 1965 Federal and State returns. At the space opposite No. 1, note the year the return covers. If it is for a calendar year, no entry need be made.

STEP 2. Enter the first name and middle initial of the husband, then enter the first name and middle initial of the wife, and the last name. Fill in your address, including county, post office address including the state in which your post office is located, and complete the address by entering your zip code number. Please answer the question under the line entitled "Home Address" and enter the name of your school district unless you know the serial number of your school district, which number may be entered at the line calling for the name of your school district instead of writing out the name of your school district. Please make certain that you enter your social security number(s) exactly as they appear on your social security identification card. Enter a descriptive name of your occupation(s).

STEP 3. What would ordinarily be called for in Step 3 is uncalled for when using this special form.

STEP 4. Step 4 begins with the examination of all the lines in "Schedule 4", as a unit, including the lines designated by Roman Numerals IV through X.

There are two lines for entering the amount of wages and Federal income tax withheld and showing the names of employers and address of employment. If neither of you have travel or transportation deductions allowable as adjustments on Page 1 in computing the portion of your wages or salaries to be included in adjusted gross income, it is suggested that the husband utilize the top line to combine all of the earnings shown on his earnings statements (Forms IT-5A or State copies of Form W-2) and enter the total of such earnings in the second column from the extreme right, and all of his Federal income tax withheld in the first column on the extreme left; with the wife utilizing the second line and entering the sum of all her wages and salaries

in the column on the extreme right and her Federal income tax withheld in the second column from the extreme left. If either have travel expenses, then both should combine their separate income and separate Federal income tax withholding on the first line, each utilizing the columns for entry separately assigned to them. The second line may then be used for entering travel and transportation adjustments to income developed on State Form IT-13 or Federal Form 2106, a copy of which should be submitted with this return.

The next operation involves the computation of the Federal income tax deduction. Husband and wife should each complete this computation as follows:

A. Each put the sum of their Federal income tax withheld during 1966 at Line IV in the appropriate column.

B. Each should enter the amount of Federal income tax paid during 1966 for any prior year by means other than withholding or payment of estimated Federal tax at Line V.

C. Each should enter any payments of 1966 estimated Federal tax at Line VI.

D. Each should total the amounts shown in his and her column at Lines IV, V, and VI and enter this total at Line VII.

E. The total at Line VII should be carried forward to Line VIII located immediately beneath Schedule B in the column marked for each spouse ("Husband" and "Wife").

F. Lines IXA and IXB should be completed by entering at IXA the amount of refund received by each in 1966 and entering at Line IXB any self-employment tax included in any payment shown to have been made in any of the Roman Numeral numbered lines IV through VI.

G. Subtract the sum of the entries at Lines IXA and IXB from the amount shown at Line VIII and enter the balance at Line X.

If the sum of the amounts at Lines IXA and IXB is less than the amounts at Line VIII, you have a Federal tax deduction; keeping in mind that each of you have separate, individual situations. If the sum of the amounts at Line IXA and IXB is greater than the amounts at Line VIII, then you have an excess Federal tax refund

which amounts to an addition to your adjusted gross income.

At the line on the right-hand of the page entitled "Enter Total From Salaries Here", the husband enters the total of his salaries received in the column to the left of the extreme right-hand column and the wife enters the total of her salaries received on this line in the column on the extreme right.

STEP 5. You will note there are some small Arabic figures enclosed in black. They have no significance in the preparation of your return but are data processing guide posts.

At line 5, each of you should follow directions in determining your excludable sick pay, if any. You will have encountered this same situation in preparing your Federal income tax return and will have used Federal Form 2440 in determining the amount of sick pay for Federal income tax purposes. Each of you, therefore, will enter the same figure that you used on your Federal return, if you had excludable sick pay. Each of you having excludable sick pay should submit with this return a copy of your Form 2440 or a separate schedule setting forth essentially all of the necessary facts to determine and substantiate the amount of your sick pay exclusion, if any.

STEP 6. At line 6, in the columns to the right, each of you should enter the balance after subtracting the amount of line 5 from the amount shown at the line in Schedule 4 entitled "Enter Total From Salaries Here". By this time you will note that where separate columns apply to husband and wife, the husband's column is to the left of the wife's column and each of the columns are clearly labeled "Husband" or "Wife".

STEP 7. If either or both of you have income or loss from the operation of a trade, business, or profession, enter the amount at line 7C from line 27, Schedule C, Page 4, Form IT-1A, or the amount shown as "Net Profit" on a facsimile of Federal Schedule 1040C and be sure to submit a copy of whichever of these forms you have utilized.

If either of you have profit or loss from the operation of an agricultural enterprise, enter at line 7F the net profit or loss developed either on Schedule F, Page 3, Form IT-1A, or the amount developed on Federal Form 1040F, and be certain to submit a copy or facsimile of whichever of these forms you have utilized.

STEP 8. Schedule B is located near the center of the page just beneath line VII and line 7F. Complete Schedule B by first entering in the left-hand column of Schedule B the total shown on the Federal return from each of the sources listed in Schedule B on the same line that each source of income is announced on Schedule B. To the right of this column are two columns marked "(H)" and "(W)". The husband's income from each of the sources should be entered in the column marked "(H)" and the wife's in the column marked "(W)". Adjustments from the amount shown on the Federal return to the amount required to be shown on the state return are enumerated in the early pages of this pamphlet under "Definitions of Net Income". At line 8A, enter the total of Schedule B income shown on your Federal return. At line 8B, each of you enter the total that each of you had, as adjusted in accordance with definitions of net income, from sources listed in Schedule B. At line 8C, each of you should enter the sum of the amounts shown in your separate columns on the right-hand side of the page at lines 6, 7C, 7F, and 8B. At line 8D, enter any self-employment contributions to a qualified retirement plan. Your determination of the amount of these contributions which are deductible should have been completed by using the Federal Form 2950SE. The amount shown to be deductible on this form is the amount that should be entered at line 8D in the column appropriate to the person to whom this deduction is available. Please make certain to submit with your return a facsimile of Federal Form 2950SE to substantiate your right to this deduction if you are claiming this deduction.

STEP 9. Subtract the amount at line 8D from the amount at line 8C and enter the balance at line 9. This is your Iowa Adjusted Gross Income.

STEP 10. Look over at the left-hand side of your page and transpose the figures at line X, each claiming your Federal tax deduction (or recognizing your Federal tax addition of excess tax refund, as appropriate) to line 10 in the columns on the right-hand side of the page.

STEP 11. When line 10 shows the Federal income tax deduction, subtract the amount in line 10 from the amount in line 9 and enter the balance at line 11 in the appropriate column. When line 10 shows a Federal excess refund addition, add the amount

in line 10 to the amount in line 9 and enter the sum at line 11 in the appropriate column.

STEP 12. (A) If you itemized your deductions on your Federal income tax return(s), you have three alternatives:

1. If you filed separate Federal returns, then your state itemized deductions will be the amount shown on each of your separate Federal returns as deductions less the amount of State income tax included in such separately computed deductions for each of you.

2. If you filed jointly on your Federal income tax return and itemized your deductions, then each of you may claim the amount of deductions that each of you paid, less the amount of State income tax each of you paid and included in your jointly claimed Federal income tax deductions.

3. If you filed a joint Federal income tax return and itemized deductions, but are not able to properly distinguish which of you paid specific amounts of these deductions, then each of you are entitled to claim that portion of the deductions claimed for Federal income tax purposes (less the State income tax included in such deductions) that represents the same percentage of such (adjusted) Federal income tax deductions as the adjusted gross income of each of you bears to your combined total adjusted gross income. If you will carefully complete Page 2 of Form IT-1C, paying particular attention to Schedule A and the construction of the itemized deduction schedule on Page 2, then the apportionment of deduction credit between husband and wife will be accomplished in accordance with Iowa statutes.

If you are using itemized deductions, mark the blank space at line 12, Page 1, Form IT-1C, after the word Itemized ☒ and enter the amount of your individual state income tax deductions in the appropriate column at line 12.

If either of you claims itemized deductions, both of you must. If either of you uses the standard deduction, then both of you must use the standard deduction or the tax table, which is designed to equal the use of the standard deduction.

(B) If you elect to use the tax table, mark the blank space at line 12, Page 1, Form IT-1C, after the expression Tax Table ☒ and enter the amount shown on the tax table as appropriate to your income, exemptions, and number of dependency credits at line 13. Use of the tax table eliminates the necessity to complete any of the lines between line 12 and line 18 EXCEPT that the exemptions claimed should be asserted by marking the squares appropriate at line 15 and stating the number of children and the number of other dependents at line 16; writing in at line 16 the names of your children who qualify as your dependents; and completing Part II on Page 2 to substantiate the claiming of other dependents. If you use the tax table it is not necessary to multiply your number of exemptions by \$15.00 nor to multiply the number of your dependency credits by \$7.50 and extending the sum to line 17. You need only mark the squares appropriate at line 15 and follow the instructions previously given at line 16.

(C) If you elect to use the standard deduction, mark the blank space at line 12, Page 1, Form IT-1C, after the expression Standard of 5% of line 11 not to exceed \$250.00 ☒. Then enter the appropriate amounts at line 12 in the columns at the right-hand side of the page.

STEP 13. If either the itemized deduction or the standard deduction have been used, subtract the amount entered at line 12 from the balance shown at line 11 and enter the remainder at line 13.

STEP 14. This is the step in completion of your return where you will be computing the gross amount of tax on your income. Carefully note that line 14, along with lines 15, 16, and 21, has a heavy vertical line separating the left-hand portion of the page into two parts; the left-hand part being for the use of the husband and the right-hand part for the use of the wife.

HUSBAND: Complete lines 14a and 14b. Line 14a is to be completed according to the rate schedule appearing on Page 15 of this pamphlet (or may be computed according to the computation of tax on the block illustrated at Step 14 in instructions for use of Form IT-1). On line 14b, enter the amount of tax on your taxable income (amount at line 13) in excess of \$9000.00 at the rate of 3/4 of 1% of such amount in excess of \$9000.00. Having entered the amount of tax at line 14a and the amount of tax at line 14b, enter the sum of these two amounts as indicated on the right-hand side of Page 1 (left-hand column thereof).

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WIFE: Compute your income tax and your tax on taxable income in excess of \$9,000.00 following the same directions as your husband did and enter the sum of Lines 14c and 14d on which you have entered the amount of income tax and the amount of tax on income in excess of \$9,000.00 in the column at the extreme right-hand side of the page opposite Line 14.

STEP 15. Each of you claim your exemptions by marking the square(s) appropriate for your personal exemptions; multiplying the sum of the square(s) you marked by \$15.00; and entering the product in the box to the right of the small square(s) you have just marked, (unless you have used the tax table to determine your tax).

STEP 16. Each of you enter at Line 16 (husband on the left side of the heavy vertical line at the center of the page and the wife on the right side of the heavy vertical line at the center of the page) the number of your children you are claiming as dependents and the number of other dependents you are claiming; multiply the sum of dependents claimed by \$7.50; and enter the product in the box to the right of the small square(s) you have just marked with the number of children and other dependents you are claiming, (unless you have used the tax table to determine your tax).

Each of you write the first names of your children on the heavy horizontal line indicated for this purpose and each of you utilize Page 2 for naming any other dependents you may be claiming at Part II, Page 2. Husband should use Line 1, Part II, Page 2, and wife should use Line 2, Part II, Page 2.

STEP 17. Over on the right-hand side of the page, you will notice a large number 17 just opposite Line 15 for the husband and just opposite Line 16 for the wife. The husband should enter, just to the right of the large number 17, the sum of the two entries in the blocks where he has shown the product of the number of his exemptions and \$15.00 and the product of the number of his dependents and \$7.50. The wife should follow the same procedure, placing the sum of the two products in the extreme right-hand column on the right-hand side of the page.

STEP 18. Each of you now has, at Line 14, your total gross tax, and, at Line 17, your exemption and dependency credits combined. Each of you subtract your amount at Line 17 from your amount at Line 14 and enter the remainder at Line 18 in your appropriate columns.

STEP 19. If either or both of you have paid tax to another state or foreign country, on income included on this return, please turn to Page 2 and complete the schedule entitled "Credit for Income Tax Paid to Another State or Country". If there is an amount at Line G of this schedule, copy that amount onto Line 19 in your appropriate column at the right-hand side of Page 1, Form IT-1C.

STEP 20. Each of you subtract the amount, if any, at Line 19 from the amount at Line 18 and enter the balance, if any, at Line 20. If there is no balance to enter at Line 20, enter zero.

STEP 21. You should have attached at the vertical center on the left-hand side of your return the following:

1. The earning statements, Forms IT-5A or W-2 State copies.
2. Certificate(s) of estimated tax payments.

At Line 21a enter the amount of state income tax withheld with the husband using the left-hand block and the wife using the right-hand block. In a similar fashion enter the amount of 1966 estimated state tax payments at Line 21b. If your certificate of estimated tax payments has failed to include the total of your tax payments on estimated returns, please enter the correct amount that your certificate should show and note the date of your final payment of estimated tax. Use the total actually paid then as your entry at Line 21b. Each of you should enter, at Line 21c, the total of your Lines 21a and 21b.

Line 21d applies to each of you separately and each should separately enter in the appropriate column at the right-hand side of the page the amounts you have shown at Line 21c.

STEP 22. Each of you separately compare the amount shown in your separate columns at Lines 20 and 21d. If the amount at Line 21d is less than the amount at Line 20, enter the difference at Line 22.

STEP 23. You are still comparing the amounts at Lines 20 and 21d, each of you separately. If the amount at Line 21d is greater than the amount at Line 20, enter the difference at Line 23, each of you separately. This is the last step and the last point at which there is separateness in this return. Lines 24, 25, and 26 are

designed to provide combining of actual tax due for 1966 and actual tax payments for 1966, for the purpose of determining whether you have a combined net refund or a combined net tax liability.

STEP 24. Combine the payments made by the husband and wife and combine the tax at Line 20 for both husband and wife. If the combined payments are less than the sum of the amounts shown at Line 20 by each of you separately, enter the difference at Line 24. If there is a balance at Line 24, this may be paid by either of you, but must be paid in full with this return. If there is no balance to be shown at Line 24, complete Lines (Steps) 25 and 26.

STEP 25. If the combined payments (husband's Line 21d plus wife's Line 21d) are greater than the combined tax (husband's Line 20 plus wife's Line 20) then your current payments during 1966 have exceeded your 1966 tax liability. The amount by which the combined payments exceed the combined tax of both of you should be entered at Line 25.

STEP 26. You will not be performing this step unless there was an amount shown at Line 25. The amount shown at Line 25 can be recovered in several ways:

1. All or any part of it can be applied to the 1967 estimated income tax of either the husband or the wife.
2. All or any part of it may be applied against the estimated tax of both husband and wife.
3. Whatever is not applied to the 1967 estimated income tax may be claimed as a cash refund.

Whatever amount is claimed as a cash refund should be entered in the column at the right of Line 26. Whatever amount is credited to the 1967 estimated income tax liability of either or both of you should be entered at the block(s) in Line 26. The sum of the amount of cash refund claimed plus the amount(s) shown in the block(s) in Line 26 should equal the amount shown at Line 25.

STEP 27. Each of you should sign the return and date it the date you sign it. This return and any schedules required should be mailed in the goldenrod colored envelope provided for that purpose. At the lower left-hand corner of this envelope, there is space to indicate whether this is a combined claim for refund or a combined transmittal of additional tax. Indication by you can result in more prompt handling of your return and facilitate the execution of refund. You should be reminded that refund claims for less than \$1.00 must be accompanied by Form IT-6 which is available wherever state income tax blanks are distributed. Blanks are most abundantly available at the Tax Commission offices listed at the front of this pamphlet. If the amount claimed as a refund is \$1.00 or more, your properly completed income tax return serves as a claim for such refund.

SPECIFIC INFORMATION AND INSTRUCTIONS

HEAD OF HOUSEHOLD Line 15, Page 1, Form IT-1

A Head of Household is a single ("single" meaning unmarried divorced, widowed, or legally separated), who, during the year, furnished over half of the cost of maintaining a household for the entire year for at least one relative.

Your father or mother must qualify as your dependent and must live in a home you maintain for him or her. It is not necessary that you or your parent live in the same household. However, maintaining a parent in a home for the aged is not maintaining a household for such parent.

Your unmarried child, grandchild, or stepchild must live in your household which you maintain as a principal residence for both you and them. It is not necessary that such person qualify as a dependent in order for you to claim Head of Household benefit (for the Head of Household additional exemption credit only) if you maintain the home for them.

All other relatives must live with you in your household and must qualify as your dependents for their support to qualify you for Head of Household status in tax treatment.

DO NOT CLAIM HEAD OF HOUSEHOLD STATUS ON YOUR IOWA RETURN UNLESS YOU CLAIMED HEAD OF HOUSEHOLD STATUS ON YOUR FEDERAL RETURN.

The Surviving Spouse Rule provided by the Federal law does not allow the double exemption for any year following the year of death of the deceased spouse. Iowa regulation will permit, under this rule by the Federal, the privilege of Head of Household classification within limitations imposed by Federal rules.

JOINT RETURN WITH DECEASED SPOUSE

A joint return may be filed with your deceased spouse whether or not he or she had income in his or her own right, provided you do not remarry during the tax year. The personal exemption need not be prorated. The full exemption may be claimed for the deceased spouse in the case of a joint return. Extra exemption for blindness or age may be claimed for a deceased spouse with eligibility for the extra exemption determined as of date of death.

DEPENDENTS

List children's first names on line 16, page 1, Form IT-1, and list other dependents on Part 2, page 2, Form IT-1. The credit for all dependents is taken on line 16, page 1, Form IT-1.

The term "dependent" for Iowa income tax purposes shall have the same meaning as provided by the Internal Revenue Code of 1954. You may, therefore, claim the same dependents on your Iowa return as you claim on your 1966 Federal return. You need not include in your income the income of any of your dependents. Even though a qualified dependent is not in existence during the whole tax year, full credit may be claimed.

EXCLUSION FOR SICK PAY

The law allows you to exclude from wages amounts received as wages, or in lieu of wages, under a wage continuation plan for the period during which you were absent from work on account of personal injuries or sickness, as described in Federal Instruction.

FEDERAL INCOME TAX DEDUCTION OR ADDITION Line 10

See example listed above as Step 4, Page 1, of Instructions. (Separate Schedule, Page 1 of Return.)

Federal income taxes paid during the tax year are deductible, to the extent that they exceed Federal Income Tax Refunds. Such totals should include:

1. The entire amount withheld during the tax year from compensation of the taxpayer for the payment of Federal income tax.
2. Any additional Federal income tax assessment on a prior return paid during the tax year. Tax paid on final and completed Federal income tax return filed by the taxpayer for the preceding tax year, and paid during the tax year.
3. Tax paid at any time during the tax year on a return of declared or estimated tax, or on any amendment to such return.
4. If during the tax year you received a refund of Federal income tax withheld from your compensation, or paid by you, that refund must be shown at line IX, Page 1 of your return. (This does not apply to accrual basis taxpayers unless tax previously accrued is refunded.)
5. If Federal tax refund exceeds Federal tax paid in the tax year, the amount by which the refund exceeded the Federal tax paid is to be added to the Adjusted Gross Income at line 11, Page 1, Form IT-1.

No Federal income tax deduction will be allowed unless the schedule on Page 1 at lines IV through X of your return is completed. F.I.C.A. tax and self-employment tax are not income taxes and are not deductible. If such taxes are included in the total at line VII (or VIII), such amount is to be entered at line IX and subtracted along with Federal tax refunds in computing the Federal tax deduction or addition.

TAX TABLE

If your income is less than \$5,000 after allowable deduction for Federal income tax paid and you choose not to itemize deductions, you may use the tax table. Mark Tax Table at line 12, Page 1 of your return. It allows a deduction of approximately 5 percent of your income for charitable contributions, interests, taxes (other than Federal income tax), medical expenses, etc. (see Instructions at Step 12), and shows the amount of tax due and payable based on this allowance. Users of the Tax Table should enter the amount from the Tax Table at line 18, Page 1, Form IT-1, thus eliminating completion of lines 12 through 17, except for marking appropriate squares at lines 15 and 16, and completing Dependency Schedule on Page 2.

STANDARD DEDUCTION Line 12

If deductions are not itemized on your Federal return, the law provides a standard deduction of 5 percent of the total shown at line 11, Page 1, not to exceed \$250. (Enter at line 12, Page 1, Form IT-1). If you use the Standard Deduction, mark Standard Deduction of 5% of line 11 not to exceed \$250 at line 12.

ITEMIZED DEDUCTIONS Line 12 and Schedule on Page 2 of Return

If you have itemized your deductions on your Federal return, you may itemize deductions on your State income tax return. Deductions

are allowed for contributions, interest, taxes, medical and dental expenses, child care, losses from casualty, theft or disaster, and other miscellaneous items including cost for tax service, union dues, special uniforms required for work, education engaged in for the maintenance of skills or required for retention of status or position. It should be noted that for tax years beginning after December 31, 1963, no personal deduction is allowed for driver's license costs or automobile registration costs which are based upon the weight of the auto. No personal deduction is allowed upon the State income tax return for State income taxes. Child care deductions are liberalized under P.L. 88-272 (1964 Federal amendments). Casualty losses to the extent that they exceed \$100 are deductible.

If a husband and wife file a joint Federal return itemizing deductions and elect to file separate State returns, the itemized deductions allowed to each may be claimed by each on the basis of the portion of such expenditures incurred by each. If such deductions were paid from common funds or arising out of common ownership of property, then the deduction of each may be determined in the ratio that the gross income of each bears to their total combined gross income. To make this determination, utilize Schedule A at the top of Page 2, Form IT-1.

CONTRIBUTIONS

If you itemize deductions, you can deduct gifts to religious, charitable, education, scientific, or literary organizations, and organizations for the prevention of cruelty to children and animals, unless the organization is operated for profit, or conducts propaganda or otherwise attempts to influence legislation. You can deduct gifts to fraternal organizations if they are to be used for charitable, religious, etc., purposes.

In general, the deduction for contributions may not exceed 20 percent of your adjusted gross income reported in your Federal return.

However, you may increase this limitation to 30 percent if the additional 10 percent consists of contributions made to churches, a convention or association of churches, tax-exempt educational institutions, tax-exempt hospitals, or certain medical research organizations. If all your contributions were to these churches, schools, hospitals and medical research organizations, you can deduct the contributions made but not more than 30 percent of your adjusted gross income. To compute the deduction for contributions you should first figure the contributions to these special institutions to the extent of 10 percent of your adjusted gross income. The amount in excess of 10 percent should be added to the other contributions to which the 20 percent limitation applies. If contributions exceed 20 percent of your adjusted gross income, attach a schedule showing this computation.

MEDICAL AND DENTAL EXPENSES

If you and your dependents for whom you claim a dependency credit are all under age 65 at the close of your tax year, your deductible medical and dental expenses are limited to the sum of the cost for medicines and drugs to the extent that they exceed 1 percent of your adjusted gross income and all other medical expenses when such sum is reduced to the extent of 3 percent of your adjusted gross income.

If one or more of your dependents is 65 years of age or over on the last day of your tax year, then the medical and dental expenses incurred by you in their behalf should be separately computed for the deduction, since their medical and dental expenses are to be computed in the manner described in the following paragraph. That is to say, the medical and dental expenses deductible for those dependents 65 years of age or over at the conclusion of your tax year is determined by adding the sum of all cost for medicine and drugs and all other medical and dental expenses incurred in their behalf.

Special rule for persons 65 or over. If either you or your wife or both of you are 65 years of age or over on the last day of your tax year, your deduction for medical and dental expenses for you and your wife is the sum of the cost of medicine and drugs and the cost of all other medical expenses. The allowable deduction for medical and dental expenses incurred in behalf of your dependents under age 65 is the sum of the cost of medicine and drugs in excess of 1 percent of your adjusted gross income; and the cost of all other medical expenses to the extent that such sum exceeds 3 percent of your adjusted gross income.

PERSONAL EXEMPTIONS HUSBAND AND WIFE Line 15

A husband and wife filing a joint return, neither one of whom is blind or 65 years of age or over on the last day of their tax year,

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are each entitled to personal exemption credits against their total or gross tax amounting to \$15.00 (\$30.00 for the couple). A Head of Household who is neither blind nor 65 years of age or over on the last day of his or her tax year is entitled to an exemption credit against his or her gross tax amounting to \$30.00 (\$15.00 for himself or herself and \$15.00 for Head of Household status). A single or married person filing a separate return under 65 years of age and not blind on the last day of his or her tax year is entitled to an exemption credit against his or her gross tax amounting to \$15.00.

Any person entitled to a personal exemption credit is entitled to an additional exemption credit if such person is blind on the last day of his or her tax year. Similarly, any person who is entitled to a personal exemption credit is entitled to an additional exemption credit if such person is 65 years of age or over on the last day of his or her tax year. A person is determined to have attained the age of 65 years if his or her 65th birthday falls upon the day following the last day of his or her tax year.

If husband and wife file separate returns, neither spouse may take the exemption credit(s) attributable to the other.

DEPENDENCY TAX CREDIT

A dependency tax credit of \$7.50 is allowable against the gross tax for each dependent. No additional tax credit is allowable for dependents who may be blind or 65 years of age or over.

OPTIONAL METHOD OF FILING

Form IT-1 contains Pages 1 and 2 comparable to Pages 1 and 2 of Form IT-1 used in former years. If properly computed, Form IT-1 may be filed as a short form return, IF A COMPLETE FACSIMILE OR PHOTOCOPY OF YOUR FEDERAL RETURN AND SUPPORTING SCHEDULES IS ATTACHED. To properly complete the short-form method:

1. Enter the appropriate amounts at lines 6, 7c, 7f, 8b, 8c, 8d and 9 on page 1, form IT-1. This will accommodate adjustments from the requirements of the Federal regulation to the State regulation. (See page 2 net income, and page 10 taxpayers moving in and out of State.)
2. If deductions were itemized on Federal form 1040, enter the total of itemized deductions shown on Page 2 of Federal form 1040, less the Iowa income tax included in that total, at line 12, Page 1 of your Iowa return.
3. It will not be necessary to complete lines 4 and 5, page 1 of your return. You are required, however, to complete lines 10 through 22, and on through line 24, if appropriate.

OR: You may complete Form IT-1 in its entirety using facsimiles of your Federal schedules in support of items on Page 1 of your form which require supporting schedules.

If you choose this method of preparing the return, failure to comply with the above requirements will constitute an incomplete return.

WHERE TO GET FORMS

As far as practical, forms are mailed direct to taxpayers. Additional forms of all kinds may be obtained from the State Tax Commission, all banks, and all County Treasurers.

TAXPAYERS MOVING IN OR OUT OF THE STATE

If a taxpayer moves from the State during the tax year and retains his Iowa residency within the State, he also reports all of his income to Iowa as a resident and is entitled to tax credit against his tax in accordance with the computation of that credit on Page 2 of Form IT-1.

If a taxpayer moves from the State during the tax year and does lose his Iowa residency, then he reports to Iowa as a Non-Resident that portion of his income derived from sources within Iowa.

A taxpayer who moves into the State during the tax year but does not acquire Iowa residency should report to Iowa as a Non-Resident for that tax year the income derived from Iowa activities.

A taxpayer who moves into Iowa, acquiring residency during the tax year, reports to Iowa all income earned in Iowa during the year, and all income received after becoming a resident even though not earned in Iowa. The Federal income tax deduction must be prorated in the same ratio that the Iowa adjusted gross income (net income) of the taxpayer bears to the total adjusted gross income. If the taxpayer takes itemized deductions the itemized deduction allowed on the Iowa return will be in same ratio as used for the Federal income tax deduction above. However, there is no prorating of personal credits or dependent credits as this may be claimed for the full amount as allowed on lines 15 and 16, page 1, Form IT-1. No taxpayer is entitled to credit for taxes paid another state unless

the income, upon which the tax for the other state is based, has been included in income declared to Iowa for income taxation.

INTEREST RECEIVED Schedule B

Interest received on State and Municipal securities is not exempt from Iowa income tax and should be reported on Page 1, Schedule B of the State return, except bonds issued under authority of Chapter 262, Code of Iowa and exempted by reason of Section 262.51.

Interest received from the following securities is exempt from Iowa income tax:

Interest received on Federal government bonds and postal savings.

Interest obligations of:

Federal Reserve Banks	Federal Farm Mortgage Corporation
Federal Land Banks	Home Loan Bank
R. F. C.	Federal Deposit Insurance Corporation
Home Owners Loan Corporation	

DIVIDENDS RECEIVED Schedule B

The following dividends are exempt from Iowa income tax and the total of such (if included in your return) should be deducted in miscellaneous schedule on Page 2, Form IT-1:

Commodity Credit Corporation	National Farm Loan Association
Farmers Home Corporation	Joint Stock Land Banks
Federal Deposit Insurance Corporation	Home Owners' Loan Corporation
Federal Farm Loan Corporation	Production Credit Corporation
Federal Loan Banks	Central Bank for Cooperatives
Federal Intermediate Credit Banks	Reconstruction Finance Corporation
Federal Land Banks	United States Housing Authority
Federal Savings and Loan Insurance Corporation	United States Maritime Commission
	Federal Housing Administration
	National Mortgage Association

Dividends received from the following are not exempt:

Federal or State Savings and Loan Associations
Building and Loan Associations
All other dividends except those specifically exempted above

CAPITAL GAINS AND LOSSES Schedule B

The gain or loss determined for Federal income tax purposes from the sale or exchange of capital assets (or certain property used in a trade or business, or sale of personal residence) which is included in the adjusted gross income shown on line 2A of Form IT-1, will ordinarily be the amount recognized for Iowa income tax purposes. An exception exists, however, in the case of property purchased prior to January 1, 1934. In this case you can elect to compute the gain or loss by using as the acquisition basis of the property sold either: (1) the cost less depreciation allowed or allowable up to January 1, 1934, or (2) the fair market value as of January 1, 1934, whichever is greater. Where the exception applies, make an adjustment to the gain or loss determined for Federal purposes and explain same fully on an attached statement.

TAXES

YOU CAN DEDUCT:

Personal property taxes	State and local retail sales taxes
Real estate taxes	State gasoline taxes

YOU CANNOT DEDUCT:

Any Federal excise taxes	Auto inspection fees
Federal social security taxes	State income taxes
Hunting licenses, dog licenses	Taxes paid by you for another person

You cannot deduct taxes assessed for pavements or other local improvements, including front-foot benefits, which tend to increase the value of your property.

NET OPERATING LOSS DEDUCTION

Net operating losses shall be deductible for Iowa income tax purposes to the same extent they are deductible for Federal income tax purposes provided:

1. The following adjustments shall be made:
 - a. Subtract interest and dividends from Federal securities.
 - b. Add interest and dividends from foreign securities and from securities of state and other political subdivisions exempt from Federal income tax under the Internal Revenue Code of 1954, except as provided by Section 262.51 Code of Iowa.
2. Adjustments shall be made to reflect refunds of Federal and Iowa income taxes.
 - a. In the case of cash basis taxpayers, the refund of U. S. income taxes shall be reflected in the return for the year in which the refund is received.
 - b. In the case of accrual basis taxpayers, the refund of U. S. income taxes shall accrue to the year in which the net operating loss occurs.
3. With respect to corporations doing business both within and without Iowa, adjustments shall be made to reflect the ap-

portionment of the operating loss and Federal tax deduction on the basis of business done within and without the state of Iowa.

- a. After making the adjustment as provided in paragraphs 1 and 2 hereof, the net operating loss deductible for Iowa income tax purposes shall be that percent of the total loss which represents the business done within the state of Iowa as compared to the total business done by the taxpayer during the year in which the loss occurs.

NON-TAXABLE INCOME (Partnership Only)

Installment Sales — Real and Personal Property, Etc. Due to the fact that Iowa income tax law requires (in case of partnerships) that the income reported for Federal income tax purposes be reported on Form IT-3, it is likely that some items of income will be taken into account which will not constitute taxable income under the law and regulations of this division. Examples of such income are: installment sales of personal property which have been previously reported in full on Iowa partnership returns, and installment sales of real property (classified for Federal purposes as capital gain) sold prior to December 31, 1954. In such cases a separate schedule must be attached giving full details of such transactions and the total income to be excluded should be shown on your return, Form IT-3.

SEPARATE RETURNS BY SPOUSES — Apportioned Adjusted Gross Income. If spouses filed a joint return for Federal income tax purposes and are filing separate returns for Iowa income tax purposes, allocation of adjusted gross income between them becomes necessary. Each return must show the total adjusted gross income reported on the joint Federal return, and the portion of the Federal adjusted gross income apportioned to each spouse. Income may not be allocated on an arbitrary basis. Wage and salary income shall be allocated to the spouse receiving the income. Income from property or business shall be allocated to the spouse owning the property or business. If the title to property or business rests in one of the spouses, prima facie, that property or business is owned by that spouse. Adjustments for exempt and nonexempt interest and dividends, and basis for gains and losses, shall be subject to the same rules of allocation between the spouses.

Use Schedule A, Page 2 of Form IT-1, to show the division between husband and wife.

REG. 22.5-2 "Meaning of domicile. In general the terms "domicile" and "residence" are frequently used synonymously; however, they are not, when accurately used, convertible terms. "Domicile" is of more extensive significance than "residence" and includes, beyond mere physical presence at a particular locality, positive or presumptive proof of an intention to constitute it a permanent abiding place. "Residence" is of a more temporary character than domicile. What constitutes domicile is fact rather than law, frequently depending upon a variety of circumstances, and the Commission may require a statement of circumstances in determining a particular case.

"A domicile once acquired continues until a new one is acquired by intent to change, actual removal and a new abode, with abandonment of the former domicile. Receipt by a taxpayer of a homestead tax credit is deemed conclusive evidence of Iowa domicile. Where a resident of Iowa removes to another state and establishes his residence in such other jurisdiction, but retains the voting privilege in Iowa, such individual is held not to have abandoned his Iowa domicile, and the state income tax will be legally imposed upon the entire income of such individual. Prima facie, the wife's domicile follows that of her husband. Ordinarily the domicile of an infant follows that of the father and after his death that of the mother until remarriage. The domicile of a ward is not necessarily determined by that of the guardian."

Domicile is not changed by removal for a definite period or for particular purposes nor by abandonment of the old domicile, until the acquisition of a new one is effected. To constitute a change in domicile, there must be intent to change, actual removal and a new abode. A voting residence usually evidences domicile. Prima facie the wife's domicile follows that of the husband. If a family domicile has been established in which the wife and family reside, then the husband's domicile is deemed to be that of the family.

EMPLOYEE BUSINESS EXPENSES WHICH ARE DEDUCTIBLE

Part 1, General:

A. Travel, transportation, and outside salesman expenses:

You may deduct these expenses from the amounts you are required to report on line 4, Page 1, to the extent they are not paid

by your employer. See Part II below for reporting requirements. Travel, transportation, and outside salesman expenses mean:

(1) **Travel and transportation** — You can deduct the cost of bus, taxi, plane, etc., or the cost of operating an automobile in connection with your duties as an employee. However, the cost of commuting between your residence and your principal place of employment is a personal expense and is not deductible.

(2) **Meals and lodging** — If you are temporarily away on business, from the city, town, or other general area which constitutes your principal or regular business location, you can deduct meals and lodging in addition to the travel costs.

(3) **Outside salesman** — If you are an "outside salesman" you may also deduct other expenses which are ordinary and necessary in performing your duties, such as business entertainment, stationery, and postage. An "outside salesman" is one who is engaged in full-time solicitation of business for his employer away from the employer's place of business. It does not include a person whose principal activities consist of service and delivery as, for example, a milk driver-salesman.

B. Other employee business expenses:

If you itemize deductions on Page 2 of your return, you may deduct business expenses other than those described in "A" above. Examples of such expenses are entertainment, profession and union dues, and cost of tools, materials, etc., which are not paid for by your employer.

Part II. Reporting Employee Business Expenses:

(1) If employer's payment equaled business expense — No further entry is required on the form.

(2) If employer's payments exceed business expenses — The excess amount and the amount of any personal expenses paid by your employer must be included in income on line 4, Page 1, Form IT-1, and must be identified as "Excess Reimbursements."

(3) If expenses exceed employer's payments or if the employer did not pay for the expenses — The excess of the expenses over the employer payments or the unreimbursed expenses may be claimed as deductions as explained in Part I. Be sure to separate the expenses in to those relating to line 4, Page 1 of Form IT-1, and those that are to be deducted only if you itemize deductions on Page 2 of Form IT-1.

Part III. Additional Information to be Submitted With Return:

A. The following information must be submitted with your return, except as explained in B and C below:

(1) The total of all amounts received from or charged to your employer for business expenses.

(2) The amount of your business expenses broken down into such broad categories as transportation, meals and lodging while away from home, entertainment expenses, and other business expenses, and

(3) The number of days away from home on business.

B. If you are required to and did submit an expense voucher or other accounting to your employer which contained the above information, you need not submit the information with your return unless you are claiming deduction for expenses that exceed employer payments.

C. If you receive per diem, in lieu of subsistence, of not more than \$25 per day, or a mileage allowance of not more than 15 cents per mile for travel within the continental limits of the United States, you need only submit the information set forth in A, above, if you are claiming deductions for expenses that exceed employer payments.

NOTE: For computing cost of auto travel, such cost may be determined at the rate of 10 cents per mile for the first 15,000 miles and 7 cents per mile for each mile in excess of 15,000; such alternate amounts are in lieu of actual costs of operating the automobile, including depreciation allowable.

EDUCATIONAL EXPENSES

For Iowa income tax purposes, Educational Expenses are deductible in the same manner as are allowable for Federal tax purposes. Generally these expenses, including related travel expenses, are deductible if incurred primarily to maintain or improve skills required in the taxpayer's trade, business or employment, or to meet requirements necessary for retaining salary, status or employment.

If the education is undertaken primarily to obtain a new position or substantial advancement in position, or to fulfill the general educational aspirations of the taxpayer, expenses are not deductible.

Unreimbursed expenditures for such things as tuition, books, laboratory fees and similar items should be deducted on Page 2, Form

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IT-1. These expenses may not be deducted if you use the Standard Deduction or Tax Table method of preparing your return.

Expenses for travel, meals and lodging while away from home in pursuing allowable educational activities are deductible on Page 1, Form IT-1. These expenses may be deducted even though the method of preparing the return is by Standard Deduction or Tax Table method.

TAX CREDIT FOR INCOME TAX PAID TO OTHER STATES

Subsection 1 of Section 422.8, Code, 1966 is as follows:

"Under rules and regulations prescribed by the state tax commission, net income of individuals, estates and trusts shall be allocated as follows:

"1. The amount of income tax paid to another state or foreign country by a resident taxpayer of this state or income derived from sources in another state or foreign country shall be allowed as a credit against the tax computed under the provisions of this chapter, except that the credit shall not exceed what the amount of the Iowa tax would have been on the same income which was taxed by the other state or foreign country. The limitation on this credit shall be computed according to the following formula:

"Income earned in another state or country and taxed by such other state or country shall be divided by the total income of the taxpayer resident in Iowa. Said quotient multiplied times the net Iowa tax as determined on the total income of the taxpayer as if entirely earned in Iowa shall be the maximum tax credit against the Iowa net tax."

EXPLANATION OF TAX CREDIT

If an Iowa resident pays income tax to another state or foreign country on any of his income, he is entitled to a net tax credit; that is, he may deduct from his Iowa net tax (not from gross income) the amount of income tax actually paid to the other state or country, provided the amount deducted as a credit does not exceed the amount of Iowa net income tax on the same income which was taxed by the other state or foreign country.

HOW TO FIGURE THE CREDIT

This limitation on the tax credit must be computed according to the following example:

Assume an Iowa resident has a total income (adjusted gross income, Line 9, Page 1) of \$9,000, of which \$5,000 is from sources in Iowa and \$4,000 is from sources in another state. If the Iowa tax on the \$9,000 is \$232.50, (Line 18, Page 1), and the tax paid to the other state on the \$4,000 is \$107.98, the credit to be deducted from the Iowa tax is limited to \$103.32 computed by use of the following formula.

Other state income (\$4,000) divided by the total (\$9,000) equals (44.44%) maximum proportion of Iowa tax which can be taken as a tax credit. Proportion (44.44%) x Iowa net tax (\$232.50, Line 18) equals (\$103.32) the maximum allowable credit.

In this example the tax to be paid to Iowa is \$129.18, which is the Iowa net tax of \$232.50 less the credit of \$103.32 computed above. Compute your credit on Schedule on Page 2 in accordance with the foregoing and enter the proper tax credit at Line 19, Page 1 of Form IT-1.

USE THE SCHEDULE ON PAGE 2 OF FORM IT-1

Only individuals who are residents of Iowa may deduct this credit from their Iowa net income tax.

PROOF OF YOUR CLAIM FOR THE CREDIT

This credit may be deducted from Iowa net income tax if written

proof of such payment to another state or foreign country is furnished to the Iowa State Tax Commission. The Tax Commission would prefer receiving a certified copy of the return filed with another state; however, the Commission will accept any one of the following as evidence of such payment:

1. A copy of the income tax return filed with the other state or foreign country which has been CERTIFIED by the tax authority of that state or country and showing thereon that the income tax assessed has been paid to such state or country.

2. A photo copy, or other similar reproduction of either:

(a) the receipt issued by the other state or foreign country for payment of the tax, or

(b) the withholding statement and/or check by which the tax is confirmed to be paid to the other state or foreign country, together with an attached copy of the return filed with another state or foreign country.

Such evidence need not be filed with the Iowa income tax return (don't delay filing the Iowa return), but should be filed as soon as possible, but not later than one year from the date the return is due to be filed.

NON-RESIDENTS are required to file a return of their Iowa earned income on Form NR-1. No credit will be allowed for tax paid to their home state.

APPORTIONED INCOME FROM CORPORATIONS WHEREIN SHARE-OWNERS ELECT TO HAVE SUCH INCOME TAXED TO THEM INDIVIDUALLY IN LIEU OF A CORPORATION TAX (Sub-Chapter "S" Corp.)

The income attributable to each Iowa resident shareowner in such corporation should be reported in accordance with the type of income apportionable from such corporation. Compensation should be reported as wages. Dividends of the electing corporation should be reported as non-qualifying dividends. Shares of long term capital gains and short term capital gains should be shown at Schedule B. Dividends received by the electing corporation on the basis of shares of stock owned in other corporations should be reported as qualifying dividend income. Income of the corporation apportioned (even though perhaps not distributed) to the individual resident owners should be reported at Line 6, Schedule 8. If a distribution is made of the funds in excess of the earnings of the corporation, or the earnings from investments in capital or otherwise, such distribution may be considered to be in the same manner as return of capital is considered for Federal income tax purposes.

Should any income from a Sub-Chapter "S" domestic Iowa corporation be subject to taxation by another state by reason of activities carried on within such other state and should any individual tax be paid to such other state by an Iowa resident shareowner of such corporation, then such Iowa resident shall be entitled to a tax credit equal to the amount of tax paid such other state on such income included in his Iowa income for taxation or the amount of Iowa income tax due on such income taxed by such other state, whichever sum is lesser. The above is provided for in Section 422.8, Code of Iowa, and assures the shareowners of Iowa domestic electing corporation that they not be taxed twice by the state(s) on any portion of their Sub-Chapter "S" corporate income.

Non-residents owning shares of stock in Iowa corporations wherein the shareowners elect to be taxed as individuals in lieu of corporation taxes should report their share of the apportioned earnings and income from such electing corporation in the same manner in which earnings of any enterprise is allocable to Iowa for taxation.

TAX COMPUTATION SCHEDULE

PAGE THIRTEEN

1. Your 1966 Iowa Income Tax (Enter on line 1A of Form IT-W-12) \$

2. Estimated 1967 Iowa Adjusted Gross Income \$

3. Less: Estimated Federal Income Tax to be withheld or paid during 1967 (less Federal Income Tax Refund Received) \$

4. Subtract line 3 from line 2. Enter balance \$

5. Estimated deductions: (a) If you expect to itemize deductions, enter total of such estimated deductions. (b) If you do not expect to itemize deductions, enter 5% of line 4 or \$250.00, whichever is smaller \$

6. This is your Estimated Taxable Net Income (subtract line 5 from line 4) \$

Schedule of Rates	Amount of Taxable Income	Rate of Tax	Amount of Tax
\$ 0 to \$1,000		1% of 1%	
\$1,000 to \$2,000		1 1/2%	
\$2,000 to \$3,000		2 1/2%	
\$3,000 to \$4,000		3%	
All over \$4,000		3 1/2%	
Taxable Income Over \$5,000		1/2 of 1%	
Total tax (to line 7)			\$

7. Total Tax (from computation at left) \$

8. Personal Exemptions

Unmarried Head of Household ☐ number of boxes checked x \$15.00

Yourself ☐ 65 or over ☐ blind

Wife ☐ 65 or over ☐ blind

9. Credit for dependents: number of children and number of other dependents x \$7.50

10. Total of lines 8 and 9 \$

11. This is your TOTAL ESTIMATED TAX for 1967. Enter this amount on line 1 B of Form IT-W-12 \$

Form
IT-W-12

YOUR COPY OF DECLARATION OF ESTIMATED TAX

1967

For calendar year 1967 or fiscal year ending

19 SOCIAL SECURITY NUMBERS

(If this Declaration is for Husband and Wife, use first names of both.)

NAME YOURS WIFE'S

Street and Number or Rural Route, City, Town, or Post Office, State, Postal Zip Code

ADDRESS

1 A. Your 1966 Iowa Income Tax \$

1 B. Your estimate of 1967 Iowa Income Tax \$

2. Estimated Iowa Income Tax withheld or to be withheld during the entire year 1967 \$

3. ESTIMATED TAX (line 1 B less line 2) (Do Not File If Less Than \$30.00) \$

4. Computation of installment. Check proper box below and enter amount indicated.

If this declaration is due to be filed on: ☐ April 30, 1967, enter 1/4 of line 3; ☐ Sept. 30, 1967, enter 1/2 of line 3; ☐ June 30, 1967, enter 1/3 of line 3; ☐ Jan. 31, 1968, enter amount on line 3

5. (A) Credit from line 24 1966 State of Iowa Income Tax Return \$

(B) Remittance Enclosed (If you wish additional installments may be paid now) \$

6. Total line 5 (Not less than line 4) \$

Did you file Form IT-1 for last year? ☐ Yes ☐ No If yes and your name or address was different than shown above, enter name and address used.

Under penalties of perjury, I declare that this declaration has been examined by me and to the best of my knowledge and belief is a true, correct, and complete declaration.

Signature (s) If joint estimate, both husband and wife must sign. Date 19

FOLD UP FOR CARBON COPY

STATE OF IOWA

PAGE FOURTEEN

INDIVIDUAL DECLARATION OF ESTIMATED INCOME TAX

INSTRUCTIONS FOR FILING DECLARATION OF IOWA ESTIMATED INCOME TAX DURING 1966

1. **Purpose of Declaration.** The purpose of declaration is to provide a basis for paying currently any Iowa income tax attributable to income other than salaries or wages subject to withholding. Therefore, declarations are required only from individuals whose Iowa tax from income not subject to withholding exceeds the amount specified in instruction 2.

Every taxpayer must file an annual income tax return after the close of the taxable year. At that time he must pay any balance of tax due on the year's income over and above the total of (a) the amount withheld from his wages and; (b) the amount paid as estimated tax. All over-payments of \$1 will be refunded upon filing of the annual return. Amounts of over-payment of less than \$1 will be refunded upon filing the annual return and making written application in accordance with Section 422.67, Code 1966.

2. **Who must File A Declaration.** Every person or married couple filing a joint return shall make a declaration of estimated tax if his or their Iowa income tax attributable to income other than salaries and wages subject to withholding can reasonably be expected to amount to \$50 or more for the taxable year.

Optional methods available to farmers and fishermen, if a person's or married couple's estimated gross income from farming or fishing is at least two-thirds of his estimated gross income from all sources for the taxable year, three courses are open:

- File declarations, make payments and file a return in the customary manner, as explained in paragraphs 3 through 8 as contained herein.
- File a declaration on or before January 15th, 1968, pay the indicated estimated tax for the entire taxable year, 1967, and file a return on or before April 30th, 1968, or
- File a return and pay the tax in full on or before April 30th, 1968.

3. **When and Where to File Declaration.** The final dates for filing calendar year declarations of estimated tax by persons or married couples filing joint returns is April 30, 1967. If an income tax return is filed on a fiscal year basis the date for filing the declaration is on or before the last day of the 4th month of the taxpayer's tax year. The declaration of estimated tax form is to be filed with the Director of Income Tax, Iowa State Tax Commission, Des Moines, Iowa, 50319.

4. **Payment of Estimated Tax.** The first installment shall be paid at time of filing the declaration. The other equal installments shall be paid on or before June 30, 1967, September 30, 1967, and January 31, 1968. If you file your income tax return on a fiscal year basis, your final dates for paying the estimated tax in equal installments will be: (1) the last day of the first month of the second quarter of your fiscal year; (2) the last day of the third month of the second quarter of your fiscal year; (3) the last day of the third quarter of your fiscal year; and (4) the last day of the first month of your next fiscal year.

However, at the election of the person or married couple filing jointly any installment of the estimated tax may be paid prior to the date prescribed for its payment.

Installment notices (ITW-13) will be mailed about 2 weeks prior

to the installment due dates, except that the notice for January 31 due date will be mailed just prior to December 31, 1966. Such notices will show:

- Total estimated tax as indicated on the estimate return;
- Previous payments and credits (this portion will serve as an acknowledgement or receipt of estimated tax paid);
- Balance of estimated tax due, if any;
- Installment due as of the date indicated on the notice.

5. **Changes in Income.** Whenever a person or married couple filing a joint return has reason to believe that his or their Iowa income tax may increase or decrease either for purposes of meeting that requirement to file a declaration of estimated tax or for the purpose of increasing such declaration, an amended estimate shall be filed by him or them to reflect such increase or decrease in estimated Iowa income tax. In such case the time for filing is as follows: June 30, if the change occurs after April 1 and before June 2; September 30, if the change occurs after June 1 and before September 2; January 31, 1968 if the change occurs after September 1. The estimated tax may be paid in equal installments on the remaining payment dates.

If by January 31, 1968, you file your 1967 Iowa income tax return and pay in full the balance of tax due, then on or before January 31, 1968, you need not —

- File any required amended declaration, nor on original declaration which would be due for the first time on January 31, 1968 nor
- Pay the last installment of estimated tax.

6. **Penalties.** The civil penalties provided by the Internal Revenue Code of 1954 for failure to file a declaration or for underpayment of the tax payable shall apply to persons required to file declarations and make payments of estimated tax under the provisions of Section 422.16 (11e) Code 1966. Underpayment of estimated tax shall be determined in the same manner as provided under the provisions of the Internal Revenue Code of 1954 and the exceptions therein provided shall also apply.

Failure to comply with the above requirements for payment of the proper amount of tax due will subject the taxpayer to a statutory penalty of 5% of the tax per month up to a maximum of 25% of the tax plus interest of 6% per annum computed from May 1, 1968. Filing a fraudulent or incomplete return will subject the taxpayer, upon conviction, to imprisonment in the county jail for a term not exceeding one (1) year or in the state penitentiary for a term not exceeding five (5) years or by a fine not exceeding five thousand dollars (\$5,000) or both fine and imprisonment. Section 422.25, 1966 Code of Iowa.

7. **How to Estimate Your Tax for 1967.** The computation schedule on the other side is presented to assist you in estimating your tax for 1967. Form IT-Inf. with related instructions for 1966 may be used as a guide.

8. **Unable to Make Declaration.** If a taxpayer is unable to make his own declaration, the declaration of estimated tax may be made by a duly authorized agent, or by the guardian or other person charged with the care of such taxpayer or his property.

Signature (s) _____
 If joint estimate, both husband and wife must sign.

Under penalties of perjury, I declare that this declaration has been examined by me and to the best of my knowledge and belief is a true, correct, and complete declaration.

Did you file Form 11-1 for last year? ☐ Yes ☐ No If yes and your name or address was different than shown above, enter name and address used.

6. Total line 5 (Not less than line 4).

5 (A) Credit from line 24 1966 State of Iowa Income Tax Return _____
 (B) Remittance Enclosed (If you wish additional installments may be paid now) _____

5 due to be filed on: ☐ June 30, 1967, enter 1/3 of line 3;
☐ Sept. 30, 1967, enter 1/2 of line 3;
☐ April 30, 1967, enter 1/4 of line 3;

4. Computation of installment. Check proper box below and enter amount indicated.

3. ESTIMATED TAX (line 1 B less line 2) (Do Not file if less than \$50.00)

2. Estimated Iowa Income Tax withheld or to be withheld during the entire year 1967

1 A. Your 1966 Iowa Income Tax \$ _____
 B. Your estimate of 1967 Iowa Income Tax \$ _____

NAME _____
 Street and Number or Rural Route, City, Town, or Post Office, State, Postal Zip Code _____

If this Declaration is for Husband and Wife, use first names of both: _____
 SOCIAL SECURITY NUMBERS _____
 1967

Form IT W12
 STATE OF IOWA
 DECLARATION OF ESTIMATED INCOME TAX
 TAX COMMISSION'S COPY

TAX RATE SCHEDULE

If the amount on line 13,
page 1, IT-1, is:

Enter on line 14a, page 1:

Not over \$1000

3/4% of amount of line 13

OVER BUT NOT OVER

OF EXCESS OVER

\$1000 — \$2000 \$ 7.50 plus 1.5% — \$1000

\$1000 — \$2000	\$ 7.50 plus 1.5 %	— \$1000
\$2000 — \$3000	\$22.50 plus 2.25 %	— \$2000

\$2000 — \$3000	\$12.50 plus 2.25 %	\$2000
\$3000 — \$4000	\$45.00 plus 3.00 %	\$3000

\$4000 — and over	\$75.00 plus 3-3/4% — \$4000
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If the amount on line 13, page 1, IT-1 is more than \$9000 enter on line 14b, page 1, enter amount over \$9000 x 3/4%.

TAX COMPUTATION SCHEDULE

COMPUTATION OF TAX (see instructions Form IT-Inf.)				
Schedule of Rates	Amount of Taxable Income	Rate of Tax	Amount of Tax	
\$ 0 to \$1,000	\$	$\frac{1}{2}$ of 1%	\$	
\$1,000 to \$2,000		1 $\frac{1}{2}$ %		
\$2,000 to \$3,000		2 $\frac{1}{2}$ %		
\$3,000 to \$4,000		3%		
All over \$4,000		3 $\frac{1}{2}$ %		
			← Enter this amount 14A	
Taxable Income Over \$9,000		$\frac{1}{2}$ of 1%		
			← Enter this amount 14B	
		Total tax (to line 14C)	\$	

PAGE SIXTEEN

TAX TABLE FOR CALENDAR YEAR 1956
 IF YOU USE THIS TABLE, FILE ONLY PAGES 1 AND 2

For persons with incomes under \$5,000 after deduction of Federal Income Tax Paid

Read down shaded column until you find the line covering the amount shown at line 11 page 1. Then read across until you reach the column under which your classification as to marital status and dependency appear, husband and wife cannot be taken as a dependent. Enter the tax you find there in line 18 page 1. (Head of household start at Col. 3, as described in instructions.)

If husband and wife file separate returns, and one itemized deductions, the other must also itemize deductions. Each must use tax table as if a single person and either may claim one or more of their dependents. The table allows about 5 per cent of your income for charitable contributions, interest, taxes (other than Federal income tax), medical expenses, etc. If your deductions exceed 5 per cent it will usually be to your advantage to itemize them and compute your tax on page 1. IF YOU USE THIS TABLE ENTER "X" AT LINE 12 PAGE 1

TAX BASE		YOUR TAX IS											
IF AMOUNT SHOWN ON LINE 11 PAGE 1	IS BUT NOT	1	2	3	4	5	6	7	8	9	10	11	12
		Exemption	1 Exemption & 1 Dependent	2 Ex. or 1 Ex. & 2 Dep.	2 Ex. & 1 Dep. or 1 Ex. & 2 Dep.	2 Ex. & 2 Dep. 1 Ex. & 3 Dep.	2 Ex. & 3 Dep. 1 Ex. & 4 Dep. 3 Ex.	2 Ex. & 4 Dep. 1 Ex. & 5 Dep. 3 Ex. & 1 Dep.	2 Ex. & 5 Dep. 1 Ex. & 6 Dep. 4 Ex.	2 Ex. & 6 Dep. 1 Ex. & 7 Dep. 4 Ex. & 2 Dep.	2 Ex. & 7 Dep. 1 Ex. & 8 Dep. 4 Ex. & 3 Dep.	2 Ex. & 8 Dep. 1 Ex. & 9 Dep. 4 Ex. & 4 Dep.	2 Ex. & 9 Dep. 1 Ex. & 10 Dep. 4 Ex. & 5 Dep.
\$ 1550	\$ 1500	\$.50	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
1600	1550	1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1650	1600	1.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1700	1650	2.45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1750	1700	3.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1800	1750	3.85	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1850	1800	4.55	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1900	1850	5.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1950	1900	6.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2000	1950	6.70	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2050	2000	7.45	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2100	2050	8.45	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2150	2100	9.55	2.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2200	2150	10.60	3.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2250	2200	11.65	4.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2300	2250	12.70	5.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2350	2300	13.80	6.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2400	2350	14.85	7.35	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2450	2400	15.95	8.45	.95	.00	.00	.00	.00	.00	.00	.00	.00	.00
2500	2450	17.00	9.50	2.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2550	2500	18.05	10.55	3.05	.00	.00	.00	.00	.00	.00	.00	.00	.00
2600	2550	19.15	11.65	4.15	.00	.00	.00	.00	.00	.00	.00	.00	.00
2650	2600	20.20	12.70	5.20	.00	.00	.00	.00	.00	.00	.00	.00	.00
2700	2650	21.30	13.80	6.30	.00	.00	.00	.00	.00	.00	.00	.00	.00
2750	2700	22.35	14.85	7.35	.00	.00	.00	.00	.00	.00	.00	.00	.00
2800	2750	23.40	15.95	8.40	.90	.00	.00	.00	.00	.00	.00	.00	.00
2850	2800	24.50	17.00	9.50	2.00	.00	.00	.00	.00	.00	.00	.00	.00
2900	2850	25.55	18.05	10.55	3.05	.00	.00	.00	.00	.00	.00	.00	.00
2950	2900	26.60	19.10	11.60	4.10	.00	.00	.00	.00	.00	.00	.00	.00
3000	2950	27.70	20.20	12.70	5.20	.00	.00	.00	.00	.00	.00	.00	.00
3050	3000	28.75	21.25	13.75	6.25	.00	.00	.00	.00	.00	.00	.00	.00
3100	3050	29.80	22.30	14.80	7.30	.00	.00	.00	.00	.00	.00	.00	.00
3150	3100	31.00	23.70	16.20	8.70	.00	.00	.00	.00	.00	.00	.00	.00
3200	3150	32.60	25.10	17.60	10.10	.00	.00	.00	.00	.00	.00	.00	.00
3250	3200	34.00	26.50	19.00	11.50	.00	.00	.00	.00	.00	.00	.00	.00
3300	3250	35.50	28.00	20.50	13.00	.00	.00	.00	.00	.00	.00	.00	.00
3350	3300	36.90	29.40	21.90	14.40	.00	.00	.00	.00	.00	.00	.00	.00
3400	3350	38.35	30.85	23.35	15.85	.00	.00	.00	.00	.00	.00	.00	.00
3450	3400	39.75	32.25	24.75	17.25	.00	.00	.00	.00	.00	.00	.00	.00
3500	3450	41.15	33.65	26.15	18.65	.00	.00	.00	.00	.00	.00	.00	.00
3550	3500	42.60	35.10	27.60	20.10	12.00	5.10	.00	.00	.00	.00	.00	.00
3600	3550	44.00	36.50	29.00	21.50	14.00	6.50	.00	.00	.00	.00	.00	.00
3650	3600	45.45	37.95	30.45	22.95	15.45	7.95	.45	.00	.00	.00	.00	.00
3700	3650	46.85	39.35	31.85	24.35	16.85	9.35	1.85	.00	.00	.00	.00	.00
3750	3700	48.30	40.80	33.30	25.80	18.30	10.80	3.30	.00	.00	.00	.00	.00
3800	3750	49.70	42.20	34.70	27.20	19.70	12.20	4.70	.00	.00	.00	.00	.00
3850	3800	51.15	43.65	36.15	28.65	21.15	13.65	6.15	.00	.00	.00	.00	.00
3900	3850	52.55	45.05	37.55	30.05	22.55	15.05	7.55	.05	.00	.00	.00	.00
3950	3900	54.00	46.50	39.00	31.50	24.00	16.50	9.00	1.50	.00	.00	.00	.00
4000	3950	55.40	47.90	40.40	32.90	25.40	17.90	10.40	2.90	.00	.00	.00	.00
4050	4000	56.80	49.30	41.80	34.30	26.80	19.30	11.80	4.30	.00	.00	.00	.00
4100	4050	58.25	50.75	43.25	35.75	28.25	20.75	13.25	5.75	.00	.00	.00	.00
4150	4100	59.70	52.20	44.70	37.20	29.70	22.20	14.70	7.20	.00	.00	.00	.00
4200	4150	61.10	53.60	46.10	38.60	31.10	23.60	16.10	8.60	1.40	.00	.00	.00
4250	4200	63.20	55.70	48.20	40.70	33.20	25.70	18.20	10.70	3.20	.00	.00	.00
4300	4250	64.95	57.45	49.95	42.45	34.95	27.45	19.95	12.45	4.95	.00	.00	.00
4350	4300	66.75	59.25	51.75	44.25	36.75	29.25	21.75	14.25	6.75	.00	.00	.00
4400	4350	68.55	61.05	53.55	46.05	38.55	31.05	23.55	16.55	8.55	1.05	.00	.00
4450	4400	70.30	62.80	55.30	47.80	40.30	32.80	25.30	17.80	10.30	2.80	.00	.00
4500	4450	72.10	64.60	57.10	49.60	42.10	34.60	27.10	19.60	12.10	4.60	.00	.00
4550	4500	73.85	66.35	58.85	51.35	43.85	36.35	28.85	21.35	13.85	6.35	.00	.00
4600	4550	75.65	68.15	60.65	53.15	45.65	38.15	30.65	23.15	15.65	8.15	.65	.00
4650	4600	77.45	69.95	62.45	54.95	47.45	39.95	32.45	24.95	17.45	9.95	2.45	.00
4700	4650	79.20	71.70	64.20	56.70	49.20	41.70	34.20	26.70	19.20	11.70	4.20	.00
4750	4700	81.00	73.50	66.00	58.50	51.00	43.50	36.00	28.50	21.00	13.50	6.00	.00
4800	4750	82.80	75.30	67.80	60.30	52.80	45.30	37.80	30.30	22.80	15.30	7.80	.30
4850	4800	84.55	77.05	69.55	62.05	54.55	47.05	39.55	32.05	24.55	17.05	9.55	2.05
4900	4850	86.35	78.85	71.35	63.85	56.35	48.85	41.35	33.85	26.35	18.85	11.35	3.85
4950	4900	88.15	80.65	73.15	65.65	58.15	50.65	43.15	35.65	28.15	20.65	13.15	5.65

1966

FORM 17-1

IOWA RESIDENT INDIVIDUAL INCOME TAX RETURN

Page 1

1. For calendar year 1956 - fiscal year beginning 1956 and ending 1967.

2. NAME PLEASE PRINT. (If this is a joint return of husband and wife, use first names of both.)

HOME ADDRESS Is name and address the same as on your last Iowa return filed? YES ☐ NO ☐ For what year was your last Iowa return filed?

(City, town, or post office) (County) (State) (Zip code number)

Official name of your School District

• Your Social Security Number Occupation • Spouse's Social Security Number Occupation

3. • Check one: ① Single ② Married filing joint return (even if only one had income) ③ Married filing separately

④ Unmarried Head of Household OR Surviving widow(er) with dependent child

Give name of spouse only if also filing separately

4. Enter all wages, salaries, bonuses, commissions, tips, and other compensation before payroll deductions received in 1956

Federal Tax Withheld	EMPLOYER'S NAME	WHERE EMPLOYED (CITY)	WAGES, ETC.
\$			
\$	IV Federal Tax withheld in 1956.	Enter total from Salaries here	
\$	V Federal Tax paid in 1956 for Prior years.	5. Less: Excludable "Sick pay" in line 4	
\$	VI Payments on 1956 Federal Estimated Tax.	6. Balance (line 4 less line 5)	
\$	VII TOTAL Federal Tax withheld and paid in 1956. Enter on line VIII below.	7c. Profit (or loss) from schedules C	
		7f. Profit (or loss) from schedules F	

SCHEDULE B

Net income from rents and royalties (from schedule C)

Income From Dividends (less Federal exclusions) (attach itemized list)

Income From Interest (attach itemized list)

Gain or Loss From Sale or Exchange of Property (attach schedule)

Income From Pensions or Annuities

Share of operating income Form 1120-S

Partnership (name and address)

Estate or Trust (name and address)

Other Sources (state nature)

VIII. Federal tax paid in 1956 Am't line VII \$

IX. A. Refund Rec'd in 1956

B. Self-Employment Tax included in VIII above

X. Federal tax deduction or addition \$

11. Subtract line 10 from line 9 or Add line 10 to line 9 if federal refund exceeds federal tax paid. Enter balance

12. Deductions ① Itemized ② Tax table ③ Standard deduction of 5% of line 11 not to exceed \$250.00

14a. Income Tax: use Tax Table or Rate Schedule

14b. Tax on taxable income over \$9,000 At 3% of 1%

15. Personal exemptions: Yourself 65 or over blind Unmarried Head of Household number of bases x \$15.00

Wife 65 or over blind Number of other dependents x \$7.50

16. List first names of your children who qualify as dependents

17. Total of lines 15 and 16

18. TAX BALANCE (line 14c minus line 17)

19. Less credit for 1956 Income taxes paid to other states

20. Balance less amount claimed on line 19

21a. IOWA income tax withheld 1955

21b. IOWA Estimated tax payments for 1955

21c. Total IOWA payments (add lines 21a and 21b)

22. If payments (line 21c) are less than tax (line 20) enter Balance Due. Pay in full with this return

23. If payments (line 21c) are larger than tax (line 20) enter Overpayment

24. Amount of line 23 you wish credited to 1957 Estimated Tax

REFUND CLAIMED

Taxpayer sign here

I/we hereby certify and declare that this return (including any accompanying schedules and statements) has been examined by me/us and to the best of my/our knowledge and belief is a true, correct, and complete return.

(Your Signature) (Date) (If This is a Joint Return, Wife's Signature) (Date)

(Signature of person (other than taxpayer or agent) preparing return) (Address) (Date)

MAKE REMITTANCE PAYABLE TO TREASURER, STATE OF IOWA. FILE WITH THE STATE TAX COMMISSION, STATE OFFICE BUILDING, DES MOINES, IOWA, 50319

Page 2

FORM IT-1

Schedule A — Division of Income and Deductions Where Husband and Wife are Filing Separate Returns.

Where both spouses itemize deductions, the deductions must be divided between them according to the portion thereof paid by each, or in the ratio that the income of each bears to the combined total adjusted gross income.

(If you and your spouse each have income of your own, each may file a separate return.)	Total	On husband's return	On wife's return
1. Adjusted Gross Income of Husband and Wife	\$	\$	\$
2. Ratio of Adjusted Gross Income of each spouse to Total Adjusted Gross Income	100%	%	%
3. Itemized Deductions — Husband's return — Wife's return	\$	\$	\$

Credit for Income Tax Paid To Another State or Country.

This schedule is to be used only by residents of Iowa who have paid income tax to states other than Iowa on income from sources outside this state and included in the Iowa individual income tax return for this year. (Sec. 422.8, 1960, Code of Iowa.)

A. Adjusted Gross Income (Line 9, Page 1)	\$
B. Total income taxed in the state of (Name of state)	\$
C. Percent that other state B income bears to the total income A. (Divide B by A and carry the result to four digits as 00.00%)	%
D. Iowa Net tax (Line 18, Page 1)	\$
E. Credit limitation (Line D multiplied by %, C)	\$
F. Income tax paid (return attached) to state of (Name of state)	\$
G. Credit allowance (Line E or F whichever is less)	\$
(Enter at Line 19, Page 1)	

PART 2 EXEMPTIONS Complete only for dependents other than your children claimed on line 16, page 1

(a) NAME (if more space is needed attach schedule)	(b) Relationship	(c) Months lived in your home. If born or died during year write "B" or "D"	(d) Did dependent have income of \$500 or more?	(e) Amount YOU furnished for dependent's support, if 100% write "All"	(f) Amount furnished by OTHERS including dependent.
1				\$	\$
2				\$	\$
3 Total number of dependents listed above. Enter here and on page 1, line 16					

ITEMIZED DEDUCTIONS—If you do not use tax table or standard deduction

If husband and wife (not legally separated) file separate returns and one itemizes deductions the other must also itemize. If necessary, write more than one item on a line or attach additional sheets. Put name and address on all attachments.

Contributions			Total
Interest expense			Total
Taxes			Total
Medical and Dental Expenses (If 65 or older see instructions)	Submit itemized list. Do not enter any expense compensated by insurance or otherwise.		Total
	1. Cost of medicines and drugs, in excess of 1% of Adjusted gross income page 1, Form 1040 Federal Return.		
	2. Other medical and dental expenses		
	3. Total		
	4. Enter 3 percent of ADJUSTED GROSS INCOME, page 1, of your Federal Form 1040		
Miscellaneous Deductions	5. Allowable amount (excess of line 3 over line 4) (see instructions). If 65 or over, check here <input type="checkbox"/>		Total

TOTAL ITEMIZED DEDUCTIONS (enter on line 12, Page 1)**SCHEDULE G. Income From Rents and Royalties** (attach Depreciation Schedule)

1. Kind and location of property	2. Amount of rent or royalty	3. Depreciation	4. Repairs (Attach itemized list)	5. Other Expenses (Attach itemized list)	ENTER IN SCHEDULE B* Page 1.
	\$	\$	\$	\$	
	\$	\$	\$	\$	
	\$	\$	\$	\$	
Totals	\$	\$	\$	\$	\$

2. Net income (or loss) from rents and royalties (column 2 less sum of columns 3, 4, and 5)

READ THE INSTRUCTIONS CAREFULLY

FORM 10-1C 1966 IOWA RESIDENT INDIVIDUAL INCOME TAX RETURN FOR HUSBAND AND WIFE FILING SEPARATELY

1. For calendar year 1966 or fiscal year beginning _____, 1965 and ending _____, 1967.

2. **NAME** _____ PLEASE PRINT _____
 HUSBAND'S FIRST NAME WIFE'S FIRST NAME LAST NAME

HOME ADDRESS _____
 Is name and address the same as on your last Iowa return filed? YES ☐ NO ☐ For what year was your last Iowa return filed? _____

(City, town, or post office) (County) (State) (Zip code number)

Official name of your School District _____

• Your Social Security Number _____ Occupation _____ • Spouse's Social Security Number _____ Occupation _____

OFFICE USE ONLY

CO. NO. NO. CHILDREN
 (H) (W) (H) (W)

OCCUP. OTHER DEPEND.

School District _____

4. Enter all wages, salaries, bonuses, commissions, tips, and other compensation, before payroll deductions, received in 1966:

HUSBAND	WIFE	EMPLOYER'S NAME	WHERE EMPLOYED	HUSBAND WAGES, ETC.	WIFE WAGES, ETC.
		IV Federal Tax withheld 1966	Enter total from Salaried here		
		V Pr. yrs. Fed. Tax paid 1966	5. Less: Excludable "Sick pay" in line 4		
		VI Fed Estimated Tax paid 1966	6. Balance (line 4 less line 5)		
		VII TOTAL Federal Tax withheld and paid 1966. To line VIII.	7c. Profit (or loss) from schedules C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z		
			7f. Profit (or loss) from schedules C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z		

SCHEDULE B

Net income from rents and royalties (from schedule G) _____

Income from Dividends (less Federal exclusions) _____

Income from Interest (attach itemized list) _____

Gain or Loss From Sale or Exchange of Property _____

Income from Pensions or Annuities _____

Share of operating income Form 1120-S _____

Partnership (name and address) _____

Estate or Trust (name and address) _____

Other Sources (state nature) _____

8B Total of lines 6, 7, and 8B _____

8C Total of lines 6, 7, and 8C _____

VIII. Federal tax paid in 1966 _____

IX. A. Refund Rec'd in 1966 _____

B. Self-employment tax included in VIII above _____

X. Federal tax adjustment _____

9. ADJUSTED GROSS INCOME (subtract line 8D from line 8C) _____

10. Federal Tax deduction or addition _____

11. Subtract line 10 from line 9 or Add line 10 to line 9 if federal refund exceeds federal tax paid. Balance _____

12. Deductions (1) Itemized (2) Tax table (3) Standard of 5% of line 11 not to exceed \$250.00 _____

13. TAXABLE INCOME line 12 from line 11 _____

14a. Income Tax use Rate Schedule _____

14b. TAX ON over \$9,000 (at 2% of 1%) _____

15. EXEMPTIONS blind _____ number of boxes x \$15 _____

16. Number of your dep. children _____

17. Husband _____

18. Tax Balance Subtract line 17 from line 14 _____

19. Less credit for 1966 income taxes paid other states _____

20. Balance less amount claimed on line 19 _____

21a. Total Iowa income tax withheld (H) (W) (H) (W) _____

21b. 1966 Estimated tax payments (H) (W) (H) (W) _____

21c. Total Iowa 1966 tax payments (H) (W) (H) (W) _____

21d. Husband and wife each apply his or her Iowa State income tax payments to the balance at Line 20 _____

22. If payments (line 21) are less than tax (line 20), enter Balance Due. Husband and wife separately _____

23. If payments (line 21) are larger than tax (line 20) enter Overpayment. Husband and wife separately _____

24. If husband's and wife's combined payments (line 21d) are less than combined tax (line 20), enter Balance Due with this return _____

25. If husband's and wife's combined payments (line 21d) are larger than combined tax (line 20) enter Overpayment _____

26. Amount of line 25 you wish credited to 1967 Estimated Tax (H) (W) (H) (W) _____

REFUND CLAIMED

We severally declare that this return has been examined by us and, to the best of our knowledge, is a true, correct, and complete return. We voluntarily agree to combined treatment of taxes due or refunds as shown hereon; being jointly and severally liable for any amount shown to be due on this return and agree to receive any refunds due in a combined refund voucher made payable to both of us.

Taxpayer(s) sign here _____

(Husband's Signature) (Date) (Wife's Signature) (Date)

(Signature of person other than taxpayer or agent preparing return) (Address) (Date)

MAKE REMITTANCE PAYABLE TO TREASURER, STATE OF IOWA. FILE WITH THE STATE TAX COMMISSION, STATE OFFICE BUILDING, DES MOINES, IOWA, 50319

Page 2

FORM 17-1C

Schedule A — Division of Income and Deductions Where Husband and Wife are Filing Separately.

Where both spouses itemize deductions, the deductions must be divided between them according to the portion thereof paid by each, or in the ratio that the adjusted gross income of each bears to their combined total adjusted gross income.

(If each spouse has separate income each may file a separate return.)	Total	On husband's return	On wife's return
1. Adjusted Gross Income of Husband and Wife	\$	\$	\$
2. Ratio of Adjusted Gross Income of each spouse to Total Adjusted Gross Income	100%	%	%
3. Itemized Deductions — Husband's — Wife's	\$	\$	\$

Credit for Income Tax Paid to Another State or Country.

This schedule is to be used only by residents of Iowa who have paid income tax to states other than Iowa on income from sources outside this state and included in the Iowa individual income tax return for this year. (Sec. 422.8, 1955, Code of Iowa.)

A. Adjusted Gross Income (Line 9, Page 1)	\$	\$	\$
B. Total Income taxed in the state of (Name of state)	\$	\$	\$
C. Percent that other state B income bears to the total income A. (Divide B by A)		%	%
D. Iowa Net tax (Line 18, Page 1)	\$	\$	\$
E. Credit limitation (Line D multiplied by %, C)	\$	\$	\$
F. Income tax paid (return attached) to state of (Name of state)	\$	\$	\$
G. Credit allowance (Line E or F whichever is less)	\$	\$	\$

(Enter at Line 19, Page 1)

(Enter at Line 19, Page 1)

PART 2 EXEMPTIONS Complete only for dependents other than your children claimed on line 16, page 1

(a) NAME (if more space is needed attach schedule)	(b) Relationship	(c) Months lived in your home. If born or died during year write "B" or "D"	(d) Did dependent have income of \$200 or more?	(e) Amount YCD furnished for dependent's support, if 100% write "All"	(f) Amount furnished by OTHERS including dependent
1				\$	\$
2				\$	\$
3. Total number of dependents listed above. Enter here and on page 1, line 16					

ITEMIZED DEDUCTIONS—If you do not use tax table or standard deduction

If husband and wife (not legally separated) file separate returns and one itemizes deductions the other must also itemize. If necessary, write more than one item on a line or attach additional sheets. Put name and address on all attachments.

	HUSBAND	Combined	WIFE
Contributions			
Total contributions (not to exceed 30 percent of ADJUSTED GROSS INCOME page 1, Federal Form 1040, except as described in instructions)			
Interest expense			
Home mortgage			
Other interest expense (specify)			
Total			
Taxes			
Real Estate Tax \$ Personal Property Tax \$ State Gas Tax \$ Sales Tax \$			
(You may not claim Iowa Income Taxes on your Iowa return)			
Total			
Medical and Dental Expenses			
Submit itemized list. Do not enter any expense compensated by insurance or otherwise.	HUSBAND	WIFE	Combined
1. Cost of medicines and drugs in excess of 1% of Adjusted gross income page 1, Form 1040 Federal Return			
2. Other medical and dental expenses			
3. Total			
4. Enter 3 percent of ADJUSTED GROSS INCOME, page 1, of Federal Form 1040 — See Schedule A above.			
5. Allowable amount (excess of line 3 over line 4) (see instructions)			
Miscellaneous Deductions			
Total			
TOTAL ITEMIZED DEDUCTIONS (enter on line 12, Page 1)			

SCHEDULE B. Income from Rents and Royalties (attach Depreciation Schedule)

1. Kind and location of property	2. Amount of rent or royalty	3. Depreciation	4. Repairs (attach itemized list)	5. Other Expenses (attach itemized list)	ENTER IN SCHEDULE B Page 1.
	\$	\$	\$	\$	
	\$	\$	\$	\$	
	\$	\$	\$	\$	
Totals	\$	\$	\$	\$	\$
2: Net income (or loss) from rents and royalties (column 2 less sum of columns 3, 4, and 5)					

READ THE INSTRUCTIONS CAREFULLY

APPENDIX F

IOWA TAX MODEL PRINTOUT--A 10 PERCENT FEDERAL SURCHARGE

THE STATE TAX IS CALCULATED MARGINALLY USING THE FOLLOWING BRACKETS AND RATES.

BRACKET		RATE
0.-	1000.	0.0075
1000.-	2000.	0.0150
2000.-	3000.	0.0225
3000.-	4000.	0.0300
4000.-	9000.	0.0375
9000.-	0.	0.0450

PROVISION- 1-

THE FEDERAL TAX DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD-
MARGINALLY BY THE FOLLOWING BRACKETS AND RATES

BRACKET		RATE
0.-	0.	1.1000

AND CAN BE NO GREATER THAN 80000016.21.

PROVISION- 2-

THE STATE PERSONAL DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD IF ITEMIZED-
THE ITEMIZED AMOUNT IS EQUAL TO THE STATE PERSONAL DEDUCTION.
AND IF NOT ITEMIZED THE STATE PERSONAL DEDUCTION IS EQUAL TO-

$$(AGI-FTD) * 0.05.$$

AGI = ADJUSTED GROSS INCOME.

FTD = FEDERAL TAX DEDUCTION.

AND CAN BE NO GREATER THAN 250.00.

PROVISION- 3-

THE PERSONAL AND CHILD CREDIT IS EQUAL TO-

$$\text{NUMBER OF ADULTS} * 15.00 + \text{NUMBER OF CHILDREN} * 7.50 + \text{NUMBER OF OTHER DEPENDENTS} * 7.50.$$

PROVISION- 4-

THE OUT OF STATE TAX CREDIT IS CALCULATEDMarginally USING THE FOLLOWING BRACKETS AND RATES-

BRACKET	RATE
0.- 0.	1.0000
AND CAN BE NO GREATER THAN	80000016.21.

PROVISION- 5-

THE SALES TAX CREDIT IS NOT USED.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.- 0.	0.0000	-43.1754	4317.5429	-41.9725	4197.2558	2.7859	-39.8536	3985.3676
0.- 500.	0.7499	0.7499	0.0000	0.7124	5.0000	5.0000	0.7124	5.0000
500.- 1000.	0.7499	1.4079	-87.7308	1.2787	-70.4960	9.1805	0.7230	3.5890
1000.- 2000.	1.0937	0.9978	8.7691	0.9202	15.8622	7.7748	0.1078	90.1408
2000.- 3000.	1.3556	1.1446	15.5596	0.9906	26.9228	13.4570	0.3427	74.7176
3000.- 4000.	1.7228	1.4347	16.7221	1.2177	29.3169	15.1238	0.5897	65.7682
4000.- 5000.	2.0805	1.7376	16.4797	1.4352	31.0186	17.4075	0.8100	61.0637
5000.- 6000.	2.3871	2.0220	15.2938	1.6271	31.8373	19.5304	1.0367	56.5686
6000.- 7000.	2.5957	2.2183	14.5388	1.8081	30.3407	18.4901	1.2709	51.0379
7000.- 8000.	2.7466	2.3538	14.3031	1.9260	29.8776	18.1739	1.4221	48.2223
8000.- 9000.	2.8647	2.4634	14.0068	2.0397	28.7990	17.2016	1.5709	45.1631
9000.- 10000.	2.9952	2.5402	15.1885	2.1151	29.3831	16.7366	1.6869	43.6772
10000.- 15000.	3.2919	2.7527	16.3773	2.2947	30.2901	16.6375	1.9286	41.4118
15000.- 20000.	3.6618	3.0323	17.1919	2.6271	28.2558	13.2608	2.3789	35.0358
20000.- 25000.	3.8596	3.1510	18.3603	2.7325	29.2031	13.2813	2.5484	33.9734
25000.- 30000.	3.9721	3.0760	22.5598	2.6562	33.1270	13.6457	2.5014	37.0240
30000.- 35000.	4.0673	3.0096	25.9148	2.6542	34.6627	11.8079	2.5327	37.6544
35000.- 40000.	4.1174	3.0589	25.7077	2.6468	35.7146	13.4695	2.5245	38.6864
40000.- 45000.	4.1636	2.9555	29.0145	2.4954	40.0652	15.5675	2.3939	42.5036
45000.- 50000.	4.1967	3.0119	28.2310	2.6436	37.0070	12.2281	2.5513	39.2056
50000.- 75000.	4.2645	2.8450	33.2871	2.4024	43.6643	15.5550	2.3287	45.3927
75000.- 100000.	4.3289	2.4932	42.4056	2.2291	48.5059	10.5918	2.1816	49.6029
100000.- 150000.	4.3772	2.4441	44.1634	1.9086	56.3959	21.9077	1.8821	57.0025
150000.- 0.	4.4485	2.4385	45.1838	2.0910	52.9942	14.2483	2.0790	53.2634

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	7.6936	5.0482	-39.8536	3985.3676	7.6936	5.0482	0.0000
0.-	500.	5.0000	0.0000	0.7124	5.0000	5.0000	0.0000	0.0000
500.-	1000.	48.6440	43.4526	0.7230	3.5890	48.6440	43.4526	0.0000
1000.-	2000.	89.1932	88.2821	0.1078	90.1408	89.1932	88.2821	0.0000
2000.-	3000.	70.0588	65.4031	0.3417	74.7913	70.1461	65.5040	0.2914
3000.-	4000.	58.8945	51.5700	0.5897	65.7682	58.8945	51.5700	0.0000
4000.-	5000.	53.3811	43.5554	0.8078	61.1727	53.5115	43.7134	0.2798
5000.-	6000.	48.7270	36.2827	1.0360	56.5971	48.7607	36.3246	0.0657
6000.-	7000.	42.7084	29.7121	1.2675	51.1698	42.8628	29.9014	0.2693
7000.-	8000.	39.5804	26.1610	1.4180	48.3719	39.7550	26.3743	0.2888
8000.-	9000.	36.2311	22.9829	1.5702	45.1870	36.2589	23.0165	0.0436
9000.-	10000.	33.5906	20.2417	1.6846	43.7564	33.6840	20.3539	0.1406
10000.-	15000.	29.9374	15.9542	1.9208	41.6489	30.2209	16.2943	0.4047
15000.-	20000.	21.5484	9.4502	2.3756	35.1249	21.6561	9.5745	0.1372
20000.-	25000.	19.1243	6.7379	2.5484	33.9734	19.1243	6.7379	0.0000
25000.-	30000.	18.6779	5.8274	2.5014	37.0240	18.6779	5.8274	0.0000
30000.-	35000.	15.8460	4.5788	2.5327	37.6544	15.8460	4.5788	0.0000
35000.-	40000.	17.4697	4.6227	2.5122	38.9857	17.8725	5.0883	0.4880
40000.-	45000.	19.0025	4.0683	2.3898	42.6019	19.1411	4.2325	0.1710
45000.-	50000.	15.2916	3.4902	2.5481	39.2833	15.3998	3.6134	0.1277
50000.-	75000.	18.1459	3.0680	2.3287	45.3927	18.1459	3.0680	0.0000
75000.-	100000.	12.4964	2.1302	2.1816	49.6029	12.4964	2.1302	0.0000
100000.-	150000.	22.9941	1.3911	1.8665	57.3574	23.6296	2.2049	0.8253
150000.-	0.	14.7394	0.5727	2.0790	53.2634	14.7394	0.5727	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	-39.8536	3985.3676	7.6936	5.0482	0.0000	0.0000
0.-	500.	0.7174	5.0000	5.0000	0.0000	0.0000	0.0000
500.-	1000.	0.7230	3.5890	48.6440	43.4526	0.0000	0.0000
1000.-	2000.	0.1078	90.1408	89.1932	88.2821	0.0000	0.0000
2000.-	3000.	0.3417	74.7913	70.1461	65.5040	0.2914	0.0000
3000.-	4000.	0.5897	65.7682	58.8945	51.5700	0.0000	0.0000
4000.-	5000.	0.8078	61.1727	53.5115	43.7134	0.2798	0.0000
5000.-	6000.	1.0360	56.5971	48.7607	36.3246	0.0657	0.0000
6000.-	7000.	1.2675	51.1698	42.8628	29.9014	0.2693	0.0000
7000.-	8000.	1.4180	48.3719	39.7550	26.3743	0.2888	0.0000
8000.-	9000.	1.5702	45.1870	36.2529	23.0165	0.0436	0.0000
9000.-	10000.	1.6846	43.7564	33.6840	20.3539	0.1406	0.0000
10000.-	15000.	1.9208	41.6489	30.2209	16.2943	0.4047	0.0000
15000.-	20000.	2.3756	35.1249	21.6561	9.5745	0.1372	0.0000
20000.-	25000.	2.5484	33.9734	19.1243	6.7379	0.0000	0.0000
25000.-	30000.	2.5014	37.0240	18.6779	5.8274	0.0000	0.0000
30000.-	35000.	2.5327	37.6544	15.8460	4.5788	0.0000	0.0000
35000.-	40000.	2.5122	38.9857	17.8725	5.0883	0.4880	0.0000
40000.-	45000.	2.3898	42.6019	19.1411	4.2325	0.1710	0.0000
45000.-	50000.	2.5481	39.2833	15.3998	3.6134	0.1277	0.0000
50000.-	75000.	2.3287	45.3927	18.1459	3.0680	0.0000	0.0000
75000.-	100000.	2.1816	49.6029	12.4964	2.1302	0.0000	0.0000
100000.-	150000.	1.8665	57.3574	23.6296	2.2049	0.8253	0.0000
150000.-	0.	2.0790	53.2634	14.7394	0.5727	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPC	TLOST	TLSTC
-99999.-	0.	1.	-4247.	0.	-1833.	51.	89.	0.
0.-	500.	1.	200.	1.	0.	0.	0.	0.
500.-	1000.	3.	2699.	20.	-17.	3.	15.	0.
1000.-	2000.	12278.	22669676.	247956.	21743.	17587.	184178.	0.
2000.-	3000.	71337.	179463072.	2432844.	378542.	276448.	1162772.	1792.
3000.-	4000.	87913.	309750976.	5336521.	892380.	672123.	1945232.	0.
4000.-	5000.	96638.	434149056.	9032778.	1488583.	1313262.	2713911.	9841.
5000.-	6000.	99945.	549991553.	13129036.	2007940.	2171999.	3246979.	3749.
6000.-	7000.	91814.	596583169.	15485936.	2251477.	2447078.	3205157.	20425.
7000.-	8000.	75692.	565806721.	15540862.	2222835.	2420410.	2850927.	23244.
8000.-	9000.	56732.	480620800.	13768410.	1928515.	2036658.	2253071.	3291.
9000.-	10000.	39330.	372452608.	11155750.	1694401.	1583510.	1594615.	8835.
10000.-	15000.	70169.	827683713.	27246652.	4462292.	3790766.	3030281.	64606.
15000.-	20000.	16666.	283370112.	10376630.	1783944.	1148057.	703537.	9249.
20000.-	25000.	7001.	155824768.	6014320.	1104249.	652123.	286897.	0.
25000.-	30000.	3681.	99367440.	3946987.	890432.	417088.	153813.	0.
30000.-	35000.	2209.	71930960.	2922108.	757259.	255623.	87420.	0.
35000.-	40000.	1394.	51923704.	2137919.	549611.	213939.	63534.	6398.
40000.-	45000.	900.	38131368.	1587660.	460652.	175447.	38713.	1561.
45000.-	50000.	657.	30873756.	1295694.	365788.	113710.	28487.	1006.
50000.-	75000.	1331.	80624288.	3438278.	1144504.	356798.	59427.	0.
75000.-	100000.	349.	29081348.	1258926.	533856.	76798.	13809.	0.
100000.-	150000.	162.	18905628.	827551.	365475.	101230.	5019.	2936.
150000.-	0.	92.	25482256.	1133590.	512199.	88537.	3051.	0.
TOTAL	736303.	5224679435.	148316224.	25814808.	20329224.	23630908.	156938.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	-1782.	-1692.	-1692.	-1692.	1692.
0.- 500.	0.	0.	0.	0.	1.
500.- 1000.	-14.	0.	0.	0.	19.
1000.- 2000.	39331.	223510.	223510.	223510.	24447.
2000.- 3000.	654990.	1817763.	1819556.	1819556.	613334.
3000.- 4000.	1564504.	3509736.	3509736.	3509736.	1826866.
4000.- 5000.	2801846.	5515757.	5525598.	5525598.	3507353.
5000.- 6000.	4179938.	7426918.	7430667.	7430667.	5698505.
6000.- 7000.	4699555.	7903712.	7924137.	7924137.	7561970.
7000.- 8000.	4643245.	7494172.	7517416.	7517416.	8023596.
8000.- 9000.	3965174.	6218245.	6221536.	6221536.	7546941.
9000.- 10000.	3277911.	4872526.	4881361.	4881361.	6274423.
10000.- 15000.	8253058.	11283340.	11347946.	11347946.	15898806.
15000.- 20000.	2932002.	3635539.	3644788.	3644788.	6731852.
20000.- 25000.	1756373.	2043270.	2043270.	2043270.	3971053.
25000.- 30000.	1307521.	1461334.	1461334.	1461334.	2485653.
30000.- 35000.	1012883.	1100303.	1100303.	1100303.	1821804.
35000.- 40000.	763550.	827084.	833482.	833482.	1304436.
40000.- 45000.	636099.	674813.	676374.	676374.	911286.
45000.- 50000.	479499.	507986.	508992.	508992.	796703.
50000.- 75000.	1501302.	1560729.	1560729.	1560729.	1877548.
75000.- 100000.	610654.	624464.	624464.	624464.	634462.
100000.- 150000.	466705.	471725.	474662.	474662.	352889.
150000.- 0.	600737.	603788.	603788.	603788.	529801.
TOTAL	46144032.	69774944.	69931872.	69931872.	78385328.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.-	0.	0.0000	2.8456	-284.5666	2.9570	-295.7050	-3.9141	4.6101
0.-	500.	0.7499	0.7041	6.1142	0.6314	15.7998	10.3163	-7.0543
500.-	1000.	0.7499	0.6989	6.8056	0.6201	17.3135	11.2752	-2.0141
1000.-	2000.	0.9922	0.8804	11.2672	0.7339	26.0283	16.6354	-0.8667
2000.-	3000.	1.3307	1.2115	8.9574	0.8788	33.9577	27.4600	-0.7152
3000.-	4000.	1.6738	1.5063	10.0063	1.0099	39.6623	32.9534	-0.3750
4000.-	5000.	2.0370	1.7818	12.5277	0.9121	55.2205	48.8072	-0.3958
5000.-	6000.	2.3628	2.0353	13.8611	0.6610	72.0216	67.5194	-0.3130
6000.-	7000.	2.5773	1.9070	26.0065	0.5775	77.5930	69.7176	-0.1900
7000.-	8000.	2.7376	2.1822	20.2865	0.6242	77.1969	71.3937	-0.0843
8000.-	9000.	2.8629	1.6610	41.9835	0.2385	91.6677	85.6381	-0.2870
9000.-	10000.	2.9803	1.5929	46.5509	-0.0880	102.9541	105.5270	-0.5587
10000.-	15000.	3.2836	-0.1875	105.7115	-1.6773	151.0832	-794.3867	-2.0614
15000.-	20000.	3.6875	0.0392	98.9354	-2.7488	174.5456	7102.4804	-2.9643
20000.-	25000.	3.8670	1.3044	66.2683	-0.2200	105.6912	116.8722	-0.3987
25000.-	30000.	3.9645	0.6562	83.4476	-0.5299	113.3661	180.7505	-0.6684
30000.-	35000.	4.0518	0.1601	96.0485	-0.7935	119.5851	595.6405	-0.8946
35000.-	40000.	4.1171	-0.7665	118.6192	-1.7351	142.1447	-126.3502	-1.8399
40000.-	45000.	4.1551	0.7600	81.7090	-0.6380	115.3546	183.9469	-0.7106
45000.-	50000.	4.1949	-2.5049	159.7121	-2.9763	170.9498	-18.8197	-3.0244
50000.-	75000.	4.2581	-5.6557	232.8198	-7.1619	268.1930	-26.6325	-7.2110
75000.-	100000.	4.3326	-8.0415	285.6057	-8.5628	297.6367	-6.4820	-8.6553
100000.-	150000.	4.3926	-1.1340	125.8173	-1.2867	129.2922	-13.4595	-1.3177
150000.-	0.	4.4692	1.1683	73.8577	-0.4215	109.4331	136.0841	-0.4345

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	-62.0063	-55.9039	4.6101	-461.0159	-62.0063	-55.9039	0.0000
0.-	500.	1101.8388	1217.0810	-7.0543	1040.5837	1101.8388	1217.0810	0.0000
500.-	1000.	388.1649	424.7853	-2.0141	368.5534	388.1649	424.7853	0.0000
1000.-	2000.	198.4473	218.0925	-0.8679	187.4714	198.5785	218.2499	-0.1332
2000.-	3000.	159.0376	181.3863	-0.7158	153.7951	159.0878	181.4555	-0.0850
3000.-	4000.	124.8957	137.1321	-0.3883	123.1997	125.7793	138.4499	-3.5489
4000.-	5000.	122.2179	143.4006	-0.3986	119.5704	122.3733	143.7041	-0.6992
5000.-	6000.	115.3804	147.3529	-0.3120	113.2485	115.3804	147.3529	0.0000
6000.-	7000.	109.9651	132.9074	-0.2350	109.1199	112.3253	140.7014	-23.6844
7000.-	8000.	103.8657	113.5135	-0.2863	110.4588	113.1205	145.8659	-239.4072
8000.-	9000.	117.2834	220.3428	-0.4290	114.9843	125.8276	279.8353	-49.4359
9000.-	10000.	135.0744	-534.5908	-0.7572	125.4031	147.5371	-760.0743	-35.5320
10000.-	15000.	-999.2027	-22.9001	-2.3940	172.9102	-1176.5417	-42.7281	-16.1333
15000.-	20000.	7651.3193	-7.8377	-3.0693	183.2369	7918.8984	-11.6589	-3.5434
20000.-	25000.	130.5712	-81.1926	-0.6212	116.0661	147.6293	-182.2937	-55.7975
25000.-	30000.	201.8644	-26.1471	-0.9984	125.1854	252.1561	-88.4275	-49.3712
30000.-	35000.	658.7747	-12.7379	-0.8946	122.0798	658.7747	-12.7379	0.0000
35000.-	40000.	-140.0180	-6.0383	-1.8399	144.6895	-140.0180	-6.0383	0.0000
40000.-	45000.	193.4996	-11.3794	-0.7106	117.1019	193.4996	-11.3794	0.0000
45000.-	50000.	-20.7425	-1.6182	-3.0244	172.0980	-20.7425	-1.6182	0.0000
50000.-	75000.	-27.5003	-0.6853	-7.2110	269.3457	-27.5003	-0.6853	0.0000
75000.-	100000.	-7.6323	-1.0802	-8.6553	299.7717	-7.6323	-1.0802	0.0000
100000.-	150000.	-16.1994	-2.4148	-1.3177	129.9995	-16.1994	-2.4148	0.0000
150000.-	0.	137.1925	-3.0717	-0.4345	109.7229	137.1925	-3.0717	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	4.6101	-461.0159	-62.0063	-55.9039	0.0000	0.0000
0.-	500.	-7.0543	1040.5837	1101.8388	1217.0810	0.0000	0.0000
500.-	1000.	-2.0141	368.5534	388.1649	424.7853	0.0000	0.0000
1000.-	2000.	-0.8679	187.4714	198.5785	218.2499	-0.1332	0.0000
2000.-	3000.	-0.7158	153.7951	159.0878	181.4555	-0.0850	0.0000
3000.-	4000.	-0.3883	123.1997	125.7793	138.4499	-3.5489	0.0000
4000.-	5000.	-0.3986	119.5704	122.3733	143.7041	-0.6992	0.0000
5000.-	6000.	-0.3130	113.2485	115.3804	147.3529	0.0000	0.0000
6000.-	7000.	-0.2350	109.1199	112.3253	140.7014	-23.6844	0.0000
7000.-	8000.	-0.2863	110.4588	113.1205	145.8659	-239.4072	0.0000
8000.-	9000.	-0.4290	114.9843	125.8276	279.8353	-49.4359	0.0000
9000.-	10000.	-0.7572	125.4081	147.5371	-760.0743	-35.5320	0.0000
10000.-	15000.	-2.3940	172.9102	-1176.5417	-42.7281	-16.1333	0.0000
15000.-	20000.	-3.0693	183.2369	7918.8984	-11.6589	-3.5434	0.0000
20000.-	25000.	-0.6212	116.0661	147.6293	-182.2937	-55.7975	0.0000
25000.-	30000.	-0.9984	125.1854	252.1561	-88.4275	-49.3712	0.0000
30000.-	35000.	-0.8946	122.0798	658.7747	-12.7379	0.0000	0.0000
35000.-	40000.	-1.8399	144.6895	-140.0180	-6.0383	0.0000	0.0000
40000.-	45000.	-0.7106	117.1019	193.4996	-11.3794	0.0000	0.0000
45000.-	50000.	-3.0244	172.0980	-20.7425	-1.6182	0.0000	0.0000
50000.-	75000.	-7.2110	269.3457	-27.5003	-0.6853	0.0000	0.0000
75000.-	100000.	-8.6553	299.7717	-7.6323	-1.0802	0.0000	0.0000
100000.-	150000.	-1.3177	129.9995	-16.1994	-2.4148	0.0000	0.0000
150000.-	0.	-0.4345	109.7229	137.1925	-3.0717	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	8464.	-17137944.	0.	0.	0.	0.	0.
0.-	500.	14285.	4240913.	31806.	1624.	2445.	27736.	0.
500.-	1000.	43253.	33020192.	247650.	16854.	24156.	206639.	0.
1000.-	2000.	109557.	161819136.	1605623.	180525.	236346.	1186752.	0.
2000.-	3000.	48184.	117932400.	1569335.	140571.	378445.	1049663.	653.
3000.-	4000.	23795.	80744544.	1351536.	134993.	399152.	812399.	4991.
4000.-	5000.	7843.	34340296.	699528.	87390.	298648.	312758.	731.
5000.-	6000.	2163.	11697810.	276404.	38312.	160312.	77778.	0.
6000.-	7000.	753.	4819234.	124208.	32302.	63782.	25986.	2137.
7000.-	8000.	328.	2432403.	66591.	13509.	37897.	11859.	3325.
8000.-	9000.	155.	1317095.	37708.	15831.	18210.	2825.	841.
9000.-	10000.	83.	780157.	23251.	7740.	12782.	1744.	983.
10000.-	15000.	184.	2163528.	71041.	42031.	20993.	2067.	5949.
15000.-	20000.	46.	820829.	30268.	18060.	11017.	361.	829.
20000.-	25000.	22.	517780.	20022.	12000.	6794.	223.	1003.
25000.-	30000.	13.	345980.	13716.	9431.	3149.	167.	967.
30000.-	35000.	7.	222588.	9018.	7526.	1483.	9.	0.
35000.-	40000.	5.	186114.	7662.	7415.	247.	0.	0.
40000.-	45000.	5.	206607.	8584.	6459.	2120.	4.	0.
45000.-	50000.	2.	93432.	3919.	3919.	0.	0.	0.
50000.-	75000.	7.	418428.	17817.	17603.	214.	0.	0.
75000.-	100000.	2.	170263.	7376.	7376.	0.	0.	0.
100000.-	150000.	1.	241611.	10613.	10613.	0.	0.	0.
150000.-	0.	1.	463310.	20706.	15293.	5413.	0.	0.
TOTAL	259166.	441856128.	6254383.	827388.	1683611.	3720975.	22413.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	0.	0.	0.	0.	0.
0.- 500.	4070.	31806.	31806.	31806.	0.
500.- 1000.	41011.	247650.	247650.	247650.	0.
1000.- 2000.	416871.	1605623.	1605623.	1605623.	0.
2000.- 3000.	519017.	1568681.	1569334.	1569334.	0.
3000.- 4000.	534146.	1346546.	1351537.	1351537.	0.
4000.- 5000.	386039.	698797.	699528.	699528.	0.
5000.- 6000.	198625.	276404.	276404.	276404.	0.
6000.- 7000.	96084.	122071.	124208.	124208.	0.
7000.- 8000.	51406.	63265.	66591.	66591.	0.
8000.- 9000.	34041.	36867.	37708.	37708.	0.
9000.- 10000.	20523.	22267.	23251.	23251.	0.
10000.- 15000.	63024.	65092.	71041.	71041.	0.
15000.- 20000.	29077.	29438.	30268.	30268.	0.
20000.- 25000.	18795.	19018.	20022.	20022.	0.
25000.- 30000.	12580.	12748.	13716.	13716.	0.
30000.- 35000.	9009.	9018.	9018.	9018.	0.
35000.- 40000.	7662.	7662.	7662.	7662.	0.
40000.- 45000.	8580.	8584.	8584.	8584.	0.
45000.- 50000.	3919.	3919.	3919.	3919.	0.
50000.- 75000.	17817.	17817.	17817.	17817.	0.
75000.- 100000.	7376.	7376.	7376.	7376.	0.
100000.- 150000.	10613.	10613.	10613.	10613.	0.
150000.- 0.	20706.	20706.	20706.	20706.	0.
TOTAL	2510999.	6231975.	6254388.	6254388.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	NFTD	UNFTD	NSPD	UNSPD	NPCC	UNPC	NOST	UNOS	NSTC	UNSTC
-999999.-	8464.	487688.	0.	1908.	0.	283308.	0.	0.	0.	0.
0.-	430.	319.	172.	634.	13689.	298214.	0.	0.	0.	0.
500.-	0.	0.	1148.	1865.	42105.	663207.	0.	0.	0.	0.
1000.-	103.	385.	623.	661.	108830.	1401546.	0.	1869.	0.	0.
2000.-	0.	0.	615.	13893.	47467.	830268.	102.	64.	0.	0.
3000.-	95.	246.	95.	1658.	23315.	305891.	287.	5755.	0.	0.
4000.-	79.	244.	0.	0.	7684.	136436.	79.	219.	0.	0.
5000.-	0.	0.	196.	445.	1966.	36174.	0.	0.	0.	0.
6000.-	0.	0.	45.	292.	685.	11003.	22.	32.	0.	0.
7000.-	0.	0.	0.	0.	291.	5377.	36.	1586.	0.	0.
8000.-	0.	0.	0.	0.	109.	4097.	5.	1028.	0.	0.
9000.-	0.	0.	40.	524.	57.	1927.	6.	564.	0.	0.
10000.-	6.	3082.	12.	332.	47.	6242.	34.	1246.	0.	0.
15000.-	54.	35067.	47.	11239.	18.	1407.	1.	32.	0.	0.
20000.-	10.	11885.	16.	11868.	8.	701.	2.	148.	0.	0.
25000.-	7.	1267.	5.	1099.	3.	311.	1.	174.	0.	0.
30000.-	5.	2014.	3.	954.	1.	215.	0.	0.	0.	0.
35000.-	2.	1136.	4.	639.	1.	195.	0.	0.	0.	0.
40000.-	4.	1673.	1.	1555.	0.	145.	0.	0.	0.	0.
45000.-	2.	554.	2.	768.	1.	45.	0.	0.	0.	0.
50000.-	2.	2340.	0.	440.	0.	205.	0.	0.	0.	0.
75000.-	6.	23879.	1.	6088.	0.	157.	0.	0.	0.	0.
100000.-	2.	13691.	0.	887.	0.	75.	0.	0.	0.	0.
150000.-	1.	2740.	0.	363.	0.	60.	0.	0.	0.	0.
150000.-	0.	0.	1.	1953.	0.	0.	0.	0.	0.	0.
TOTAL	9277.	586218.	3031.	77261.	246277.	3987209.	580.	12721.	0.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	TOTAL NUM	UNTOT
-99999.- 0.	9464.	790086.
0.- 500.	14285.	299169.
500.- 1000.	43253.	665073.
1000.- 2000.	109557.	1404461.
2000.- 3000.	48184.	844226.
3000.- 4000.	23795.	313551.
4000.- 5000.	7843.	136900.
5000.- 6000.	2163.	36619.
6000.- 7000.	753.	11327.
7000.- 8000.	328.	6964.
8000.- 9000.	155.	5650.
9000.- 10000.	83.	5907.
10000.- 15000.	184.	51796.
15000.- 20000.	46.	25194.
20000.- 25000.	22.	3216.
25000.- 30000.	13.	3454.
30000.- 35000.	7.	1991.
35000.- 40000.	5.	3424.
40000.- 45000.	5.	1468.
45000.- 50000.	2.	2825.
50000.- 75000.	7.	30173.
75000.- 100000.	2.	14736.
100000.- 150000.	1.	3183.
150000.- 0.	1.	2013.
TOTAL	259166.	4663411.

TOTAL EXEMPTIONS BY AGI CLASS
PAYS

AGI CLASS	TAGI	TFTD	TSPD	TPCC	TOST	TSTC
-99999.-	0.	-4247.	-51330.	1161.	89.	0.
0.-	500.	200.	0.	10.	0.	0.
500.-	1000.	2699.	-1029.	248.	15.	0.
1000.-	2000.	22669676.	1462556.	1165518.	184178.	0.
2000.-	3000.	179463072.	17482032.	13679062.	1162772.	1792.
3000.-	4000.	309750976.	31233636.	25761444.	1945232.	0.
4000.-	5000.	434149056.	42174512.	41143248.	2713911.	9841.
5000.-	6000.	549991553.	53669456.	59522696.	3246979.	3749.
6000.-	7000.	596583169.	60071968.	65411920.	3205157.	20425.
7000.-	8000.	565806721.	59275600.	64641368.	2850927.	23244.
8000.-	9000.	480620800.	51427216.	54363872.	2253071.	3291.
9000.-	10000.	372452608.	41839744.	42029128.	1594615.	8835.
10000.-	15000.	827683713.	99823064.	90351760.	3030281.	64606.
15000.-	20000.	283370112.	39645320.	25586596.	703537.	9249.
20000.-	25000.	155824768.	24538884.	14491650.	286897.	0.
25000.-	30000.	99367440.	19787376.	9355420.	153813.	0.
30000.-	35000.	71939960.	16823004.	5680534.	87420.	0.
35000.-	40000.	51923704.	12213596.	4754205.	63534.	6398.
40000.-	45000.	38131368.	10236738.	3898828.	28713.	1561.
45000.-	50000.	30873756.	8128625.	2526907.	28487.	1006.
50000.-	75000.	80624288.	25433440.	7946894.	59427.	0.
75000.-	100000.	29081348.	11863476.	1706635.	13809.	0.
100000.-	150000.	18905628.	8121682.	2249566.	5019.	2936.
150000.-	0.	25482256.	11382218.	1971608.	3051.	0.
TOTAL		5224679435.	646595969.	538240001.	23630908.	156938.

AGI CLASS

EFFECTIVE TAX RATES BY AGI CLASS
TTDUE/(AGI(1)+AGI(1+24))

-99999.-	0.	-0.00987
0.-	500.	0.00003
500.-	1000.	0.00005
1000.-	2000.	0.01325
2000.-	3000.	0.20623
3000.-	4000.	0.46783
4000.-	5000.	0.74865
5000.-	6000.	1.01452
6000.-	7000.	1.25738
7000.-	8000.	1.41201
8000.-	9000.	1.56595
9000.-	10000.	1.68110
10000.-	15000.	1.91587
15000.-	20000.	2.36877
20000.-	25000.	2.53997
25000.-	30000.	2.49279
30000.-	35000.	2.52489
35000.-	40000.	2.50324
40000.-	45000.	2.37698
45000.-	50000.	2.54044
50000.-	75000.	2.31674
75000.-	100000.	2.16898
100000.-	150000.	1.84303
150000.-	0.	2.04197

APPENDIX G

IOWA TAX MODEL PRINTOUT RAISING AN ADDITIONAL \$5 MILLION
AND REDUCING REGRESSIVITY BY CHANGING ONLY
THE FEDERAL TAX DEDUCTION

THE STATE TAX IS CALCULATED marginally USING THE FOLLOWING BRACKETS AND RATES.

BRACKET		RATE
0.-	1000.	0.0075
1000.-	2000.	0.0150
2000.-	3000.	0.0225
3000.-	4000.	0.0300
4000.-	9000.	0.0375
9000.-	0.	0.0450

PROVISION- 1-

THE FEDERAL TAX DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD-
marginally BY THE FOLLOWING BRACKETS AND RATES

BRACKET		RATE
0.-	0.	0.7886
AND CAN BE NO GREATER THAN		80000016.21.

PROVISION- 2-

THE STATE PERSONAL DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD IF ITEMIZED-
THE ITEMIZED AMOUNT IS EQUAL TO THE STATE PERSONAL DEDUCTION.
AND IF NOT ITEMIZED THE STATE PERSONAL DEDUCTION IS EQUAL TO-
(AGI-FTD)* 0.05.

AGI = ADJUSTED GROSS INCOME.
FTD = FEDERAL TAX DEDUCTION.
AND CAN BE NO GREATER THAN 250.00.

PROVISION- 3-

THE PERSONAL AND CHILD CREDIT IS EQUAL TO-
NUMBER OF ADULTS *15.00+ NUMBER OF CHILDREN * 7.50 + NUMBER OF OTHER DEPENDENTS *
7.50.

PROVISION- 4-

THE OUT OF STATE TAX CREDIT IS CALCULATED MARGINALLY USING THE FOLLOWING BRACKETS AND RATES-

BRACKET	RATE
0.- 0.	1.0000
AND CAN BE NO GREATER THAN	80000016.21.

PROVISION- 5-

THE SALES TAX CREDIT IS NOT USED.

THIS OUTPUT IS FOR YEAR NUMBER 1966 AND ESTIMATE FILE NUMBER 2
ONE INDICATES A HIGH ESTIMATE AND TWO A LOW ESTIMATE.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.- 0.	0.0000	-28.2179	2821.7959	-27.0309	2703.0986	4.2064	-24.9121	2491.2114
0.- 500.	0.7499	0.7499	0.0000	0.7124	5.0000	5.0000	0.7124	5.0000
500.- 1000.	0.7499	1.1848	-57.9787	1.0952	-46.0299	7.5634	0.5395	28.0550
1000.- 2000.	1.0914	1.0101	7.4436	0.9320	14.6012	7.7332	0.1149	89.4691
2000.- 3000.	1.3548	1.1971	11.6411	1.0372	23.4468	13.3610	0.3865	71.4724
3000.- 4000.	1.7219	1.5092	12.3559	1.2826	25.5109	15.0095	0.6475	62.3933
4000.- 5000.	2.0808	1.8247	12.3101	1.5101	27.4288	17.2410	0.8821	57.6049
5000.- 6000.	2.3871	2.1241	11.0150	1.7219	27.8650	18.9357	1.1299	52.6662
6000.- 7000.	2.5955	2.3230	10.4979	1.9066	26.5403	17.9240	1.3677	47.3030
7000.- 8000.	2.7465	2.4605	10.4148	2.0275	26.1797	17.5977	1.5212	44.6106
8000.- 9000.	2.8647	2.5641	10.4921	2.1354	25.4568	16.7188	1.6662	41.8354
9000.- 10000.	2.9948	2.6484	11.5677	2.2195	25.8876	16.1930	1.7896	40.2436
10000.- 15000.	3.2914	2.8961	12.0088	2.4288	26.2076	16.1366	2.0626	37.3336
15000.- 20000.	3.6645	3.0873	15.7495	2.6627	27.3371	13.7538	2.4180	34.0133
20000.- 25000.	3.8604	3.2081	16.8987	2.7298	29.2886	14.9094	2.5497	33.9526
25000.- 30000.	3.9718	3.1456	20.7749	2.7001	32.0176	14.1908	2.5462	35.8925
30000.- 35000.	4.0636	3.2232	20.6600	2.7998	31.0827	13.1367	2.6792	34.0518
35000.- 40000.	4.1170	3.2894	20.1033	2.8849	29.9278	12.2964	2.7634	32.8771
40000.- 45000.	4.1630	3.1619	24.0477	2.5717	38.2236	18.6643	2.4742	40.5669
45000.- 50000.	4.1968	3.2570	22.3926	2.8994	30.9138	10.9799	2.8080	33.0911
50000.- 75000.	4.2651	3.1407	26.3620	2.6810	37.1414	14.6383	2.6080	38.8516
75000.- 100000.	4.3289	3.0129	30.4010	2.7488	36.5013	8.7649	2.7013	37.5982
100000.- 150000.	4.3784	2.8683	34.4889	2.3568	46.1721	17.8340	2.3308	46.7668
150000.- 0.	4.4497	2.9528	33.6407	2.5259	43.2355	14.4589	2.5138	43.5060

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	11.7154	7.8386	-24.9121	2491.2114	11.7154	7.8386	0.0000
0.-	500.	5.0000	0.0000	0.7124	5.0000	5.0000	0.0000	0.0000
500.-	1000.	54.4590	50.7327	0.5395	28.0550	54.4590	50.7327	0.0000
1000.-	2000.	88.6222	87.6686	0.1149	89.4691	88.6222	87.6686	0.0000
2000.-	3000.	67.7139	62.7349	0.3851	71.5702	67.8247	62.8627	0.3430
3000.-	4000.	57.0915	49.5138	0.6475	62.3933	57.0915	49.5138	0.0000
4000.-	5000.	51.6533	41.5813	0.8799	57.7122	51.7758	41.7293	0.2532
5000.-	6000.	46.8069	34.3816	1.1292	52.6946	46.8389	34.4210	0.0600
6000.-	7000.	41.1220	28.2641	1.3628	47.4936	41.3349	28.5235	0.3616
7000.-	8000.	38.1712	24.9671	1.5146	44.8532	38.4421	25.2958	0.4380
8000.-	9000.	35.0173	21.9720	1.6655	41.8591	35.0437	22.0037	0.0406
9000.-	10000.	32.4269	19.3706	1.7841	40.4262	32.6334	19.6170	0.3056
10000.-	15000.	28.7810	15.0774	2.0499	37.7190	29.2191	15.5997	0.6151
15000.-	20000.	21.6779	9.1878	2.4012	34.4721	22.2225	9.8192	0.6952
20000.-	25000.	20.5218	6.5957	2.5497	33.9526	20.5218	6.5957	0.0000
25000.-	30000.	19.0818	5.6998	2.5462	35.8925	19.0818	5.6998	0.0000
30000.-	35000.	16.8790	4.3082	2.6792	34.0518	16.8790	4.3082	0.0000
35000.-	40000.	15.9878	4.2090	2.7514	33.1692	16.3534	4.6258	0.4351
40000.-	45000.	21.7494	3.7930	2.4705	40.6550	21.8655	3.9358	0.1483
45000.-	50000.	13.7853	3.1514	2.8049	33.1663	13.8823	3.2604	0.1124
50000.-	75000.	16.9607	2.7207	2.6080	38.8516	16.9607	2.7207	0.0000
75000.-	100000.	10.3410	1.7275	2.7013	37.5982	10.3410	1.7275	0.0000
100000.-	150000.	18.7416	1.1046	2.3159	47.1055	19.2586	1.7339	0.6362
150000.-	0.	14.8665	0.4764	2.5138	43.5060	14.8665	0.4764	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	-24.9121	2491.2114	11.7154	7.8386	0.0000	0.0000
0.-	500.	0.7124	5.0000	5.0000	0.0000	0.0000	0.0000
500.-	1000.	0.5395	28.0550	54.4590	50.7327	0.0000	0.0000
1000.-	2000.	0.1149	89.4691	88.6222	87.6686	0.0000	0.0000
2000.-	3000.	0.3851	71.5702	67.8247	62.8627	0.3430	0.0000
3000.-	4000.	0.6475	62.3933	57.0915	49.5138	0.0000	0.0000
4000.-	5000.	0.8799	57.7122	51.7758	41.7293	0.2532	0.0000
5000.-	6000.	1.1292	52.6946	46.8389	34.4210	0.0600	0.0000
6000.-	7000.	1.3628	47.4936	41.3349	28.5235	0.3616	0.0000
7000.-	8000.	1.5146	44.8532	38.4421	25.2958	0.4380	0.0000
8000.-	9000.	1.6655	41.8591	35.0437	22.0037	0.0406	0.0000
9000.-	10000.	1.7841	40.4262	32.6334	19.6170	0.3056	0.0000
10000.-	15000.	2.0499	37.7190	29.2191	15.5997	0.6151	0.0000
15000.-	20000.	2.4012	34.4721	22.2225	9.8192	0.6952	0.0000
20000.-	25000.	2.5497	33.9526	20.5218	6.5957	0.0000	0.0000
25000.-	30000.	2.5462	35.8925	19.0818	5.6998	0.0000	0.0000
30000.-	35000.	2.6792	34.0518	16.8790	4.3082	0.0000	0.0000
35000.-	40000.	2.7514	33.1692	16.3534	4.6258	0.4351	0.0000
40000.-	45000.	2.4705	40.6550	21.8655	3.9358	0.1483	0.0000
45000.-	50000.	2.8049	33.1663	13.8823	3.2604	0.1124	0.0000
50000.-	75000.	2.6080	38.8516	16.9607	2.7207	0.0000	0.0000
75000.-	100000.	2.7013	37.5982	10.3410	1.7275	0.0000	0.0000
100000.-	150000.	2.3159	47.1055	19.2586	1.7339	0.6362	0.0000
150000.-	0.	2.5138	43.5060	14.8665	0.4764	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	1.	-4247.	0.	-1198.	50.	89.	0.
0.-	500.	1.	200.	1.	0.	0.	0.	0.
500.-	1000.	3.	2699.	20.	-11.	2.	15.	0.
1000.-	2000.	15171.	27849956.	303963.	22625.	21756.	227571.	0.
2000.-	3000.	73602.	185006848.	2506623.	291799.	295924.	1203819.	2453.
3000.-	4000.	89955.	316733696.	5454110.	673907.	717487.	2011604.	0.
4000.-	5000.	98016.	440424832.	9164792.	1128200.	1385593.	2765576.	9841.
5000.-	6000.	100438.	552697089.	13193496.	1453274.	2223106.	3272138.	3749.
6000.-	7000.	92599.	601580929.	15614430.	1639202.	2504921.	3241981.	29753.
7000.-	8000.	76474.	571580033.	15698754.	1634997.	2474902.	2893413.	38090.
8000.-	9000.	57409.	486378240.	13933486.	1461929.	2085096.	2282115.	3291.
9000.-	10000.	39806.	376858112.	11286308.	1305572.	1616181.	1620266.	20615.
10000.-	15000.	70657.	833086721.	27420260.	3292854.	3893344.	3050776.	105693.
15000.-	20000.	17801.	303619584.	11126204.	1752326.	1289263.	742804.	51047.
20000.-	25000.	7591.	169166240.	6530663.	1103598.	809148.	304586.	0.
25000.-	30000.	4031.	108767376.	4320028.	897481.	485688.	167397.	0.
30000.-	35000.	2350.	76564224.	3110512.	642633.	324198.	92355.	0.
35000.-	40000.	1429.	53206296.	2190541.	440372.	215208.	64606.	6398.
40000.-	45000.	1005.	42535568.	1770761.	425827.	251022.	41492.	1561.
45000.-	50000.	677.	31849944.	1336697.	299321.	113903.	29103.	1006.
50000.-	75000.	1400.	84983040.	3624688.	955544.	390718.	61989.	0.
75000.-	100000.	349.	29081348.	1258926.	382726.	76798.	13809.	0.
100000.-	150000.	168.	19802220.	867038.	299032.	101298.	5155.	2936.
150000.-	0.	95.	27121660.	1206858.	405995.	115796.	3264.	0.
TOTAL	751038.	5338886155.	151918976.	20507996.	21391384.	24095900.	276438.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	-1148.	-1058.	-1058.	-1058.	1058.
0.- 500.	0.	0.	0.	0.	1.
500.- 1000.	-9.	5.	5.	5.	14.
1000.- 2000.	44382.	271953.	271953.	271953.	32012.
2000.- 3000.	587724.	1791544.	1793997.	1793997.	712674.
3000.- 4000.	1391395.	3403000.	3403000.	3403000.	2051192.
4000.- 5000.	2513794.	5279370.	5289211.	5289211.	3875751.
5000.- 6000.	3676380.	6948518.	6952267.	6952267.	6241404.
6000.- 7000.	4144123.	7386104.	7415857.	7415857.	8198758.
7000.- 8000.	4109900.	7003313.	7041403.	7041403.	8657506.
8000.- 9000.	3547025.	5829140.	5832431.	5832431.	8101134.
9000.- 10000.	2921754.	4542020.	4562635.	4562635.	6723697.
10000.- 15000.	7186198.	10236974.	10342666.	10342666.	17077660.
15000.- 20000.	3041590.	3784394.	3835441.	3835441.	7290767.
20000.- 25000.	1912746.	2217333.	2217333.	2217333.	4313333.
25000.- 30000.	1383169.	1550567.	1550567.	1550567.	2769460.
30000.- 35000.	966831.	1059186.	1059186.	1059186.	2051325.
35000.- 40000.	655581.	720187.	726585.	726585.	1463956.
40000.- 45000.	676850.	718342.	719904.	719904.	1050857.
45000.- 50000.	413225.	442328.	443334.	443334.	893364.
50000.- 75000.	1346262.	1408251.	1408251.	1408251.	2216436.
75000.- 100000.	459525.	473334.	473334.	473334.	785592.
100000.- 150000.	400330.	405486.	408423.	408423.	458615.
150000.- 0.	521792.	525056.	525056.	525056.	681802.
TOTAL	41899376.	65995272.	66271712.	66271712.	85648288.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.- 0.	0.0000	2.8125	-281.2559	2.9238	-292.3890	-3.9583	4.5769	-1457.6998
0.- 500.	0.7499	0.7171	4.3833	0.6443	14.0877	10.1492	-7.0415	1038.8710
500.- 1000.	0.7499	0.7133	4.8921	0.6344	15.4020	11.0505	-1.9998	366.6418
1000.- 2000.	0.9873	0.9085	7.9812	0.7563	23.3937	16.7493	-0.8859	189.7276
2000.- 3000.	1.3306	1.2547	5.7097	0.9119	31.4649	27.3147	-0.7280	154.7102
3000.- 4000.	1.6728	1.5631	6.2584	1.0495	37.2605	33.0718	-0.3759	122.4726
4000.- 5000.	2.0255	1.9108	5.6651	0.9670	52.2583	49.3913	-0.4246	120.9658
5000.- 6000.	2.3602	2.1419	9.2504	0.6788	71.2377	68.3058	-0.3010	112.7543
6000.- 7000.	2.5793	2.0734	19.6110	0.5898	77.1322	71.5535	-0.1874	107.2692
7000.- 8000.	2.7387	2.4473	10.6394	0.5695	79.2025	76.7263	-0.1276	104.6593
8000.- 9000.	2.8614	2.1194	25.9304	0.3190	88.8510	84.9479	-0.2140	107.4811
9000.- 10000.	2.9842	2.1248	28.7984	0.0791	97.3469	96.2738	-0.3652	112.2407
10000.- 15000.	3.2985	0.5844	82.2810	-1.2004	136.3919	305.3848	-1.5855	148.0582
15000.- 20000.	3.6728	0.6429	82.4935	-4.5314	223.3782	804.7600	-4.7692	229.8519
20000.- 25000.	3.8651	2.0871	46.0009	0.2582	93.3175	87.6249	0.0530	98.6277
25000.- 30000.	3.9605	1.7347	56.1988	0.0047	99.8803	99.7267	-0.1277	103.2259
30000.- 35000.	4.0403	0.5321	86.8295	-0.2888	107.1480	154.2735	-0.3855	109.5430
35000.- 40000.	4.1205	0.4135	89.9646	-0.6172	114.9798	249.2708	-0.7270	117.6453
40000.- 45000.	4.1457	0.0094	99.7729	-0.8651	120.8680	9292.9414	-0.9770	123.5664
45000.- 50000.	4.1804	-1.8912	145.1434	-2.8511	168.0556	-50.7544	-2.8838	168.8359
50000.- 75000.	4.2499	-4.7187	211.0314	-6.5366	253.8055	-38.5243	-6.5813	254.8585
75000.- 100000.	4.3326	-4.4437	202.5659	-4.9650	214.5968	-11.7299	-5.0575	216.7319
100000.- 150000.	4.3780	0.2783	93.6412	0.0113	99.7397	95.9064	-0.0399	100.9128
150000.- 0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	-62.7343	-56.5379	4.5769	-457.6998	-62.7343	-56.5379	0.0000
0.-	500.	1081.9118	1192.8254	-7.0415	1038.8710	1081.9118	1192.8254	0.0000
500.-	1000.	380.3573	415.1871	-1.9998	366.6417	380.3573	415.1871	0.0000
1000.-	2000.	197.5101	217.1283	-0.8871	189.8509	197.6441	217.2894	-0.1375
2000.-	3000.	158.0232	179.8282	-0.7280	154.7102	158.0232	179.8282	0.0000
3000.-	4000.	123.9730	135.8190	-0.3904	123.3424	124.9008	137.2054	-3.8704
4000.-	5000.	122.2248	143.9151	-0.4279	121.1260	122.3947	144.2508	-0.7643
5000.-	6000.	114.0544	144.3440	-0.3010	112.7543	114.0544	144.3440	0.0000
6000.-	7000.	109.0425	131.7880	-0.1874	107.2692	109.0425	131.7880	0.0000
7000.-	8000.	105.2140	122.4034	-0.3064	111.1887	112.5208	153.7985	-140.1351
8000.-	9000.	110.1001	167.1016	-0.4059	114.1879	119.1549	227.2582	-89.6499
9000.-	10000.	117.1917	561.3807	-0.5476	118.3511	125.7734	791.6906	-49.9175
10000.-	15000.	371.2814	-32.0844	-1.8273	155.3992	412.6553	-52.2290	-15.2513
15000.-	20000.	841.7393	-5.2470	-4.7692	229.8519	841.7393	-5.2470	0.0000
20000.-	25000.	97.4588	79.4650	-0.2976	107.7003	114.2601	215.2333	661.1577
25000.-	30000.	107.3648	2795.0859	-0.7928	120.0176	145.7012	16823.7539	-520.5277
30000.-	35000.	172.4584	-33.5059	-0.3855	109.5430	172.4584	-33.5059	0.0000
35000.-	40000.	275.8307	-17.7932	-0.7270	117.6452	275.8307	-17.7932	0.0000
40000.-	45000.	10482.2480	-12.9306	-0.9770	123.5664	10482.2480	-12.9306	0.0000
45000.-	50000.	-52.4828	-1.1465	-2.8838	168.8359	-52.4828	-1.1465	0.0000
50000.-	75000.	-39.4727	-0.6845	-6.5813	254.8585	-39.4727	-0.6845	0.0000
75000.-	100000.	-13.8115	-1.8631	-5.0575	216.7319	-13.8115	-1.8631	0.0000
100000.-	150000.	114.3562	450.7106	-0.0399	100.9128	114.3562	450.7106	0.0000
150000.-	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	4.5769	-457.6998	-62.7342	-56.5379	0.0000	0.0000
0.-	500.	-7.0415	1038.8710	1081.9118	1192.8254	0.0000	0.0000
500.-	1000.	-1.9998	366.6418	380.3573	415.1871	0.0000	0.0000
1000.-	2000.	-0.8871	139.8509	197.6441	217.2893	-0.1374	0.0000
2000.-	3000.	-0.7290	154.7102	158.0233	179.8282	0.0000	0.0000
3000.-	4000.	-0.3904	123.3424	124.9008	137.2054	-3.8704	0.0000
4000.-	5000.	-0.4279	121.1260	122.3947	144.2507	-0.7643	0.0000
5000.-	6000.	-0.3010	112.7543	114.0544	144.3441	0.0000	0.0000
6000.-	7000.	-0.1874	107.2692	109.0425	131.7880	0.0000	0.0000
7000.-	8000.	-0.3064	111.1887	112.5208	153.7984	-140.1355	0.0000
8000.-	9000.	-0.4059	114.1879	119.1549	227.2582	-89.6500	0.0000
9000.-	10000.	-0.5476	118.3511	125.7734	791.6896	-49.9176	0.0000
10000.-	15000.	-1.8273	155.3992	412.6554	-52.2290	-15.2513	0.0000
15000.-	20000.	-4.7692	229.8519	841.7393	-5.2470	0.0000	0.0000
20000.-	25000.	-0.2976	107.7003	114.2601	215.2330	661.1533	0.0000
25000.-	30000.	-0.7928	120.0176	145.7012	16824.0820	-520.5274	0.0000
30000.-	35000.	-0.3855	109.5430	172.4584	-33.5059	0.0000	0.0000
35000.-	40000.	-0.7270	117.6453	275.8309	-17.7932	0.0000	0.0000
40000.-	45000.	-0.9770	123.5664	10481.6523	-12.9306	0.0000	0.0000
45000.-	50000.	-2.8838	168.8359	-52.4828	-1.1465	0.0000	0.0000
50000.-	75000.	-6.5813	254.8585	-39.4727	-0.6846	0.0000	0.0000
75000.-	100000.	-5.0575	216.7319	-13.8115	-1.8631	0.0000	0.0000
100000.-	150000.	-0.0399	100.9128	114.3561	450.6996	0.0000	0.0000
150000.-	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	8464.	-17137944.	0.	0.	0.	0.	0.
0.-	500.	14285.	4240913.	31806.	1207.	2473.	28125.	0.
500.-	1000.	43253.	33020192.	247650.	12115.	24300.	211234.	0.
1000.-	2000.	104884.	153451392.	1515153.	120927.	233006.	1161220.	0.
2000.-	3000.	45724.	111909248.	1489174.	85028.	369731.	1034413.	0.
3000.-	4000.	21780.	73854672.	1235511.	77324.	381374.	770862.	5950.
4000.-	5000.	6733.	29287800.	593244.	33607.	276411.	282409.	815.
5000.-	6000.	1917.	10349302.	244274.	22596.	151035.	70641.	0.
6000.-	7000.	570.	3657067.	94327.	18498.	54118.	21710.	0.
7000.-	8000.	231.	1713580.	46931.	4993.	32177.	8059.	1701.
8000.-	9000.	115.	973982.	27870.	7226.	17136.	2581.	924.
9000.-	10000.	67.	631763.	18853.	4143.	12603.	1446.	660.
10000.-	15000.	150.	1784822.	58873.	30718.	22678.	1906.	3570.
15000.-	20000.	23.	403122.	14805.	5206.	9381.	217.	0.
20000.-	25000.	14.	323540.	12698.	5766.	5646.	221.	1064.
25000.-	30000.	6.	171693.	6799.	3217.	2443.	104.	1034.
30000.-	35000.	4.	124008.	5010.	4073.	894.	42.	0.
35000.-	40000.	4.	150231.	6190.	5521.	664.	4.	0.
40000.-	45000.	1.	40225.	1667.	1663.	3.	0.	0.
45000.-	50000.	1.	45886.	1922.	1922.	0.	0.	0.
50000.-	75000.	5.	288983.	12281.	11736.	545.	0.	0.
75000.-	100000.	2.	170263.	7376.	7376.	0.	0.	0.
100000.-	150000.	0.	106305.	4654.	4358.	283.	12.	0.
150000.-	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	248241.	409565376.	5677070.	469230.	1596911.	3595210.	15721.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	0.	0.	0.	0.	0.
0.- 500.	3681.	31806.	31806.	31806.	0.
500.- 1000.	36415.	247650.	247650.	247650.	0.
1000.- 2000.	353933.	1515154.	1515154.	1515154.	0.
2000.- 3000.	454759.	1489172.	1489172.	1489172.	0.
3000.- 4000.	458699.	1229561.	1235512.	1235512.	0.
4000.- 5000.	310019.	592429.	593244.	593244.	0.
5000.- 6000.	173632.	244274.	244274.	244274.	0.
6000.- 7000.	72617.	94327.	94327.	94327.	0.
7000.- 8000.	37170.	45230.	46931.	46931.	0.
8000.- 9000.	24363.	26945.	27870.	27870.	0.
9000.- 10000.	16746.	18193.	18853.	18853.	0.
10000.- 15000.	53397.	55303.	58873.	58873.	0.
15000.- 20000.	14588.	14806.	14806.	14806.	0.
20000.- 25000.	11413.	11634.	12698.	12698.	0.
25000.- 30000.	5661.	5765.	6799.	6799.	0.
30000.- 35000.	4968.	5010.	5010.	5010.	0.
35000.- 40000.	6185.	6190.	6190.	6190.	0.
40000.- 45000.	1667.	1667.	1667.	1667.	0.
45000.- 50000.	1922.	1922.	1922.	1922.	0.
50000.- 75000.	12281.	12281.	12281.	12281.	0.
75000.- 100000.	7376.	7376.	7376.	7376.	0.
100000.- 150000.	4641.	4654.	4654.	4654.	0.
150000.- 0.	0.	0.	0.	0.	0.
TOTAL	2066141.	5661351.	5677073.	5677073.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	NFTD	UNFTD	NSPD	UNSPD	NPCC	UNPC	NOST	UNOS	NSTC	UNSTC
99999.9	8464.4	482014.4	0.0	19079.4	0.0	283308.0	0.0	0.0	0.0	0.0
0.0	430.0	186.0	172.0	612.0	13683.0	297825.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	861.0	1727.0	42392.0	658611.0	0.0	0.0	0.0	0.0
1000.0	0.0	0.0	623.0	517.0	104261.0	1358992.0	0.0	1869.0	0.0	0.0
2000.0	0.0	0.0	615.0	13808.0	45109.0	800924.0	0.0	0.0	0.0	0.0
3000.0	0.0	0.0	95.0	1658.0	21396.0	281943.0	287.0	4795.0	0.0	0.0
4000.0	0.0	0.0	0.0	0.0	6654.0	125193.0	79.0	135.0	0.0	0.0
5000.0	0.0	0.0	196.0	382.0	1720.0	30772.0	0.0	0.0	0.0	0.0
6000.0	0.0	0.0	22.0	139.0	548.0	6717.0	0.0	0.0	0.0	0.0
7000.0	0.0	0.0	0.0	0.0	218.0	3887.0	12.0	0.0	0.0	0.0
8000.0	0.0	0.0	0.0	0.0	86.0	2610.0	5.0	1363.0	0.0	0.0
9000.0	0.0	0.0	23.0	399.0	54.0	1361.0	3.0	944.0	0.0	0.0
10000.0	6.0	1236.0	3.0	320.0	61.0	4968.0	20.0	745.0	0.0	0.0
15000.0	34.0	17722.0	34.0	9178.0	7.0	740.0	0.0	0.0	0.0	0.0
20000.0	5.0	7007.0	10.0	11477.0	6.0	453.0	2.0	88.0	0.0	0.0
25000.0	2.0	75.0	4.0	361.0	1.0	123.0	1.0	107.0	0.0	0.0
30000.0	2.0	604.0	2.0	526.0	2.0	77.0	0.0	0.0	0.0	0.0
35000.0	1.0	276.0	1.0	123.0	2.0	160.0	0.0	0.0	0.0	0.0
40000.0	2.0	47.0	1.0	883.0	1.0	15.0	0.0	0.0	0.0	0.0
45000.0	0.0	0.0	1.0	348.0	0.0	45.0	0.0	0.0	0.0	0.0
50000.0	1.0	867.0	0.0	440.0	0.0	15.0	0.0	0.0	0.0	0.0
55000.0	3.0	14181.0	2.0	4708.0	0.0	129.0	0.0	0.0	0.0	0.0
75000.0	2.0	7566.0	0.0	887.0	0.0	157.0	0.0	0.0	0.0	0.0
100000.0	0.0	0.0	0.0	0.0	0.0	42.0	0.0	0.0	0.0	0.0
150000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	8953.0	531837.0	2669.0	67582.0	236206.0	3859057.0	411.0	10540.0	0.0	0.0

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	TOTAL NUM	UNTOT
-99999.- 0.	8464.	784403.
0.- 500.	14285.	298624.
500.- 1000.	43253.	660339.
1000.- 2000.	104884.	1361379.
2000.- 3000.	45724.	814733.
3000.- 4000.	21780.	288397.
4000.- 5000.	6733.	125328.
5000.- 6000.	1917.	31155.
6000.- 7000.	570.	6856.
7000.- 8000.	231.	5250.
8000.- 9000.	115.	3954.
9000.- 10000.	67.	3459.
10000.- 15000.	150.	32615.
15000.- 20000.	23.	19225.
20000.- 25000.	14.	977.
25000.- 30000.	6.	1361.
30000.- 35000.	4.	478.
35000.- 40000.	4.	1092.
40000.- 45000.	1.	393.
45000.- 50000.	1.	1323.
50000.- 75000.	5.	19019.
75000.- 100000.	2.	8611.
100000.- 150000.	0.	42.
150000.- 0.	0.	0.
TOTAL	248241.	4469018.

TOTAL EXEMPTIONS BY AGI CLASS
PAYS

AGI CLASS	TAGI	TFTD	TSPD	TPCC	TOST	TSTC
-99999.-	0.	-4247.	-36799.	1161.	89.	0.
0.-	500.	200.	0.	10.	0.	0.
500.-	1000.	2699.	-738.	231.	15.	0.
1000.-	2000.	27849956.	1515251.	1444540.	227571.	0.
2000.-	3000.	185006848.	13309486.	14438162.	1203819.	2453.
3000.-	4000.	316733696.	23260568.	26910456.	2011604.	0.
4000.-	5000.	440424832.	31436928.	42364392.	2765576.	9841.
5000.-	6000.	552697089.	38789496.	60307128.	3272139.	3749.
6000.-	7000.	601580929.	43718944.	66983288.	3241981.	29753.
7000.-	8000.	571580033.	43599848.	66103592.	2893413.	38090.
8000.-	9000.	486378240.	39001480.	55701744.	2282115.	3291.
9000.-	10000.	376858112.	31654392.	42705224.	1620266.	20615.
10000.-	15000.	833086721.	73510544.	90900112.	3050776.	105693.
15000.-	20000.	303619584.	39196016.	29336640.	742804.	51047.
20000.-	25000.	169156240.	24707788.	18343156.	304586.	0.
25000.-	30000.	108767376.	20033524.	11006694.	167397.	0.
30000.-	35000.	76564224.	14280760.	7301395.	92355.	0.
35000.-	40000.	53206296.	9799904.	4788055.	64606.	6398.
40000.-	45000.	42535568.	9462834.	5654794.	41492.	1561.
45000.-	50000.	31849944.	6658133.	2532040.	29103.	1006.
50000.-	75000.	84983040.	21234344.	8686488.	61989.	0.
75000.-	100000.	29081348.	8505036.	1706635.	13809.	0.
100000.-	150000.	19802220.	6645180.	2251073.	5155.	2936.
150000.-	0.	27121660.	9022134.	2573257.	3264.	0.
TOTAL		5338886155.	509354560.	561939713.	24095900.	276438.

AGI CLASS		EFFECTIVE TAX RATES BY AGI CLASS TTDUE/(AGI(1)+AGI(1+24))
-99999.-	0.	-0.00617
0.-	500.	0.00003
500.-	1000.	0.00004
1000.-	2000.	0.01765
2000.-	3000.	0.24002
3000.-	4000.	0.52515
4000.-	5000.	0.82513
5000.-	6000.	1.10850
6000.-	7000.	1.35463
7000.-	8000.	1.51013
8000.-	9000.	1.66227
9000.-	10000.	1.78115
10000.-	15000.	2.04554
15000.-	20000.	2.39809
20000.-	25000.	2.54481
25000.-	30000.	2.54221
30000.-	35000.	2.67489
35000.-	40000.	2.74372
40000.-	45000.	2.46820
45000.-	50000.	2.80088
50000.-	75000.	2.59925
75000.-	100000.	2.68563
100000.-	150000.	2.30361
150000.-	0.	2.51386

THIS OUTPUT IS FOR YEAR NUMBER 1971 AND ESTIMATE FILE NUMBER 2
ONE INDICATES A HIGH ESTIMATE AND TWO A LOW ESTIMATE.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS		RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.-	0.	0.0000	-28.2179	2821.7959	-27.0309	2703.0986	4.2064	-24.9121	2491.2114
0.-	500.	0.7500	0.7500	0.0000	0.7124	5.0000	5.0000	0.7124	5.0000
500.-	1000.	0.7499	1.1848	-57.9787	1.0952	-46.0299	7.5634	0.5395	28.0550
1000.-	2000.	1.0914	1.0101	7.4435	0.9320	14.6012	7.7332	0.1149	89.4691
2000.-	3000.	1.3548	1.1971	11.6411	1.0372	23.4468	13.3610	0.3865	71.4723
3000.-	4000.	1.7219	1.5092	12.3559	1.2826	25.5109	15.0095	0.6475	62.3933
4000.-	5000.	2.0808	1.8247	12.3101	1.5101	27.4288	17.2410	0.8821	57.6049
5000.-	6000.	2.3871	2.1241	11.0150	1.7219	27.8650	18.9357	1.1299	52.6662
6000.-	7000.	2.5955	2.3230	10.4979	1.9066	26.5403	17.9240	1.3677	47.3030
7000.-	8000.	2.7465	2.4605	10.4148	2.0275	26.1797	17.5977	1.5212	44.6106
8000.-	9000.	2.8647	2.5641	10.4922	2.1354	25.4568	16.7188	1.6662	41.8354
9000.-	10000.	2.9948	2.6484	11.5677	2.2195	25.8875	16.1930	1.7896	40.2436
10000.-	15000.	3.2914	2.8961	12.0088	2.4288	26.2076	16.1366	2.0626	37.3336
15000.-	20000.	3.6645	3.0873	15.7495	2.6627	27.3371	13.7538	2.4180	34.0133
20000.-	25000.	3.8605	3.2081	16.8987	2.7298	29.2887	14.9094	2.5497	33.9526
25000.-	30000.	3.9718	3.1466	20.7749	2.7001	32.0176	14.1908	2.5462	35.8925
30000.-	35000.	4.0626	3.2232	20.6600	2.7998	31.0827	13.1367	2.6792	34.0518
35000.-	40000.	4.1170	3.2894	20.1033	2.8849	29.9278	12.2964	2.7634	32.8771
40000.-	45000.	4.1630	3.1619	24.0477	2.5717	38.2236	18.6643	2.4742	40.5669
45000.-	50000.	4.1968	3.2570	22.3926	2.8994	30.9138	10.9799	2.8080	33.0911
50000.-	75000.	4.2651	3.1407	26.3620	2.6810	37.1414	14.6383	2.6080	38.8516
75000.-	100000.	4.3289	3.0129	30.4010	2.7488	36.5013	8.7649	2.7013	37.5982
100000.-	150000.	4.3784	2.8683	34.4889	2.3568	46.1721	17.8340	2.3308	46.7668
150000.-	0.	4.4497	2.9528	33.6407	2.5259	43.2355	14.4589	2.5138	43.5060

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	11.7154	7.8386	-24.9121	2491.2114	11.7154	7.8386	0.0000
0.-	500.	5.0000	0.0000	0.7124	5.0000	5.0000	0.0000	0.0000
500.-	1000.	54.4590	50.7327	0.5395	28.0550	54.4590	50.7327	0.0000
1000.-	2000.	88.6222	87.6686	0.1149	89.4691	88.6222	87.6686	0.0000
2000.-	3000.	67.7139	62.7349	0.3851	71.5702	67.8247	62.8627	0.3430
3000.-	4000.	57.0915	49.5137	0.6475	62.3933	57.0915	49.5137	0.0000
4000.-	5000.	51.6533	41.5813	0.8799	57.7122	51.7758	41.7293	0.2532
5000.-	6000.	46.8069	34.3816	1.1292	52.6946	46.8389	34.4210	0.0600
6000.-	7000.	41.1220	28.2641	1.3628	47.4936	41.3349	28.5235	0.3616
7000.-	8000.	38.1712	24.9672	1.5146	44.8532	38.4421	25.2958	0.4380
8000.-	9000.	35.0173	21.9720	1.6655	41.8591	35.0437	22.0036	0.0406
9000.-	10000.	32.4269	19.3706	1.7841	40.4262	32.6334	19.6170	0.3056
10000.-	15000.	28.7810	15.0774	2.0499	37.7190	29.2191	15.5997	0.6151
15000.-	20000.	21.6779	9.1878	2.4012	34.4721	22.2225	9.8192	0.6952
20000.-	25000.	20.5218	6.5957	2.5497	33.9526	20.5218	6.5957	0.0000
25000.-	30000.	19.0818	5.6998	2.5462	35.8925	19.0818	5.6998	0.0000
30000.-	35000.	16.8790	4.3082	2.6792	34.0518	16.8790	4.3082	0.0000
35000.-	40000.	15.9878	4.2090	2.7514	33.1692	16.3534	4.6258	0.4351
40000.-	45000.	21.7494	3.7930	2.4705	40.6550	21.8655	3.9358	0.1483
45000.-	50000.	13.7853	3.1514	2.8049	33.1663	13.8823	3.2604	0.1124
50000.-	75000.	16.9607	2.7207	2.6080	38.8516	16.9607	2.7207	0.0000
75000.-	100000.	10.3410	1.7275	2.7013	37.5982	10.3410	1.7275	0.0000
100000.-	150000.	18.7416	1.1046	2.3159	47.1055	19.2586	1.7339	0.6362
150000.-	0.	14.8665	0.4764	2.5138	43.5060	14.8665	0.4764	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-999999.-	0.	2491.2114	11.7154	7.8386	0.0000	0.0000
0.-	0.7124	5.0000	5.0000	0.0000	0.0000	0.0000
500.-	0.5395	28.0550	54.4590	50.7327	0.0000	0.0000
1000.-	0.1149	89.4691	88.6222	87.6636	0.0000	0.0000
2000.-	0.3851	71.5702	67.8247	62.8627	0.3430	0.0000
3000.-	0.6475	62.3933	57.0915	49.5137	0.0000	0.0000
4000.-	0.8799	57.7122	51.7758	41.7293	0.2532	0.0000
5000.-	1.1292	52.6946	46.8389	34.4210	0.0600	0.0000
6000.-	1.3628	47.4936	41.3349	28.5235	0.3616	0.0000
7000.-	1.5146	44.8532	38.4421	25.2958	0.4380	0.0000
8000.-	1.6555	41.8591	35.0437	22.0036	0.0406	0.0000
9000.-	1.7841	40.4262	32.6334	19.6170	0.3056	0.0000
10000.-	2.0499	37.7190	29.2191	15.5997	0.6151	0.0000
15000.-	2.4012	34.4721	22.2225	9.8192	0.6952	0.0000
20000.-	2.5497	33.9526	20.5218	6.5957	0.0000	0.0000
25000.-	2.5462	35.8925	19.0818	5.6998	0.0000	0.0000
30000.-	2.6792	34.0518	16.8790	4.3082	0.0000	0.0000
35000.-	2.7514	33.1692	16.3534	4.6258	0.4351	0.0000
40000.-	2.4705	40.6550	21.8655	3.9358	0.1124	0.0000
45000.-	2.8049	33.1663	13.8823	3.2604	0.1483	0.0000
50000.-	2.6080	38.8516	16.9607	2.7207	0.0000	0.0000
75000.-	2.7013	37.5982	10.3410	1.7275	0.0000	0.0000
100000.-	2.3159	47.1055	19.2586	1.7339	0.6362	0.0000
150000.-	2.5138	43.5060	14.8665	0.4764	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	648.	-1377792.	0.	-388784.	16354.	29193.	0.
0.-	500.	-32.	-6509.	-48.	0.	-2.	0.	0.
500.-	1000.	-15.	-13992.	-104.	60.	-12.	-77.	0.
1000.-	2000.	14701.	26987672.	294552.	21925.	21083.	220525.	0.
2000.-	3000.	69129.	173764416.	2354302.	274067.	277942.	1130666.	2304.
3000.-	4000.	77116.	271528192.	4675678.	577724.	615084.	1724500.	0.
4000.-	5000.	83434.	374902272.	7801334.	960356.	1179457.	2354138.	8376.
5000.-	6000.	104360.	574277889.	13708654.	1510019.	2309911.	3399903.	3895.
6000.-	7000.	114739.	745414017.	19347712.	2031121.	3103827.	4017112.	36867.
7000.-	8000.	104359.	780003457.	21423220.	2231190.	3377362.	3948480.	51979.
8000.-	9000.	81452.	690067585.	19768664.	2074167.	2958309.	3237837.	4670.
9000.-	10000.	56978.	539433473.	16155184.	1868792.	2313396.	2319243.	29508.
10000.-	15000.	99938.	1178317826.	38783216.	4657413.	5506746.	4315018.	149493.
15000.-	20000.	24339.	415140096.	15212896.	2395962.	1762814.	1015638.	69797.
20000.-	25000.	10080.	224624832.	8671644.	1465396.	1074415.	404441.	0.
25000.-	30000.	5274.	142301760.	5651948.	1174186.	635432.	219008.	0.
30000.-	35000.	3092.	100765664.	4093724.	845765.	426675.	121547.	0.
35000.-	40000.	1896.	70591856.	2906317.	584268.	285529.	85717.	8488.
40000.-	45000.	1360.	57517536.	2394462.	575813.	339438.	56107.	2111.
45000.-	50000.	892.	41933336.	1759883.	394084.	149964.	38316.	1324.
50000.-	75000.	1862.	113058704.	4822169.	1271225.	519799.	82468.	0.
75000.-	100000.	479.	39918112.	1728047.	525344.	105416.	18955.	0.
100000.-	150000.	226.	26552560.	1162602.	400969.	135829.	6913.	3937.
150000.-	0.	122.	34639072.	1541368.	518527.	147892.	4168.	0.
TOTAL		856438.	6620335115.	194257152.	25969584.	27262640.	28749796.	372756.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	-372430.	-343237.	-343237.	-343237.	343237.
0.- 500.	-2.	-2.	-2.	-2.	-46.
500.- 1000.	48.	-29.	-29.	-29.	-75.
1000.- 2000.	43008.	263533.	263533.	263533.	31021.
2000.- 3000.	552009.	1682676.	1684980.	1684980.	669367.
3000.- 4000.	1192809.	2917309.	2917309.	2917309.	1758438.
4000.- 5000.	2139814.	4493952.	4502328.	4502328.	3299150.
5000.- 6000.	3819930.	7219834.	7223729.	7223729.	6485108.
6000.- 7000.	5134949.	9152062.	9188928.	9188928.	10159014.
7000.- 8000.	5608553.	9557032.	9609010.	9609010.	11814418.
8000.- 9000.	5032476.	8270312.	8274982.	8274982.	11493792.
9000.- 10000.	4182188.	6501432.	6530940.	6530940.	9624278.
10000.- 15000.	10164158.	14479174.	14628666.	14628666.	24154644.
15000.- 20000.	4158776.	5174415.	5244212.	5244212.	9968692.
20000.- 25000.	2539811.	2944252.	2944252.	2944252.	5727395.
25000.- 30000.	1809618.	2028627.	2028627.	2028627.	3623320.
30000.- 35000.	1272441.	1393988.	1393988.	1393988.	2699736.
35000.- 40000.	869797.	955514.	964003.	964003.	1942315.
40000.- 45000.	915251.	971359.	973470.	973470.	1420992.
45000.- 50000.	544048.	582365.	583689.	583689.	1176194.
50000.- 75000.	1791024.	1873493.	1873493.	1873493.	2948675.
75000.- 100000.	630760.	649716.	649716.	649716.	1078332.
100000.- 150000.	536799.	543712.	547649.	547649.	614952.
150000.- 0.	666419.	670588.	670588.	670588.	870780.
TOTAL	53232224.	81982016.	82354768.	82354768.	111903632.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.-	0.	0.0000	2.8125	-281.2559	2.9238	-292.3890	-3.9583	4.5769	-457.6598
0.-	500.	0.7499	0.7171	4.3833	0.6443	14.0877	10.1492	-7.0415	1038.8710
500.-	1000.	0.7499	0.7133	4.8921	0.6344	15.4020	11.0505	-1.9998	366.6418
1000.-	2000.	0.9273	0.9085	7.9812	0.7563	23.3937	16.7493	-0.8859	189.7276
2000.-	3000.	1.3306	1.2547	5.7097	0.9119	31.4649	27.3147	-0.7280	154.7102
3000.-	4000.	1.6728	1.5681	6.2584	1.0495	37.2605	33.0718	-0.3759	122.4726
4000.-	5000.	2.0255	1.9108	5.6651	0.9670	52.2583	49.3913	-0.4246	120.9658
5000.-	6000.	2.3692	2.1419	9.2504	0.6738	71.2377	68.3058	-0.3010	112.7543
6000.-	7000.	2.5793	2.0734	19.6110	0.5898	77.1322	71.5535	-0.1874	107.2692
7000.-	8000.	2.7387	2.4473	10.6394	0.5695	79.2025	76.7263	-0.1276	104.6593
8000.-	9000.	2.8614	2.1194	25.9304	0.3190	88.8510	84.9479	-0.2140	107.4811
9000.-	10000.	2.9842	2.1248	28.7904	0.0791	97.3469	96.2738	-0.3652	112.2407
10000.-	15000.	3.2985	0.5844	82.2810	-1.2004	136.3919	305.3848	-1.5855	148.0582
15000.-	20000.	3.6728	0.6429	82.4935	-4.5314	223.3782	304.7600	-4.7692	229.8519
20000.-	25000.	3.8651	2.0871	46.0009	0.2582	93.3175	87.6249	0.0530	98.6277
25000.-	30000.	3.9605	1.7347	56.1988	0.0047	99.8803	99.7267	-0.1277	102.2259
30000.-	35000.	4.0403	0.5321	36.8295	-0.2888	107.1480	154.2735	-0.3855	109.5430
35000.-	40000.	4.1205	0.4135	89.9646	-0.6172	114.9798	249.2708	-0.7270	117.6453
40000.-	45000.	4.1457	0.0094	99.7729	-0.8651	120.8680	9292.9414	-0.9770	123.5664
45000.-	50000.	4.1854	-1.8912	145.1434	-2.8511	168.0556	-50.7544	-2.8836	168.8359
50000.-	75000.	4.2499	-4.7187	211.0314	-6.5366	253.8055	-38.5243	-6.5813	254.8585
75000.-	100000.	4.3326	-4.4437	202.5659	-4.9650	214.5968	-11.7299	-5.0575	216.7319
100000.-	150000.	4.3780	0.2783	93.6412	0.0113	99.7397	95.9064	-0.0399	100.9128
150000.-	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	-62.7342	-56.5379	4.5769	-457.6998	-62.7342	-56.5379	0.0000
0.-	500.	1081.9118	1192.8254	-7.0415	1038.8710	1081.9118	1192.8254	0.0000
500.-	1000.	380.3573	415.1871	-1.9998	366.6418	380.3573	415.1871	0.0000
1000.-	2000.	197.5101	217.1283	-0.8871	189.8509	197.6441	217.2893	-0.1374
2000.-	3000.	158.0233	179.8282	-0.7280	154.7102	158.0233	179.8282	0.0000
3000.-	4000.	123.9730	135.8190	-0.3904	123.3424	124.9008	137.2054	-3.8704
4000.-	5000.	122.2248	143.9151	-0.4279	121.1260	122.3947	144.2507	-0.7643
5000.-	6000.	114.0544	144.3441	-0.3010	112.7543	114.0544	144.3441	0.0000
6000.-	7000.	109.0425	131.7880	-0.1874	107.2692	109.0425	131.7880	0.0000
7000.-	8000.	105.2140	122.4033	-0.3064	111.1887	112.5208	153.7984	-140.1355
8000.-	9000.	110.1001	167.1016	-0.4059	114.1879	119.1549	227.2582	-89.6500
9000.-	10000.	117.1917	561.3797	-0.5476	118.3511	125.7734	791.6896	-49.9176
10000.-	15000.	371.2814	-32.0844	-1.8273	155.3992	412.6554	-52.2290	-15.2513
15000.-	20000.	841.7393	-5.2470	-4.7692	229.8519	841.7393	-5.2470	0.0000
20000.-	25000.	97.4587	79.4649	-0.2976	107.7003	114.2601	215.2330	661.1533
25000.-	30000.	107.3648	2795.1396	-0.7928	120.0176	145.7012	16824.0820	-520.5274
30000.-	35000.	172.4584	-33.5059	-0.3855	109.5430	172.4584	-33.5059	0.0000
35000.-	40000.	275.8309	-17.7932	-0.7270	117.6453	275.8309	-17.7932	0.0000
40000.-	45000.	10481.6523	-12.9306	-0.9770	123.5664	10481.6523	-12.9306	0.0000
45000.-	50000.	-52.4828	-1.1465	-2.8838	168.8359	-52.4828	-1.1465	0.0000
50000.-	75000.	-39.4727	-0.6846	-6.5813	254.8585	-39.4727	-0.6846	0.0000
75000.-	100000.	-13.8115	-1.8631	-5.0575	216.7319	-13.8115	-1.8631	0.0000
100000.-	150000.	114.3561	450.6996	-0.0399	100.9128	114.3561	450.6996	0.0000
150000.-	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	4.5769	-457.6998	-62.7342	-56.5379	0.0000	0.0000
0.-	500.	-7.0415	1038.8710	1081.9118	1192.8254	0.0000	0.0000
500.-	1000.	-1.9998	366.6418	380.3573	415.1871	0.0000	0.0000
1000.-	2000.	-0.8871	199.8509	197.6441	217.2893	-0.1374	0.0000
2000.-	3000.	-0.7290	154.7102	158.0233	179.8282	0.0000	0.0000
3000.-	4000.	-0.3904	123.3424	124.9008	137.2054	-3.8704	0.0000
4000.-	5000.	-0.4279	121.1260	122.3947	144.2507	-0.7643	0.0000
5000.-	6000.	-0.3010	112.7543	114.0544	144.3441	0.0000	0.0000
6000.-	7000.	-0.1874	107.2692	109.0425	131.7880	0.0000	0.0000
7000.-	8000.	-0.3064	111.1887	112.5208	153.7984	-140.1355	0.0000
8000.-	9000.	-0.4059	114.1879	119.1549	227.2582	-89.6500	0.0000
9000.-	10000.	-0.5476	118.3511	125.7734	791.6896	-49.9176	0.0000
10000.-	15000.	-1.8273	155.3992	412.6554	-52.2290	-15.2513	0.0000
15000.-	20000.	-4.7692	229.8519	841.7393	-5.2470	0.0000	0.0000
20000.-	25000.	-0.2976	107.7003	114.2601	215.2330	661.1533	0.0000
25000.-	30000.	-0.7928	120.0176	145.7012	16824.0820	-520.5274	0.0000
30000.-	35000.	-0.3855	109.5430	172.4584	-33.5059	0.0000	0.0000
35000.-	40000.	-0.7270	117.6453	275.8309	-17.7932	0.0000	0.0000
40000.-	45000.	-0.9770	123.5664	10481.6523	-12.9306	0.0000	0.0000
45000.-	50000.	-2.8838	168.8359	-52.4828	-1.1465	0.0000	0.0000
50000.-	75000.	-6.5813	254.8585	-39.4727	-0.6846	0.0000	0.0000
75000.-	100000.	-5.0575	216.7319	-13.8115	-1.8631	0.0000	0.0000
100000.-	150000.	-0.0399	100.9128	114.3561	450.6996	0.0000	0.0000
150000.-	0.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	9710.	-19661860.	0.	0.	0.	0.	0.
0.-	500.	11131.	3304548.	24784.	940.	1927.	21915.	0.
500.-	1000.	46387.	35412616.	265593.	12993.	26061.	226539.	0.
1000.-	2000.	105659.	154585536.	1526351.	121821.	234728.	1169802.	0.
2000.-	3000.	34641.	84785392.	1128237.	64419.	280118.	783698.	0.
3000.-	4000.	26370.	89418544.	1495878.	93619.	461744.	933311.	7204.
4000.-	5000.	7338.	31917876.	646518.	36625.	301233.	307770.	888.
5000.-	6000.	2912.	15720308.	371046.	34323.	229419.	107303.	0.
6000.-	7000.	1105.	7079494.	182602.	35810.	104764.	42027.	0.
7000.-	8000.	515.	3822017.	104676.	11137.	71769.	17975.	3794.
8000.-	9000.	287.	2426190.	69425.	18002.	42687.	6431.	2304.
9000.-	10000.	164.	1545946.	46131.	10138.	30839.	3538.	1615.
10000.-	15000.	283.	3359849.	110826.	57826.	42690.	3587.	6721.
15000.-	20000.	35.	615881.	22620.	7953.	14333.	332.	0.
20000.-	25000.	21.	486382.	18799.	8536.	8360.	327.	1575.
25000.-	30000.	9.	258201.	10226.	4838.	3674.	156.	1555.
30000.-	35000.	5.	162096.	6549.	5325.	1169.	54.	0.
35000.-	40000.	5.	202812.	8357.	7453.	897.	5.	0.
40000.-	45000.	1.	61545.	2551.	2545.	5.	0.	0.
45000.-	50000.	1.	63093.	2643.	2643.	0.	0.	0.
50000.-	75000.	5.	321544.	13665.	13058.	606.	0.	0.
75000.-	100000.	3.	259651.	11249.	11249.	0.	0.	0.
100000.-	150000.	0.	103384.	4526.	4238.	276.	11.	0.
150000.-	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	246599.	416250368.	6073253.	565501.	1857307.	3624788.	25659.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AFI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	0.	0.	0.	0.	0.
0.- 500.	2868.	24784.	24784.	24784.	0.
500.- 1000.	39054.	265593.	265593.	265593.	0.
1000.- 2000.	356549.	1526352.	1526352.	1526352.	0.
2000.- 3000.	344537.	1128236.	1128236.	1128236.	0.
3000.- 4000.	555363.	1488675.	1495879.	1495879.	0.
4000.- 5000.	337859.	645629.	646518.	646518.	0.
5000.- 6000.	263743.	371046.	371046.	371046.	0.
6000.- 7000.	140574.	182602.	182602.	182602.	0.
7000.- 8000.	82906.	100882.	104676.	104676.	0.
8000.- 9000.	60690.	67121.	69425.	69425.	0.
9000.- 10000.	40977.	44516.	46131.	46131.	0.
10000.- 15000.	100517.	104105.	110826.	110826.	0.
15000.- 20000.	22287.	22620.	22620.	22620.	0.
20000.- 25000.	16896.	17224.	18799.	18799.	0.
25000.- 30000.	8513.	8670.	10226.	10226.	0.
30000.- 35000.	6494.	6549.	6549.	6549.	0.
35000.- 40000.	8351.	8357.	8357.	8357.	0.
40000.- 45000.	2551.	2551.	2551.	2551.	0.
45000.- 50000.	2643.	2643.	2643.	2643.	0.
50000.- 75000.	13665.	13665.	13665.	13665.	0.
75000.- 100000.	11249.	11249.	11249.	11249.	0.
100000.- 150000.	4514.	4526.	4526.	4526.	0.
150000.- 0.	0.	0.	0.	0.	0.
TOTAL	2422808.	6047596.	6073256.	6073256.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	NFTD	UNFTD	NSPD	UNSPD	NPCC	UNPC	NOST	UNOS	NSTC	UNSTC
-99999.- 0.	9710.	553001.	0.	21889.	0.	325032.	0.	0.	0.	0.
0.- 500.	335.	145.	134.	477.	10562.	232067.	0.	0.	0.	0.
500.- 1000.	0.	0.	923.	1852.	45464.	706330.	0.	0.	0.	0.
1000.- 2000.	0.	0.	627.	521.	105031.	1369036.	0.	1883.	0.	0.
2000.- 3000.	0.	0.	466.	10461.	34175.	606801.	0.	0.	0.	0.
3000.- 4000.	0.	0.	116.	2008.	25906.	341359.	348.	5806.	0.	0.
4000.- 5000.	0.	0.	0.	0.	7252.	136436.	86.	147.	0.	0.
5000.- 6000.	0.	0.	298.	581.	2614.	46742.	0.	0.	0.	0.
6000.- 7000.	0.	0.	44.	270.	1060.	13003.	0.	0.	0.	0.
7000.- 8000.	0.	0.	0.	0.	488.	8671.	27.	3040.	0.	0.
8000.- 9000.	0.	0.	57.	995.	215.	6502.	14.	2352.	0.	0.
9000.- 10000.	15.	3146.	7.	783.	133.	3331.	7.	1203.	0.	0.
10000.- 15000.	64.	33362.	64.	17278.	115.	9352.	38.	1403.	0.	0.
15000.- 20000.	8.	10706.	16.	17534.	11.	1131.	0.	0.	0.	0.
20000.- 25000.	3.	111.	6.	535.	9.	670.	3.	130.	0.	0.
25000.- 30000.	3.	908.	3.	791.	1.	185.	1.	161.	0.	0.
30000.- 35000.	1.	361.	1.	161.	2.	101.	0.	0.	0.	0.
35000.- 40000.	2.	64.	1.	1193.	1.	216.	0.	0.	0.	0.
40000.- 45000.	0.	0.	1.	532.	0.	68.	0.	0.	0.	0.
45000.- 50000.	1.	1193.	0.	605.	0.	20.	0.	0.	0.	0.
50000.- 75000.	3.	15779.	2.	5238.	0.	143.	0.	0.	0.	0.
75000.- 100000.	3.	11538.	0.	1353.	0.	240.	0.	0.	0.	0.
100000.- 150000.	0.	0.	0.	0.	0.	41.	0.	0.	0.	0.
150000.- 0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	10152.	630320.	2772.	85067.	233146.	3807482.	527.	16127.	0.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	TOTAL NUM	UNTOT
-99999.- 0.	9710.	899923.
0.- 500.	11131.	232690.
500.- 1000.	46387.	708183.
1000.- 2000.	105659.	1371440.
2000.- 3000.	34641.	617263.
3000.- 4000.	26370.	349173.
4000.- 5000.	7338.	136583.
5000.- 6000.	2912.	47324.
6000.- 7000.	1105.	13273.
7000.- 8000.	515.	11711.
8000.- 9000.	287.	9850.
9000.- 10000.	164.	8465.
10000.- 15000.	283.	61397.
15000.- 20000.	35.	29372.
20000.- 25000.	21.	1447.
25000.- 30000.	9.	2047.
30000.- 35000.	5.	625.
35000.- 40000.	5.	1474.
40000.- 45000.	1.	601.
45000.- 50000.	1.	1819.
50000.- 75000.	5.	21162.
75000.- 100000.	3.	13131.
100000.- 150000.	0.	41.
150000.- 0.	0.	0.
TOTAL	246599.	4538998.

TOTAL EXEMPTIONS BY AGI CLASS
PAYS

AGI CLASS	TAGI	TFTD	TSPD	TPCC	TOST	TSTC
-99999.-	0.	-1377792.	-11937580.	376936.	29193.	0.
0.-	500.	-6509.	0.	-325.	0.	0.
500.-	1000.	-13992.	3826.	-1198.	-77.	0.
1000.-	2000.	26987672.	1468337.	1399815.	220525.	0.
2000.-	3000.	173764416.	12500700.	13560798.	1130666.	2304.
3000.-	4000.	271528192.	19940724.	22983960.	1724500.	0.
4000.-	5000.	374902272.	26802576.	36061792.	2354138.	8376.
5000.-	6000.	574277889.	40304088.	62661904.	3399903.	3895.
6000.-	7000.	745414017.	54171784.	82998448.	4017112.	36867.
7000.-	8000.	780003457.	59498296.	90207904.	3948480.	51979.
8000.-	9000.	690067585.	55334824.	79028960.	3237837.	4670.
9000.-	10000.	539433473.	45309992.	61128120.	2319243.	29508.
10000.-	15000.	1178317826.	103973296.	128569104.	4315018.	149493.
15000.-	20000.	415140096.	53592840.	40112088.	1015538.	69797.
20000.-	25000.	224624832.	32807864.	24356688.	404441.	0.
25000.-	30000.	142301760.	26210116.	14400198.	219008.	0.
30000.-	35000.	100765664.	18794816.	9609318.	121547.	0.
35000.-	40000.	70591856.	13002098.	6352588.	85717.	8488.
40000.-	45000.	57517536.	12795852.	7646538.	56107.	2111.
45000.-	50000.	41933336.	8766036.	3333660.	38316.	1324.
50000.-	75000.	113058704.	28249492.	11556226.	82468.	0.
75000.-	100000.	39918112.	11674318.	2342589.	18955.	0.
100000.-	150000.	26552560.	8910444.	3018437.	6913.	3937.
150000.-	0.	34639072.	11522832.	3286496.	4168.	0.
TOTAL		6620335115.	633696897.	704990209.	28749796.	372756.

TOTAL EXEMPTIONS BY AGI CLASS
NO PAY

AGI CLASS	TAGI	TFTD	TSPD	TPCC	TOST	TSTC
-99999.-	0.	-19661860.	554076.	605123.	325032.	0.
0.-	500.	3304548.	144849.	320684.	253984.	0.
500.-	1000.	35412616.	1778812.	3686267.	932889.	0.
1000.-	2000.	154585936.	8449500.	17654700.	2538961.	1883.
2000.-	3000.	84785392.	3121413.	15979372.	1390527.	0.
3000.-	4000.	89418544.	3453158.	19384844.	1274682.	13011.
4000.-	5000.	31917876.	1161924.	10379402.	444207.	1036.
5000.-	6000.	15720308.	945609.	7681908.	154046.	0.
6000.-	7000.	7079494.	1000986.	3306654.	55031.	0.
7000.-	8000.	3822017.	310320.	2161482.	26647.	6834.
8000.-	9000.	2426190.	484833.	1453963.	12934.	4656.
9000.-	10000.	1545846.	405377.	967689.	6870.	2818.
10000.-	15000.	3359849.	2451651.	1878845.	12940.	8124.
15000.-	20000.	615881.	470289.	804063.	1464.	0.
20000.-	25000.	486382.	212448.	238986.	998.	1705.
25000.-	30000.	258201.	146458.	119542.	342.	1717.
30000.-	35000.	162096.	135650.	39054.	156.	0.
35000.-	40000.	202812.	179977.	61077.	222.	0.
40000.-	45000.	61545.	60773.	17449.	68.	0.
45000.-	50000.	63093.	93964.	13458.	20.	0.
50000.-	75000.	321544.	663676.	142807.	143.	0.
75000.-	100000.	259651.	525716.	30076.	240.	0.
100000.-	150000.	103384.	94186.	7970.	53.	0.
150000.-	0.	0.	0.	0.	0.	0.
TOTAL		416250368.	26844628.	86935280.	7432457.	41787.

EFFECTIVE TAX RATES BY AGI CLASS
TTDUE/(AGI(I)+AGI(I+24))

AGI CLASS	TTDUE/(AGI(I)+AGI(I+24))
-99999.-	-1.63138
0.-	-0.00140
500.-	-0.00021
1000.-	0.01708
2000.-	0.25889
3000.-	0.48717
4000.-	0.81096
5000.-	1.09917
6000.-	1.35004
7000.-	1.50727
8000.-	1.65976
9000.-	1.77904
10000.-	2.04409
15000.-	2.39772
20000.-	2.54425
25000.-	2.54161
30000.-	2.67491
35000.-	2.74359
40000.-	2.46789
45000.-	2.80070
50000.-	2.60069
75000.-	2.68390
100000.-	2.30699
150000.-	2.51386
0.	

APPENDIX H

IOWA TAX MODEL PRINTOUT RAISING AN ADDITIONAL \$5 MILLION
AND REDUCING REGRESSIVITY BY CHANGING ONLY
THE MARGINAL TAX BRACKETS

THE STATE TAX IS CALCULATED MARGINALLY USING THE FOLLOWING BRACKETS AND RATES.

BRACKET		RATE
0.-	1000.	0.0079
1000.-	2000.	0.0154
2000.-	3000.	0.0229
3000.-	4000.	0.0304
4000.-	9000.	0.0379
9000.-	16000.	0.0454
16000.-	20000.	0.0529
20000.-	25000.	0.0629
25000.-	35000.	0.0779
35000.-	50000.	0.0929
50000.-	75000.	0.1104
75000.-	0.	0.1307

PROVISION- 1-

THE FEDERAL TAX DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD-
MARGINALLY BY THE FOLLOWING BRACKETS AND RATES

BRACKET		RATE
0.-	0.	1.0000
AND CAN BE NO GREATER THAN		80000016.21.

PROVISION- 2-

THE STATE PERSONAL DEDUCTION IS CALCULATED BY THE FOLLOWING METHOD IF ITEMIZED-
THE ITEMIZED AMOUNT IS EQUAL TO THE STATE PERSONAL DEDUCTION.
AND IF NOT ITEMIZED THE STATE PERSONAL DEDUCTION IS EQUAL TO-

$(AGI - FTD) * 0.05.$

AGI = ADJUSTED GROSS INCOME.

FTD = FEDERAL TAX DEDUCTION.

AND CAN BE NO GREATER THAN 250.00.

PROVISION- 3-

THE PERSONAL AND CHILD CREDIT IS EQUAL TO-

$\text{NUMBER OF ADULTS} * 15.00 + \text{NUMBER OF CHILDREN} * 7.50 + \text{NUMBER OF OTHER DEPENDENTS} * 7.50.$

PROVISION- 4-

THE OUT OF STATE TAX CREDIT IS CALCULATED marginally USING THE FOLLOWING BRACKETS AND RATES-

BRACKET	RATE
0.- 0.	1.0000
AND CAN BE NO GREATER THAN	80000016.21.

PROVISION- 5-

THE SALES TAX CREDIT IS NOT USED.

THIS OUTPUT IS FOR YEAR NUMBER 1966 AND ESTIMATE FILE NUMBER 2
ONE INDICATES A HIGH ESTIMATE AND TWO A LOW ESTIMATE.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.- 0.	0.0000	-48.5329	4853.2949	-46.6371	4663.7177	3.9061	-44.5183	4451.8300
0.- 500.	0.7899	0.7899	0.0000	0.7504	4.9999	4.9999	0.7504	4.9999
500.- 1000.	0.7899	1.3747	-74.0191	1.2586	-59.3167	8.4486	0.7029	11.0171
1000.- 2000.	1.1294	1.0265	9.1130	0.9460	16.2420	7.8438	0.1249	88.9400
2000.- 3000.	1.3952	1.2001	13.9804	1.0383	25.5829	13.4882	0.3805	72.7250
3000.- 4000.	1.7619	1.4961	15.0854	1.2692	27.9646	15.1072	0.6288	64.3109
4000.- 5000.	2.1201	1.8014	15.0324	1.4871	29.8539	17.4437	0.8593	59.4661
5000.- 6000.	2.4270	2.0917	13.8140	1.6882	30.4405	19.2913	1.0960	54.8377
6000.- 7000.	2.6357	2.2890	13.1534	1.8693	29.0767	18.3350	1.3315	49.4818
7000.- 8000.	2.7864	2.4250	12.9699	1.9862	28.7192	18.0964	1.4807	46.8600
8000.- 9000.	2.9047	2.5311	12.8609	2.1017	27.6451	16.9662	1.6332	43.7745
9000.- 10000.	3.0351	2.6152	13.8320	2.1849	28.0104	16.4544	1.7557	42.1527
10000.- 15000.	3.3316	2.8357	14.8962	2.3705	28.8474	16.4029	2.0046	39.8316
15000.- 20000.	3.7532	3.1273	16.6769	2.6948	28.1988	13.8280	2.4482	34.7713
20000.- 25000.	4.2117	3.3753	19.8589	2.8881	31.4266	14.4340	2.7040	35.7980
25000.- 30000.	4.6875	3.4599	26.1884	2.9184	37.7411	15.6515	2.7636	41.0433
30000.- 35000.	5.2180	3.6114	30.7893	3.0850	40.8773	14.5758	2.9635	43.2064
35000.- 40000.	5.6320	3.8845	31.0289	3.2003	43.1761	17.6119	3.0780	45.3486
40000.- 45000.	6.0741	3.9467	35.0240	3.1606	47.9657	19.9176	3.0591	49.6371
45000.- 50000.	6.3905	4.1994	34.2871	3.5331	44.7135	15.8666	3.4408	46.1574
50000.- 75000.	7.3434	4.3877	40.2484	3.5342	51.8716	19.4524	3.4605	52.8753
75000.- 100000.	8.5576	4.3296	49.4068	3.7284	56.4310	13.8837	3.6810	56.9859
100000.- 150000.	9.8319	4.8942	50.2208	3.6143	63.2390	26.1518	3.5877	63.5091
150000.- 0.	11.7124	6.4213	45.1754	5.4751	53.2537	14.7348	5.4631	53.3560

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	8.2720	4.5433	-44.5183	4451.8300	8.2720	4.5433	0.0000
0.-	500.	4.9999	0.0000	0.7504	4.9999	4.9999	0.0000	0.0000
500.-	1000.	48.8660	44.1472	0.7029	11.0171	48.8660	44.1472	0.0000
1000.-	2000.	87.8310	86.7953	0.1249	88.9400	87.8310	86.7953	0.0000
2000.-	3000.	68.2921	63.3485	0.3792	72.8196	68.4020	63.4755	0.3465
3000.-	4000.	57.9706	50.4562	0.6283	64.3369	58.0013	50.4923	0.0728
4000.-	5000.	52.2948	42.2150	0.8571	59.5718	52.4192	42.3656	0.2606
5000.-	6000.	47.5991	35.0739	1.0954	54.8657	47.6315	35.1142	0.0619
6000.-	7000.	41.8305	28.7706	1.3265	49.6700	42.0473	29.0360	0.3725
7000.-	8000.	38.9406	25.4497	1.4760	47.0268	39.1323	25.6837	0.3139
8000.-	9000.	35.4762	22.2921	1.6325	43.7980	35.5031	22.3245	0.0417
9000.-	10000.	32.8668	19.6449	1.7502	42.3346	33.0780	19.8976	0.3145
10000.-	15000.	29.3082	15.4375	1.9918	40.2139	29.7574	15.9748	0.6353
15000.-	20000.	21.7159	9.1537	2.4304	35.2438	22.2830	9.8117	0.7243
20000.-	25000.	19.5888	6.3748	2.7040	35.7980	19.8888	6.3748	0.0000
25000.-	30000.	20.1254	5.3040	2.7636	41.0433	20.1254	5.3040	0.0000
30000.-	35000.	17.9410	3.9394	2.9635	43.2064	17.9410	3.9394	0.0000
35000.-	40000.	20.7619	3.8233	3.0656	45.5674	21.0791	4.2083	0.4003
40000.-	45000.	22.4900	3.2121	3.0550	49.7046	22.5938	3.3417	0.1338
45000.-	50000.	18.0638	2.6115	3.4375	46.2084	18.1414	2.7037	0.0947
50000.-	75000.	21.1323	2.0855	3.4605	52.8753	21.1323	2.0855	0.0000
75000.-	100000.	14.9805	1.2736	3.6810	56.9859	14.9805	1.2736	0.0000
100000.-	150000.	26.6943	0.7346	3.5722	63.6670	27.0117	1.1644	0.4329
150000.-	0.	14.9213	0.2187	5.4631	53.3560	14.9213	0.2187	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	-44.5183	4451.8300	8.2720	4.5433	0.0000	0.0000
0.-	500.	0.7504	4.9999	4.9999	0.0000	0.0000	0.0000
500.-	1000.	0.7029	11.0171	48.8660	44.1472	0.0000	0.0000
1000.-	2000.	0.1249	88.9400	87.8310	86.7953	0.0000	0.0000
2000.-	3000.	0.3792	72.3196	68.4020	63.4755	0.3465	0.0000
3000.-	4000.	0.6283	64.3369	58.0013	50.4923	0.0728	0.0000
4000.-	5000.	0.8571	59.5718	52.4192	42.3656	0.2606	0.0000
5000.-	6000.	1.0954	54.8657	47.6315	35.1142	0.0619	0.0000
6000.-	7000.	1.3265	49.6700	42.0473	29.0360	0.3725	0.0000
7000.-	8000.	1.4760	47.0258	39.1323	25.6837	0.3139	0.0000
8000.-	9000.	1.6325	43.7980	35.5031	22.3245	0.0417	0.0000
9000.-	10000.	1.7502	42.3346	33.0780	19.8976	0.3145	0.0000
10000.-	15000.	1.9918	40.2139	29.7574	15.9748	0.6353	0.0000
15000.-	20000.	2.4304	35.2438	22.2830	9.8117	0.7243	0.0000
20000.-	25000.	2.7040	35.7980	19.8888	6.3748	0.0000	0.0000
25000.-	30000.	2.7636	41.0433	20.1254	5.3040	0.0000	0.0000
30000.-	35000.	2.9635	43.2064	17.9410	3.9394	0.0000	0.0000
35000.-	40000.	3.0656	45.5674	21.0791	4.2083	0.4003	0.0000
40000.-	45000.	3.0550	49.7046	22.5938	3.3417	0.1338	0.0000
45000.-	50000.	3.4375	46.2084	18.1414	2.7037	0.0947	0.0000
50000.-	75000.	3.4605	52.8753	21.1323	2.0855	0.0000	0.0000
75000.-	100000.	3.6810	56.9859	14.9805	1.2736	0.0000	0.0000
100000.-	150000.	3.5722	63.6670	27.0117	1.1644	0.4329	0.0000
150000.-	0.	5.4631	53.3560	14.9213	0.2187	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	1.	-4247.	0.	-2061.	80.	89.	0.
0.-	500.	1.	200.	1.	0.	0.	0.	0.
500.-	1000.	3.	2699.	21.	-15.	3.	15.	0.
1000.-	2000.	15749.	28772680.	324974.	29614.	23167.	236249.	0.
2000.-	3000.	73979.	186032608.	2595630.	362880.	301158.	1223635.	2453.
3000.-	4000.	90441.	318440128.	5610794.	846411.	722624.	2039320.	1458.
4000.-	5000.	97819.	439334144.	9314402.	1400185.	1380536.	2758195.	9841.
5000.-	6000.	100339.	552110209.	13399764.	1851046.	2227908.	3269178.	3749.
6000.-	7000.	92305.	599773953.	15808706.	2079383.	2517279.	3225779.	29753.
7000.-	8000.	76181.	569352961.	15865010.	2057683.	2498637.	2878030.	26468.
8000.-	9000.	56925.	482283968.	14009210.	1801714.	2071151.	2259606.	3291.
9000.-	10000.	39426.	373327616.	11330928.	1567294.	1606547.	1602453.	20615.
10000.-	15000.	70364.	829832961.	27647476.	4115681.	3859898.	3036869.	105693.
15000.-	20000.	16928.	287851968.	10803878.	1801753.	1244815.	710081.	51047.
20000.-	25000.	7001.	155824768.	6562953.	1303335.	759177.	286897.	0.
25000.-	30000.	3691.	99367440.	4657887.	1219829.	538111.	153813.	0.
30000.-	35000.	2209.	71930960.	3753383.	1155641.	378643.	87420.	0.
35000.-	40000.	1394.	51923704.	2924387.	907406.	355229.	63534.	6398.
40000.-	45000.	900.	38131368.	2316156.	811211.	299749.	38713.	1561.
45000.-	50000.	657.	30873756.	1973008.	676488.	205714.	28487.	1006.
50000.-	75000.	1331.	80624288.	5920570.	2382938.	688155.	59427.	0.
75000.-	100000.	349.	29081348.	2488691.	1229583.	174811.	13809.	0.
100000.-	150000.	162.	18905628.	1858798.	933504.	241981.	5019.	2936.
150000.-	0.	92.	25482256.	2984606.	1348308.	241106.	3051.	0.
TOTAL	748246.	5269251083.	162151040.	29879796.	22336460.	23979644.	266274.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	-1980.	-1890.	-1890.	-1890.	1890.
0.- 500.	0.	0.	0.	0.	1.
500.- 1000.	-12.	2.	2.	2.	18.
1000.- 2000.	52782.	289032.	289032.	289032.	35944.
2000.- 3000.	664038.	1897674.	1890127.	1890127.	705544.
3000.- 4000.	1569036.	3608357.	3609815.	3609815.	2001066.
4000.- 5000.	2780721.	5538917.	5548758.	5548758.	3765798.
5000.- 6000.	4078955.	7348133.	7351882.	7351882.	6048006.
6000.- 7000.	4596663.	7822441.	7852194.	7852194.	7956650.
7000.- 8000.	4556321.	7434350.	7460818.	7460818.	8404282.
8000.- 9000.	3872865.	6132471.	6135762.	6135762.	7873483.
9000.- 10000.	3173841.	4776294.	4796909.	4796909.	6534035.
10000.- 15000.	7975580.	11012448.	11118140.	11118140.	16529420.
15000.- 20000.	3046568.	3756649.	3807696.	3807696.	6996172.
20000.- 25000.	2062512.	2349410.	2349410.	2349410.	4213551.
25000.- 30000.	1757940.	1911753.	1911753.	1911753.	2746134.
30000.- 35000.	1534284.	1621704.	1621704.	1621704.	2131680.
35000.- 40000.	1262636.	1326170.	1332568.	1332568.	1591818.
40000.- 45000.	1110960.	1149673.	1151235.	1151235.	1164920.
45000.- 50000.	882203.	910690.	911696.	911696.	1061312.
50000.- 75000.	3071094.	3130521.	3130521.	3130521.	2790049.
75000.- 100000.	1404395.	1418204.	1418204.	1418204.	1070486.
100000.- 150000.	1175485.	1180505.	1183442.	1183442.	675356.
150000.- 0.	1589415.	1592466.	1592466.	1592466.	1392139.
TOTAL	52216256.	76195904.	76462176.	76462176.	85689680.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.-	0.	0.0000	3.1725	-317.2594	3.2899	-328.9927	-3.6983	4.9430
0.-	500.	0.7899	0.7460	5.5584	0.6695	15.2500	10.2620	-7.0163
500.-	1000.	0.7899	0.7410	6.2003	0.6580	16.7030	11.1969	-1.9762
1000.-	2000.	1.0269	0.9249	9.9329	0.7690	25.1162	16.8577	-0.8802
2000.-	3000.	1.3697	1.2618	7.8810	0.9150	33.1946	27.4791	-0.7220
3000.-	4000.	1.7118	1.5631	8.6865	1.0418	39.1365	33.3467	-0.3789
4000.-	5000.	2.0763	1.8673	10.0666	0.9597	53.7779	48.6040	-0.4111
5000.-	6000.	2.4038	2.0933	12.9178	0.6569	72.6705	68.6164	-0.3098
6000.-	7000.	2.6139	1.9328	26.0571	0.5636	78.4373	70.8387	-0.2259
7000.-	8000.	2.7821	2.2436	19.3585	0.6243	77.5578	72.1704	-0.0719
8000.-	9000.	2.9018	1.8282	36.9966	0.2844	90.1987	84.4432	-0.2520
9000.-	10000.	3.0213	1.7116	43.3480	-0.0650	102.1515	103.7978	-0.5189
10000.-	15000.	3.3294	-0.5671	117.0352	-2.3041	169.2059	-306.2523	-2.6940
15000.-	20000.	3.8008	-1.2340	132.4682	-6.1994	263.1090	-402.3648	-6.4237
20000.-	25000.	4.2355	1.5728	62.8651	-0.0435	101.0276	102.7672	-0.2222
25000.-	30000.	4.6431	1.0017	78.4251	-0.3159	106.8048	131.5408	-0.4545
30000.-	35000.	5.1542	0.5858	88.6389	-0.5563	110.7897	194.9713	-0.6574
35000.-	40000.	5.6295	-0.3273	105.8150	-1.4171	125.1733	-332.9011	-1.5219
40000.-	45000.	5.9926	1.2334	79.4178	-0.4544	107.5828	136.8419	-0.5270
45000.-	50000.	6.3734	-2.6696	141.8868	-3.6533	157.3209	-36.8472	-3.7014
50000.-	75000.	7.2433	-11.9647	265.1828	-14.6929	302.8481	-22.8021	-14.7420
75000.-	100000.	8.6532	-16.0700	285.7106	-17.5840	303.2062	-9.4208	-17.6765
100000.-	150000.	10.2376	-0.6642	106.4885	-0.8827	108.6222	-32.8832	-0.9137
150000.-	0.	12.2584	3.5427	71.0992	-0.1228	101.0022	103.4680	-0.1358

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	-55.8042	-50.2475	4.9430	-494.3036	-55.8042	-50.2475	0.0000
0.-	500.	1040.4184	1147.9606	-7.0163	988.1458	1040.4184	1147.9606	0.0000
500.-	1000.	366.6947	400.3215	-1.9762	350.1585	366.6947	400.3215	0.0000
1000.-	2000.	195.1606	214.4552	-0.8814	185.8281	195.2936	214.6152	-0.1397
2000.-	3000.	157.2189	178.9000	-0.7220	152.7094	157.2189	178.9000	0.0000
3000.-	4000.	124.2449	136.3747	-0.3918	122.8922	125.0700	137.6125	-3.4027
4000.-	5000.	122.0182	142.8404	-0.4143	119.9535	122.1869	143.1687	-0.7665
5000.-	6000.	114.8033	147.1692	-0.3098	112.8911	114.8033	147.1692	0.0000
6000.-	7000.	111.6913	140.0920	-0.2259	108.6448	111.6913	140.0920	0.0000
7000.-	8000.	103.2051	111.5171	-0.2985	110.7294	113.3050	147.8092	-315.1114
8000.-	9000.	113.7841	188.6060	-0.4054	113.9731	122.1783	242.5648	-60.8974
9000.-	10000.	130.3207	-698.3725	-0.6724	122.2564	139.2862	-934.4422	-29.5688
10000.-	15000.	-375.0020	-16.9229	-2.9085	187.3577	-412.8068	-26.2286	-7.9588
15000.-	20000.	-420.5379	-3.6174	-6.4237	269.0094	-420.5379	-3.6174	0.0000
20000.-	25000.	114.1280	-410.5455	-0.4447	110.4996	128.2745	-921.7562	-100.1302
25000.-	30000.	145.3722	-43.8521	-0.7845	116.8968	178.3174	-148.3045	-72.6109
30000.-	35000.	212.2267	-18.1691	-0.6574	112.7501	212.2267	-18.1691	0.0000
35000.-	40000.	-364.9065	-7.3932	-1.5219	127.0344	-364.9065	-7.3932	0.0000
40000.-	45000.	142.7281	-15.9768	-0.5270	108.7943	142.7281	-15.9768	0.0000
45000.-	50000.	-38.6513	-1.3183	-3.7014	158.0766	-38.6513	-1.3183	0.0000
50000.-	75000.	-23.2124	-0.3340	-14.7420	303.5258	-23.2124	-0.3340	0.0000
75000.-	100000.	-9.9965	-0.5260	-17.6765	304.2752	-9.9965	-0.5260	0.0000
100000.-	150000.	-37.5609	-3.5200	-0.9137	108.9257	-37.5609	-3.5200	0.0000
150000.-	0.	103.8335	-10.5403	-0.1358	101.1079	103.8335	-10.5403	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	4.9430	-494.3036	-55.8042	-50.2475	0.0000	0.0000
0.-	500.	-7.0163	988.1458	1040.4184	1147.9606	0.0000	0.0000
500.-	1000.	-1.9762	350.1585	366.6947	400.3215	0.0000	0.0000
1000.-	2000.	-0.8814	185.8281	195.2936	214.6152	-0.1397	0.0000
2000.-	3000.	-0.7220	152.7094	157.2189	178.9000	0.0000	0.0000
3000.-	4000.	-0.3918	122.8922	125.0700	137.6125	-3.4027	0.0000
4000.-	5000.	-0.4143	119.9535	122.1869	143.1687	-0.7665	0.0000
5000.-	6000.	-0.3098	112.8911	114.8033	147.1692	0.0000	0.0000
6000.-	7000.	-0.2259	108.6448	111.6913	140.0920	0.0000	0.0000
7000.-	8000.	-0.2985	110.7294	113.3050	147.8092	-315.1114	0.0000
8000.-	9000.	-0.4054	113.9731	122.1783	242.5648	-60.8974	0.0000
9000.-	10000.	-0.6724	122.2564	139.2862	-934.4422	-29.5688	0.0000
10000.-	15000.	-2.9085	187.3577	-412.8068	-26.2286	-7.9588	0.0000
15000.-	20000.	-6.4237	269.0094	-420.5379	-3.6174	0.0000	0.0000
20000.-	25000.	-0.4447	110.4996	128.2745	-921.7562	-100.1302	0.0000
25000.-	30000.	-0.7845	116.8968	178.3174	-148.3045	-72.6109	0.0000
30000.-	35000.	-0.6574	112.7501	212.2267	-18.1691	0.0000	0.0000
35000.-	40000.	-1.5219	127.0344	-364.9065	-7.3932	0.0000	0.0000
40000.-	45000.	-0.5270	108.7943	142.7281	-15.9768	0.0000	0.0000
45000.-	50000.	-3.7014	158.0766	-38.6513	-1.3183	0.0000	0.0000
50000.-	75000.	-14.7430	303.5258	-23.2124	-0.3340	0.0000	0.0000
75000.-	100000.	-17.6765	304.2752	-9.9965	-0.5260	0.0000	0.0000
100000.-	150000.	-0.9137	108.9257	-37.5609	-3.5200	0.0000	0.0000
150000.-	0.	-0.1358	101.1079	103.8335	-10.5403	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	8464.	-17137944.	0.	0.	0.	0.	0.
0.-	500.	14285.	4240913.	33503.	1570.	2585.	29346.	0.
500.-	1000.	43253.	33020192.	260858.	16174.	25507.	219177.	0.
1000.-	2000.	103949.	151960960.	1560595.	154744.	236301.	1169544.	0.
2000.-	3000.	45314.	110794864.	1517644.	119607.	389886.	1028150.	0.
3000.-	4000.	21300.	72171008.	1235458.	107318.	374475.	749526.	4139.
4000.-	5000.	6892.	30165916.	626356.	63053.	273788.	288628.	886.
5000.-	6000.	1966.	10641834.	255813.	33045.	152407.	70360.	0.
6000.-	7000.	639.	4077285.	106579.	27771.	55635.	23171.	0.
7000.-	8000.	267.	1990871.	55390.	10722.	32236.	9334.	3096.
8000.-	9000.	144.	1217983.	35344.	13076.	18345.	3039.	882.
9000.-	10000.	80.	750683.	22681.	7322.	13008.	1726.	623.
10000.-	15000.	170.	2012893.	67017.	39881.	21809.	1983.	3344.
15000.-	20000.	41.	728377.	27684.	16804.	10340.	539.	0.
20000.-	25000.	22.	517780.	21930.	13037.	7553.	303.	1036.
25000.-	30000.	13.	345980.	16064.	10964.	3710.	262.	1126.
30000.-	35000.	7.	222588.	11477.	9340.	2080.	56.	0.
35000.-	40000.	5.	186114.	10477.	10115.	361.	0.	0.
40000.-	45000.	5.	206607.	12381.	9514.	2844.	21.	0.
45000.-	50000.	2.	93432.	5954.	5954.	0.	0.	0.
50000.-	75000.	7.	418428.	30308.	29708.	599.	0.	0.
75000.-	100000.	2.	170263.	14733.	14733.	0.	0.	0.
100000.-	150000.	1.	241611.	24735.	24735.	0.	0.	0.
150000.-	0.	1.	463310.	56794.	40380.	16414.	0.	0.
TOTAL	246837.	409501248.	6009775.	779576.	1619891.	3595171.	15136.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	0.	0.	0.	0.	0.
0.- 500.	4156.	33503.	33503.	33503.	0.
500.- 1000.	41681.	260858.	260858.	260858.	0.
1000.- 2000.	391046.	1560591.	1560591.	1560591.	0.
2000.- 3000.	489493.	1517644.	1517644.	1517644.	0.
3000.- 4000.	481793.	1231319.	1235459.	1235459.	0.
4000.- 5000.	336841.	625470.	626357.	626357.	0.
5000.- 6000.	185452.	255813.	255813.	255813.	0.
6000.- 7000.	83407.	106579.	106579.	106579.	0.
7000.- 8000.	42959.	52293.	55390.	55390.	0.
8000.- 9000.	31422.	34461.	35344.	35344.	0.
9000.- 10000.	20330.	22057.	22681.	22681.	0.
10000.- 15000.	61690.	63673.	67017.	67017.	0.
15000.- 20000.	27144.	27684.	27684.	27684.	0.
20000.- 25000.	20590.	20894.	21930.	21930.	0.
25000.- 30000.	14675.	14937.	16064.	16064.	0.
30000.- 35000.	11420.	11477.	11477.	11477.	0.
35000.- 40000.	10477.	10477.	10477.	10477.	0.
40000.- 45000.	12359.	12381.	12381.	12381.	0.
45000.- 50000.	5954.	5954.	5954.	5954.	0.
50000.- 75000.	30308.	30308.	30308.	30308.	0.
75000.- 100000.	14733.	14733.	14733.	14733.	0.
100000.- 150000.	24735.	24735.	24735.	24735.	0.
150000.- 0.	56794.	56794.	56794.	56794.	0.
TOTAL	2399468.	5994639.	6009776.	6009776.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	NFTD	UNFTD	NSPD	UNSPD	NPCC	UNPC	NOST	UNOS	NSTC	UNSTC
-999999.-	8464.	543717.	0.	20108.	0.	283308.	0.	0.	0.	0.
0.-	430.	291.	172.	661.	13683.	296603.	0.	0.	0.	0.
500.-	0.	0.	1052.	1890.	42201.	650668.	0.	0.	0.	0.
1000.-	103.	268.	623.	647.	103222.	1336647.	0.	1869.	0.	0.
2000.-	0.	0.	615.	14282.	44698.	785659.	0.	0.	0.	0.
3000.-	95.	0.	95.	1722.	20917.	275934.	191.	5167.	0.	0.
4000.-	79.	0.	0.	0.	6733.	124916.	79.	63.	0.	0.
5000.-	0.	0.	196.	447.	1770.	32529.	0.	0.	0.	0.
6000.-	0.	0.	22.	190.	616.	9023.	0.	0.	0.	0.
7000.-	0.	0.	0.	0.	243.	4528.	0.	0.	0.	0.
8000.-	0.	0.	0.	0.	103.	3494.	24.	1414.	0.	0.
9000.-	0.	0.	34.	457.	64.	1681.	5.	986.	0.	0.
9900.-	6.	2509.	6.	328.	54.	5065.	3.	528.	0.	0.
10000.-	34.	38553.	61.	13154.	23.	1093.	20.	971.	0.	0.
15000.-	7.	19868.	10.	25826.	9.	621.	0.	0.	0.	0.
20000.-	4.	749.	7.	816.	5.	217.	2.	116.	0.	0.
25000.-	4.	1633.	2.	848.	3.	168.	1.	15.	0.	0.
30000.-	4.	832.	2.	462.	3.	195.	0.	0.	0.	0.
35000.-	2.	971.	1.	1666.	0.	128.	0.	0.	0.	0.
40000.-	4.	318.	2.	642.	2.	45.	0.	0.	0.	0.
45000.-	1.	2494.	0.	919.	0.	205.	0.	0.	0.	0.
50000.-	2.	50663.	3.	10815.	0.	157.	0.	0.	0.	0.
55000.-	4.	27361.	0.	2577.	0.	75.	0.	0.	0.	0.
75000.-	2.	1604.	0.	569.	0.	60.	0.	0.	0.	0.
100000.-	1.	0.	1.	99563.	234352.	3813820.	328.	11133.	0.	0.
150000.-	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	9246.	691838.	2910.	99563.	234352.	3813820.	328.	11133.	0.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	TOTAL NUM	UNTOT
-99999.- 0.	8464.	847134.
0.- 500.	14285.	297556.
500.- 1000.	43253.	652558.
1000.- 2000.	103949.	1339433.
2000.- 3000.	45314.	799942.
3000.- 4000.	21300.	282823.
4000.- 5000.	6892.	124979.
5000.- 6000.	1966.	32977.
6000.- 7000.	639.	9213.
7000.- 8000.	267.	5943.
8000.- 9000.	144.	4938.
9000.- 10000.	80.	5047.
10000.- 15000.	170.	58545.
15000.- 20000.	41.	46789.
20000.- 25000.	22.	2302.
25000.- 30000.	13.	2714.
30000.- 35000.	7.	1463.
35000.- 40000.	5.	2832.
40000.- 45000.	5.	1088.
45000.- 50000.	2.	3458.
50000.- 75000.	7.	61684.
75000.- 100000.	2.	30096.
100000.- 150000.	1.	2207.
150000.- 0.	1.	629.
TOTAL	246837.	4616355.

THIS OUTPUT IS FOR YEAR NUMBER 1971 AND ESTIMATE FILE NUMBER 2
ONE INDICATES A HIGH ESTIMATE AND TWO A LOW ESTIMATE.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS		RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.-	0.	0.0000	-48.5329	4853.2939	-46.6371	4663.7177	3.9061	-44.5182	4451.8291
0.-	500.	0.7900	0.7900	0.0000	0.7505	5.0000	5.0000	0.7505	5.0000
500.-	1000.	0.7900	1.3747	-74.0191	1.2586	-59.3167	8.4486	0.7029	11.0171
1000.-	2000.	1.1294	1.0265	9.1129	0.9460	16.2420	7.8439	0.1249	88.9400
2000.-	3000.	1.3952	1.2001	13.9804	1.0383	25.5829	13.4882	0.3805	72.7250
3000.-	4000.	1.7619	1.4961	15.0854	1.2692	27.9646	15.1672	0.6288	64.3110
4000.-	5000.	2.1201	1.8014	15.0324	1.4871	29.8539	17.4437	0.8593	59.4661
5000.-	6000.	2.4270	2.0917	13.8140	1.6882	30.4404	19.2913	1.0960	54.8377
6000.-	7000.	2.6357	2.2890	13.1534	1.8693	29.0767	18.3350	1.3315	49.4818
7000.-	8000.	2.7854	2.4250	12.9699	1.9862	28.7192	18.0964	1.4807	46.8600
8000.-	9000.	2.9047	2.5311	12.8609	2.1017	27.6451	16.9662	1.6332	43.7745
9000.-	10000.	3.0351	2.6152	13.9320	2.1849	28.0104	16.4544	1.7557	42.1527
10000.-	15000.	3.3316	2.3357	14.8862	2.3705	28.8474	16.4029	2.0046	39.8316
15000.-	20000.	3.7532	3.1273	16.6769	2.6948	28.1988	13.8280	2.4482	34.7713
20000.-	25000.	4.2117	3.3753	19.8589	2.8881	31.4265	14.4340	2.7040	35.7980
25000.-	30000.	4.6875	3.4599	26.1824	2.9184	37.7411	15.6516	2.7636	41.0433
30000.-	35000.	5.2180	3.6114	30.7893	3.0850	40.8773	14.5758	2.9635	43.2064
35000.-	40000.	5.6320	3.8845	31.0289	3.2003	43.1761	17.6119	3.0780	45.3486
40000.-	45000.	6.0741	3.9467	35.0240	3.1606	47.9657	19.9176	3.0591	49.6371
45000.-	50000.	6.3905	4.1994	34.2871	3.5331	44.7136	15.8666	3.4408	46.1574
50000.-	75000.	7.3434	4.3877	40.2484	3.5342	51.8716	19.4524	3.4605	52.8753
75000.-	100000.	8.5576	4.3296	49.4068	3.7284	56.4310	13.8837	3.6810	56.9859
100000.-	150000.	9.8319	4.8942	50.2208	3.6143	63.2390	26.1518	3.5877	63.5091
150000.-	0.	11.7124	6.4213	45.1754	5.4751	53.2537	14.7348	5.4631	53.3560

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	8.2720	4.5433	-44.5182	4451.8291	8.2720	4.5433	0.0000
0.-	500.	5.0000	0.0000	0.7505	5.0000	5.0000	0.0000	0.0000
500.-	1000.	48.8660	44.1472	0.7029	11.0171	48.8660	44.1472	0.0000
1000.-	2000.	87.8310	86.7953	0.1249	88.9400	87.8310	86.7953	0.0000
2000.-	3000.	68.2921	63.3485	0.3792	72.8196	68.4020	63.4755	0.3465
3000.-	4000.	57.9707	50.4562	0.6283	64.3370	58.0013	50.4923	0.0728
4000.-	5000.	52.2948	42.2150	0.8571	59.5718	52.4192	42.3656	0.2606
5000.-	6000.	47.5991	35.0739	1.0954	54.8657	47.6315	35.1141	0.0619
6000.-	7000.	41.8305	28.7706	1.3265	49.6700	42.0473	29.0360	0.3725
7000.-	8000.	38.9406	25.4497	1.4760	47.0268	39.1323	25.6837	0.3139
8000.-	9000.	35.4762	22.7921	1.6325	43.7980	35.5031	22.3245	0.0417
9000.-	10000.	32.8668	19.6449	1.7502	42.3346	33.0780	19.8976	0.3145
10000.-	15000.	29.3082	15.4375	1.9918	40.2139	29.7574	15.9748	0.6353
15000.-	20000.	21.7159	9.1537	2.4304	35.2437	22.2830	9.8117	0.7243
20000.-	25000.	19.8888	6.3748	2.7040	35.7980	19.8888	6.3748	0.0000
25000.-	30000.	20.1254	5.3039	2.7636	41.0433	20.1254	5.3039	0.0000
30000.-	35000.	17.9410	3.9394	2.9635	43.2064	17.9410	3.9394	0.0000
35000.-	40000.	20.7619	3.8233	3.0656	45.5674	21.0791	4.2093	0.4003
40000.-	45000.	22.4900	3.2121	3.0550	49.7045	22.5938	3.3417	0.1338
45000.-	50000.	18.0638	2.6115	3.4375	45.2084	18.1414	2.7037	0.0947
50000.-	75000.	21.1323	2.0855	3.4605	52.8753	21.1323	2.0855	0.0000
75000.-	100000.	14.9805	1.2735	3.6810	56.9859	14.9805	1.2735	0.0000
100000.-	150000.	26.6943	0.7346	3.5722	63.6670	27.0117	1.1644	0.4329
150000.-	0.	14.9213	0.2187	5.4631	53.3560	14.9213	0.2187	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS		RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-99999.-	0.	-44.5182	4451.8291	8.2720	4.5433	0.0000	0.0000
0.-	500.	0.7505	5.0000	5.0000	0.0000	0.0000	0.0000
500.-	1000.	0.7029	11.0171	48.8660	44.1472	0.0000	0.0000
1000.-	2000.	0.1249	88.9400	27.8310	86.7953	0.0000	0.0000
2000.-	3000.	0.3792	72.8196	68.4020	63.4755	0.3465	0.0000
3000.-	4000.	0.6283	64.3370	59.0013	50.4923	0.0728	0.0000
4000.-	5000.	0.8571	59.5718	52.4192	42.3656	0.2606	0.0000
5000.-	6000.	1.0954	54.8657	47.6315	35.1141	0.0619	0.0000
6000.-	7000.	1.3265	49.6700	42.0473	29.0360	0.3725	0.0000
7000.-	8000.	1.4760	47.0268	39.1323	25.6837	0.3139	0.0000
8000.-	9000.	1.6325	43.7980	35.5031	22.3245	0.0417	0.0000
9000.-	10000.	1.7502	42.3346	33.0780	19.8976	0.3145	0.0000
10000.-	15000.	1.9918	40.2139	29.7574	15.9748	0.6353	0.0000
15000.-	20000.	2.4304	35.2437	22.2830	9.8117	0.7243	0.0000
20000.-	25000.	2.7040	35.7980	19.8888	6.3748	0.0000	0.0000
25000.-	30000.	2.7636	41.0433	20.1254	5.3039	0.0000	0.0000
30000.-	35000.	2.9635	43.2064	17.9410	3.9394	0.0000	0.0000
35000.-	40000.	3.0656	45.5674	21.0791	4.2083	0.4003	0.0000
40000.-	45000.	3.0550	49.7045	22.5938	3.3417	0.1338	0.0000
45000.-	50000.	3.4375	46.2084	18.1414	2.7037	0.0947	0.0000
50000.-	75000.	3.4605	52.8753	21.1323	2.0855	0.0000	0.0000
75000.-	100000.	3.6810	56.9859	14.9805	1.2735	0.0000	0.0000
100000.-	150000.	3.5722	63.6670	27.0117	1.1644	0.4329	0.0000
150000.-	0.	5.4631	53.3560	14.9213	0.2187	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	648.	-1377792.	0.	-668683.	26119.	29193.	0.
0.-	500.	-32.	-6509.	-51.	0.	-2.	0.	0.
500.-	1000.	-15.	-13992.	-110.	81.	-16.	-77.	0.
1000.-	2000.	15262.	27881828.	314913.	28698.	22450.	228935.	0.
2000.-	3000.	69484.	174727840.	2437900.	340828.	282857.	1149273.	2304.
3000.-	4000.	77533.	272991040.	4809998.	725608.	619488.	1748260.	1250.
4000.-	5000.	83267.	373973824.	7928687.	1191878.	1175152.	2347855.	8376.
5000.-	6000.	104257.	573668225.	13922978.	1923323.	2314900.	3396828.	3895.
6000.-	7000.	114374.	743174913.	19588440.	2576547.	3119140.	3997036.	36867.
7000.-	8000.	103959.	776964353.	21650100.	2808006.	3407752.	3927488.	36119.
8000.-	9000.	80765.	684258689.	19876100.	2556251.	2938524.	3205902.	4670.
9000.-	10000.	56434.	534379904.	16219052.	2243420.	2299606.	2293746.	29508.
10000.-	15000.	99524.	1173715715.	39104584.	5821220.	5459441.	4295347.	149493.
15000.-	20000.	23146.	393580992.	14772178.	2463544.	1702039.	970896.	69797.
20000.-	25000.	9297.	206909600.	8714520.	1730614.	1008062.	380952.	0.
25000.-	30000.	4815.	130003696.	6093974.	1595918.	704017.	201235.	0.
30000.-	35000.	2907.	94667856.	4939803.	1520931.	498330.	115052.	0.
35000.-	40000.	1849.	68890176.	3879953.	1203908.	471303.	84294.	8488.
40000.-	45000.	1217.	51562088.	3131957.	1096937.	405328.	52348.	2111.
45000.-	50000.	865.	40648096.	2597644.	890658.	270841.	37505.	1324.
50000.-	75000.	1772.	107259968.	7876536.	3170185.	915500.	79060.	0.
75000.-	100000.	479.	39918112.	3416067.	1687770.	239952.	18955.	0.
100000.-	150000.	218.	25350332.	2492440.	1251725.	324470.	6731.	3937.
150000.-	0.	117.	32545268.	3811860.	1722024.	307934.	3897.	0.
TOTAL	852148.	6525668365.	207579296.	37881376.	28515168.	28570692.	358146.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
PAYS

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDOE
-99999.- 0.	-642563.	-613369.	-613369.	-613369.	613369.
0.- 500.	-2.	-2.	-2.	-2.	-48.
500.- 1000.	65.	-12.	-12.	-12.	-98.
1000.- 2000.	51148.	280083.	280083.	280083.	34831.
2000.- 3000.	623686.	1772964.	1775269.	1775269.	662669.
3000.- 4000.	1345097.	3093257.	3094608.	3094608.	1715465.
4000.- 5000.	2367030.	4714885.	4723261.	4723261.	3205556.
5000.- 6000.	4238223.	7635050.	7638945.	7638945.	6284159.
6000.- 7000.	5695688.	9692724.	9729590.	9729590.	9859020.
7000.- 8000.	6217758.	10145246.	10181364.	10181364.	11468858.
8000.- 9000.	5494775.	8700676.	8705346.	8705346.	11170802.
9000.- 10000.	4543026.	6836771.	6866279.	6866279.	9352796.
10000.- 15000.	11280660.	15576006.	15725498.	15725498.	23379212.
15000.- 20000.	4165583.	5136480.	5206277.	5206277.	9565890.
20000.- 25000.	2738676.	3119629.	3119629.	3119629.	5594900.
25000.- 30000.	2299936.	2501171.	2501171.	2501171.	3592802.
30000.- 35000.	2019261.	2134314.	2134314.	2134314.	2805490.
35000.- 40000.	1675212.	1759506.	1767995.	1767995.	2111957.
40000.- 45000.	1502265.	1554614.	1556726.	1556726.	1575230.
45000.- 50000.	1161500.	1199006.	1200330.	1200330.	1397313.
50000.- 75000.	4085685.	4164745.	4164745.	4164745.	3711792.
75000.- 100000.	1927723.	1946679.	1946679.	1946679.	1469388.
100000.- 150000.	1576195.	1582926.	1586863.	1586863.	905577.
150000.- 0.	2029959.	2033856.	2033856.	2033856.	1778003.
TOTAL	66396536.	94967232.	95325376.	95325376.	112254864.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS		RA	RF	PC DROP RA-RF	RS	PC DROP RA-RS	PC DROP RF-RS	RP	PC DROP RA-RP
-99999.-	0.	0.0000	3.1725	-317.2595	3.2899	-328.9927	-3.6983	4.9430	-494.3037
0.-	500.	0.7899	0.7460	5.5584	0.6695	15.2500	10.2620	-7.0163	986.1457
500.-	1000.	0.7899	0.7410	6.2003	0.6580	16.7030	11.1969	-1.9762	350.1585
1000.-	2000.	1.0269	0.9249	9.9329	0.7690	25.1162	16.8577	-0.8802	185.7083
2000.-	3000.	1.3697	1.2618	7.8810	0.9150	33.1946	27.4791	-0.7220	152.7094
3000.-	4000.	1.7118	1.5631	8.6865	1.0418	39.1365	33.3466	-0.3789	122.1389
4000.-	5000.	2.0763	1.8673	10.0666	0.9597	53.7779	48.6040	-0.4111	119.8017
5000.-	6000.	2.4038	2.0933	12.9178	0.6569	72.6705	68.6164	-0.3098	112.8911
6000.-	7000.	2.6139	1.9328	26.0571	0.5636	78.4373	70.8387	-0.2259	108.6448
7000.-	8000.	2.7821	2.2436	19.3585	0.6243	77.5578	72.1704	-0.0719	102.5847
8000.-	9000.	2.9018	1.9282	36.9966	0.2844	90.1987	84.4432	-0.2520	108.6844
9000.-	10000.	3.0213	1.7116	43.3481	-0.0650	102.1515	103.7978	-0.5189	117.1773
10000.-	15000.	3.3294	-0.5671	117.0352	-2.3041	169.2059	-306.2523	-2.6940	180.9176
15000.-	20000.	3.8008	-1.2340	132.4682	-6.1994	263.1090	-402.3647	-6.4237	269.0094
20000.-	25000.	4.2355	1.5728	62.8651	-0.0435	101.0276	102.7672	-0.2222	105.2464
25000.-	30000.	4.6431	1.0017	78.4251	-0.3159	106.8049	131.5409	-0.4545	109.7889
30000.-	35000.	5.1562	0.5858	88.6389	-0.5563	110.7897	194.9713	-0.6574	112.7501
35000.-	40000.	5.6296	-0.3273	105.8150	-1.4171	125.1733	-332.9012	-1.5219	127.0344
40000.-	45000.	5.9926	1.2334	79.4178	-0.4544	107.5828	136.8419	-0.5270	108.7943
45000.-	50000.	6.3734	-2.6696	141.8868	-3.6533	157.3209	-36.8472	-3.7014	158.0766
50000.-	75000.	7.2433	-11.9647	265.1828	-14.6929	302.8482	-22.8021	-14.7420	303.5258
75000.-	100000.	8.6532	-16.0700	285.7106	-17.5840	303.2061	-9.4208	-17.6765	304.2751
100000.-	150000.	10.2376	-0.6642	106.4885	-0.8827	108.6222	-32.8632	-0.9137	108.9257
150000.-	0.	12.2584	3.5427	71.0992	-0.1228	101.0022	103.4680	-0.1358	101.1079

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

		PC DROP RF-RP	PC DROP RS-RP	RT	PC DROP RA-RT	PC DROP RF-RT	PC DROP RS-RT	PC DROP RP-RT
-99999.-	0.	-55.8042	-50.2475	4.9430	-494.3037	-55.8042	-50.2475	0.0000
0.-	500.	1040.4182	1147.9604	-7.0163	988.1457	1040.4182	1147.9604	0.0000
500.-	1000.	366.6947	400.3215	-1.9762	350.1585	366.6947	400.3215	0.0000
1000.-	2000.	195.1606	214.4552	-0.9814	185.8281	195.2936	214.6151	-0.1397
2000.-	3000.	157.2189	178.9000	-0.7220	152.7094	157.2189	178.9000	0.0000
3000.-	4000.	124.2449	136.3747	-0.3918	122.8922	125.0699	137.6125	-3.4027
4000.-	5000.	122.0182	142.8404	-0.4143	119.9535	122.1869	143.1687	-0.7665
5000.-	6000.	114.8033	147.1692	-0.3098	112.8911	114.8033	147.1692	0.0000
6000.-	7000.	111.6913	140.0920	-0.2259	108.6448	111.6913	140.0920	0.0000
7000.-	8000.	103.2051	111.5171	-0.2985	110.7294	113.3050	147.8092	-315.1112
8000.-	9000.	113.7841	188.6058	-0.4054	113.9731	122.1783	242.5646	-60.8975
9000.-	10000.	130.3208	-698.3653	-0.6724	122.2564	139.2863	-934.4326	-29.5688
10000.-	15000.	-375.0020	-16.9229	-2.9085	187.3577	-412.8068	-26.2286	-7.9588
15000.-	20000.	-420.5375	-3.6174	-6.4237	269.0094	-420.5375	-3.6174	0.0000
20000.-	25000.	114.1280	-410.5449	-0.4447	110.4996	128.2745	-921.7547	-100.1302
25000.-	30000.	145.3722	-43.8521	-0.7845	116.8968	178.3174	-148.3044	-72.6108
30000.-	35000.	212.2267	-18.1691	-0.6574	112.7501	212.2267	-18.1691	0.0000
35000.-	40000.	-364.9067	-7.3932	-1.5219	127.0344	-364.9067	-7.3932	0.0000
40000.-	45000.	142.7281	-15.9768	-0.5270	108.7943	142.7281	-15.9768	0.0000
45000.-	50000.	-38.6513	-1.3183	-3.7014	158.0766	-38.6513	-1.3183	0.0000
50000.-	75000.	-23.2124	-0.3340	-14.7420	303.5258	-23.2124	-0.3340	0.0000
75000.-	100000.	-9.9964	-0.5260	-17.6765	304.2751	-9.9964	-0.5260	0.0000
100000.-	150000.	-37.5609	-3.5200	-0.9137	108.9257	-37.5609	-3.5200	0.0000
150000.-	0.	103.8335	-10.5402	-0.1358	101.1079	103.8335	-10.5402	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	RC	PC DROP RA-RC	PC DROP RF-RC	PC DROP RS-RC	PC DROP RP-RC	PC DROP RT-RC
-999999.-	0.	-494.3037	-55.8042	-50.2475	0.0000	0.0000
0.-	500.	988.1457	1040.4182	1147.9604	0.0000	0.0000
500.-	1000.	350.1585	366.6947	400.3215	0.0000	0.0000
1000.-	2000.	185.8281	195.2936	214.6151	-0.1397	0.0000
2000.-	3000.	152.7094	157.2189	178.9000	0.0000	0.0000
3000.-	4000.	122.8922	125.0699	137.6125	-3.4027	0.0000
4000.-	5000.	119.9535	122.1869	143.1687	-0.7665	0.0000
5000.-	6000.	112.8911	114.8033	147.1692	0.0000	0.0000
6000.-	7000.	108.6448	111.6913	140.0920	0.0000	0.0000
7000.-	8000.	110.7294	113.3050	147.8092	-315.1112	0.0000
8000.-	9000.	113.9731	122.1783	242.5646	-60.8975	0.0000
9000.-	10000.	122.2564	139.2863	-934.4326	-29.5688	0.0000
10000.-	15000.	187.3577	-412.8068	-26.2286	-7.9588	0.0000
15000.-	20000.	269.0094	-420.5375	-3.6174	0.0000	0.0000
20000.-	25000.	110.4996	128.2745	-921.7547	-100.1302	0.0000
25000.-	30000.	116.8968	179.3174	-148.3044	-72.6108	0.0000
30000.-	35000.	112.7501	212.2267	-18.1691	0.0000	0.0000
35000.-	40000.	127.0344	-364.9067	-7.3932	0.0000	0.0000
40000.-	45000.	108.7943	142.7281	-15.9768	0.0000	0.0000
45000.-	50000.	158.0766	-38.6513	-1.3183	0.0000	0.0000
50000.-	75000.	303.5258	-23.2124	-0.3340	0.0000	0.0000
75000.-	100000.	304.2751	-9.9964	-0.5260	0.0000	0.0000
100000.-	150000.	108.9257	-37.5609	-3.5200	0.0000	0.0000
150000.-	0.	101.1079	103.8335	-10.5402	0.0000	0.0000

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	NUM	AGI	MST	TLFTD	TLSPD	TLPCC	TLOST	TLSTC
-99999.-	0.	9710.	-19661860.	0.	0.	0.	0.	0.
0.-	500.	11131.	3304548.	26105.	1223.	22867.	0.	0.
500.-	1000.	46387.	35412616.	279758.	17346.	27355.	235057.	0.
1000.-	2000.	104717.	153084064.	1572129.	155888.	238048.	1178188.	0.
2000.-	3000.	34331.	83941120.	1149807.	90617.	280236.	778954.	0.
3000.-	4000.	25789.	87380080.	1495814.	129933.	453390.	907478.	5012.
4000.-	5000.	7511.	32874848.	682604.	68715.	298374.	314547.	966.
5000.-	6000.	2987.	16164658.	388573.	50195.	231502.	106875.	0.
6000.-	7000.	1237.	7892969.	206320.	53761.	107701.	44857.	0.
7000.-	8000.	596.	4440494.	123543.	23916.	71901.	20818.	6906.
8000.-	9000.	359.	3033996.	88042.	32572.	45699.	7570.	2199.
9000.-	10000.	195.	1836829.	55497.	17916.	31831.	4224.	1525.
10000.-	15000.	321.	3789184.	126158.	75074.	41054.	3734.	6295.
15000.-	20000.	63.	1112799.	42295.	25673.	15797.	824.	0.
20000.-	25000.	34.	766540.	32467.	19301.	11182.	449.	1533.
25000.-	30000.	19.	520300.	24158.	16489.	5580.	394.	1694.
30000.-	35000.	9.	290955.	15002.	12209.	2718.	73.	0.
35000.-	40000.	6.	251254.	14144.	13656.	488.	0.	0.
40000.-	45000.	7.	316108.	18943.	14557.	4352.	32.	0.
45000.-	50000.	2.	128469.	8187.	8187.	0.	0.	0.
50000.-	75000.	7.	465574.	33723.	33055.	667.	0.	0.
75000.-	100000.	3.	259651.	22468.	22468.	0.	0.	0.
100000.-	150000.	1.	234974.	24055.	24055.	0.	0.	0.
150000.-	0.	1.	833958.	102230.	72684.	29545.	0.	0.
TOTAL	245436.	418673536.	6532024.	979500.	1899441.	3626947.	26133.	0.

TAX RATES AND PERCENTAGE DROP IN TAX RATE DUE
TO VARIOUS PROVISIONS IN IOWA'S TAX LAWS
NO-PAY

AGI CLASS	A=FTD+SPD	B=A+PCC	C=B+OST	C+STC	TDUE
-99999.- 0.	0.	0.	0.	0.	0.
0.- 500.	3238.	26105.	26105.	26105.	0.
500.- 1000.	44701.	279758.	279758.	279758.	0.
1000.- 2000.	393936.	1572125.	1572125.	1572125.	0.
2000.- 3000.	370853.	1149807.	1149807.	1149807.	0.
3000.- 4000.	583324.	1490803.	1495815.	1495815.	0.
4000.- 5000.	367090.	681638.	682604.	682604.	0.
5000.- 6000.	281698.	388573.	388573.	388573.	0.
6000.- 7000.	161462.	206320.	206320.	206320.	0.
7000.- 8000.	95817.	116636.	123543.	123543.	0.
8000.- 9000.	78272.	85843.	88042.	88042.	0.
9000.- 10000.	49747.	53971.	55497.	55497.	0.
10000.- 15000.	116129.	119863.	126158.	126158.	0.
15000.- 20000.	41470.	42295.	42295.	42295.	0.
20000.- 25000.	30483.	30933.	32467.	32467.	0.
25000.- 30000.	22069.	22464.	24158.	24158.	0.
30000.- 35000.	14928.	15002.	15002.	15002.	0.
35000.- 40000.	14144.	14144.	14144.	14144.	0.
40000.- 45000.	18910.	18943.	18943.	18943.	0.
45000.- 50000.	8187.	8187.	8187.	8187.	0.
50000.- 75000.	33723.	33723.	33723.	33723.	0.
75000.- 100000.	22468.	22468.	22468.	22468.	0.
100000.- 150000.	24055.	24055.	24055.	24055.	0.
150000.- 0.	102230.	102230.	102230.	102230.	0.
TOTAL	2878942.	6505889.	6532023.	6532023.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	NFTD	UNFTD	NSPD	UNSPD	NPCC	UNPC	NOST	UNOS	NSTC	UNSTC
-99999.-	0.	9710.	0.	23069.	0.	325032.	0.	0.	0.	0.
0.-	335.	227.	134.	515.	10662.	231115.	0.	0.	0.	0.
500.-	0.	0.	1128.	2026.	45258.	697811.	0.	0.	0.	0.
1000.-	104.	270.	627.	652.	103995.	1346526.	0.	1883.	0.	0.
2000.-	0.	0.	466.	10820.	33865.	595236.	0.	0.	0.	0.
3000.-	0.	0.	116.	2085.	25325.	334083.	232.	6256.	0.	0.
4000.-	86.	0.	0.	0.	7338.	136133.	86.	69.	0.	0.
5000.-	0.	0.	298.	680.	2688.	49411.	0.	0.	0.	0.
6000.-	0.	0.	44.	269.	1193.	17467.	0.	0.	0.	0.
7000.-	0.	0.	0.	0.	542.	10100.	0.	0.	0.	0.
8000.-	0.	0.	0.	0.	258.	8704.	54.	3155.	0.	0.
9000.-	0.	0.	86.	1140.	156.	4114.	14.	2457.	0.	0.
10000.-	15.	6141.	15.	803.	103.	11041.	7.	1293.	0.	0.
15000.-	64.	72575.	115.	24763.	103.	1670.	38.	1829.	0.	0.
20000.-	11.	30355.	16.	39457.	35.	919.	0.	0.	0.	0.
25000.-	6.	1109.	10.	1208.	13.	220.	3.	171.	0.	0.
30000.-	6.	2456.	3.	1275.	8.	326.	1.	22.	0.	0.
35000.-	6.	1087.	2.	604.	3.	263.	0.	0.	0.	0.
40000.-	5.	1310.	1.	2249.	3.	196.	0.	0.	0.	0.
45000.-	1.	486.	3.	982.	3.	61.	0.	0.	0.	0.
50000.-	2.	3429.	0.	1263.	0.	228.	0.	0.	0.	0.
55000.-	4.	56372.	3.	12034.	0.	240.	0.	0.	0.	0.
75000.-	3.	41726.	0.	3930.	0.	73.	0.	0.	0.	0.
100000.-	1.	1560.	0.	513.	0.	108.	0.	0.	0.	0.
150000.-	0.	0.	1.	1024.	0.	17138.	0.	0.	0.	0.
TOTAL	10478.	842900.	3076.	131472.	231443.	3771081.	438.	0.	0.	0.

UNUSED EXEMPTIONS AND TAX CREDITS BY AGI CLASS

AGI CLASS	TOTAL NUM	UNTOT
-99999.- 0.	9710.	971893.
0.- 500.	11131.	231858.
500.- 1000.	46387.	699838.
1000.- 2000.	104717.	1349332.
2000.- 3000.	34331.	606057.
3000.- 4000.	25789.	342424.
4000.- 5000.	7511.	136203.
5000.- 6000.	2987.	50091.
6000.- 7000.	1237.	17836.
7000.- 8000.	596.	13255.
8000.- 9000.	359.	12302.
9000.- 10000.	195.	12351.
10000.- 15000.	321.	110208.
15000.- 20000.	63.	71483.
20000.- 25000.	34.	3408.
25000.- 30000.	19.	4081.
30000.- 35000.	9.	1912.
35000.- 40000.	6.	3823.
40000.- 45000.	7.	1665.
45000.- 50000.	2.	4755.
50000.- 75000.	7.	68635.
75000.- 100000.	3.	45897.
100000.- 150000.	1.	2147.
150000.- 0.	1.	1132.
TOTAL	245436.	4762593.

TOTAL EXEMPTIONS BY AGI CLASS
NO PAY

AGI CLASS	TAGI	TFTD	TSPD	TPCC	TOST	TSTC
-99999.-	0.	-19661860.	702607.	605123.	325032.	0.
0.-	500.	3304548.	193679.	320263.	253984.	0.
500.-	1000.	35412616.	2255662.	3678101.	932889.	0.
1000.-	2000.	153084064.	10693302.	17545564.	2524838.	1883.
2000.-	3000.	83941120.	4360860.	15862626.	1374216.	0.
3000.-	4000.	87380080.	4854375.	19006924.	1241573.	11268.
4000.-	5000.	32874848.	2231613.	10267086.	450683.	1036.
5000.-	6000.	16164658.	1393961.	7785757.	156286.	0.
6000.-	7000.	7892969.	1518493.	3466655.	62324.	0.
7000.-	8000.	4440494.	669891.	2171621.	30919.	10062.
8000.-	9000.	3033996.	887466.	1602501.	16275.	4656.
9000.-	10000.	1836829.	684043.	1013496.	8338.	2818.
10000.-	15000.	3789184.	3389340.	1932090.	14775.	8124.
15000.-	20000.	1112799.	991950.	867742.	2495.	0.
20000.-	25000.	766540.	458876.	319821.	1369.	1705.
25000.-	30000.	520300.	392483.	165585.	720.	1717.
30000.-	35000.	290955.	250188.	84133.	294.	0.
35000.-	40000.	251254.	278218.	62355.	263.	0.
40000.-	45000.	316108.	232744.	118944.	229.	0.
45000.-	50000.	128469.	189695.	13458.	61.	0.
50000.-	75000.	465574.	967330.	167246.	228.	0.
75000.-	100000.	259651.	666645.	30076.	240.	0.
100000.-	150000.	234974.	272541.	7970.	73.	0.
150000.-	0.	833958.	556121.	306056.	108.	0.
TOTAL		418673536.	39082024.	87401056.	7398212.	43272.

AGI CLASS

EFFECTIVE TAX RATES BY AGI CLASS TTDUE/(AGI(1)+AGI(1+24))

-99999.-	0.	-2.91530
0.-	500.	-0.00148
500.-	1000.	-0.00027
1000.-	2000.	0.01924
2000.-	3000.	0.25618
3000.-	4000.	0.47602
4000.-	5000.	0.78789
5000.-	6000.	1.06541
6000.-	7000.	1.31266
7000.-	8000.	1.46772
8000.-	9000.	1.62533
9000.-	10000.	1.74421
10000.-	15000.	1.98548
15000.-	20000.	2.42362
20000.-	25000.	2.69405
25000.-	30000.	2.75259
30000.-	35000.	2.95442
35000.-	40000.	3.05454
40000.-	45000.	3.03640
45000.-	50000.	3.42675
50000.-	75000.	3.44560
75000.-	100000.	3.65721
100000.-	150000.	3.53944
150000.-	0.	5.32667

APPENDIX I

OPERATING INSTRUCTIONS AND PROGRAM LISTING FOR STUDY
RELATING TO PERCENT OF FEDERAL TAXATION

APPENDIX I

Operating instructions for a program to study percent of Federal taxation for Iowa in 1966.

This program is designed to run on an IBM 1130 Computer and use a sample of returns received from the Iowa Department of Revenue. The Disk storing this data is DU/U/ at Drake University. A tape of this same information exists at the Iowa Department of Revenue.

The Data in this program must be arranged in 7 groups.

Group 1. This consists of the following 2 cards

```
// XEQ    COMP    1
*FILES (5,SAMPL), (6,SAVE), (8,DATA)
```

Group 2. This card contains two numbers in 2I10 format. If the index cards in Group 2 are AGI cards put a 1 in column 10. If they are federal tax deduction cards put a 2 in column 10. The second number will be a 2 if no pay returns are determined by federal tax exemptions and a 1 on the exemption from taxation is based on income.

Group 3. Index Cards. These 3 cards are a list of the AGI Brackets or Federal tax brackets. They indicate the form of the output. If AGI brackets are used the data will be given in tables by AGI Brackets. If federal tax brackets are given the final output will still be labeled AGI but output will be by Federal tax brackets. Format for data is 8f10.0.

Group 4. AGI bracket cards. These three cards are standard AGI brackets in 8F10.0 format.

Group 5. Loop control cards. This card, for a complete run of all of the sample, must have the numbers 1, 828 and 1 in 3I10 format. The first number is the starting point on the file, the second is the final record number and the third number is the increment in the read loop.

Group 6. Tax Rate Cards. Card 1 indicates the number of tax brackets. Format is 12. The next card(s) contain the lower limit of the bracket and then the rate for that bracket. Data is in 4(F10.0, F10.0) format.

Group 7. Tax Information Card. Six numbers appear on this card in 6F10.0 format. The first number is the amount of federal tax which will incur no state tax. All other taxpayers are subject to the schedule in group 5. The second number is the amount of federal surtax, if any. Numbers 3, 4, and 5 respectively are the amount of income exempt from taxation for adults, children and other dependents. The last number is the amount of exemption per return.

The sum of each of the numbers 3, 4, and 5 times the appropriate amount plus the 6th number constitutes the maximum income allowable for that return if it is to pay no tax. If taxable, it will be subject to the schedule in group 5.

Group 8. State Tax Information Cards. These 30 cards are numbered. Use AGI-M deck with AGI brackets in #1 and FTD-M with Federal Tax brackets in the same group.

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// FOR
*LIST ALL
*ONE WORD INTEGERS
*IOCS(CARD,TYPEWRITER,DISK,1132PRINTER)
C----- THIS PROGRAM IS CALLED COMP
C----- PROGRAM 1-PERCENT OF FEDERAL
      DIMENSION ID3(13),ID4(13),ID5(13), ID8(13), D2(13),D3(13),D4(13)
      ID5(13),WATE(48),RGIBR(25),TBRK(25),TRATE(25),D1(13)
      COMMON AGIBR(25),TAGI(48),TFTD(48),FNUM(48),TTDUE(48),RNUM(48),
      1TTAGI(48)
      DEFINE FILE 8(829,312,U,NFILE),5(1,96,U,LOC)
C----- READING WEIGHTS FROM THE DISK-----
      LOC=1
      READ(5'LOC')(WATE(I),I=1,48)
C----- INITIALIZING-----
      INDEX=13
      AGIBR(25)=0.0
      BGIBR(25)=0.0
      NFILE=1
      TBRK(NTBRK+1)=0.0
      AGIBR(25)=0.0
      K1=0
      DO 10 I=1,48
      TFTD(I)= 0.0
      FNUM(I)= 0.0
      TTDUE(I)=0.0
      TAGI(I)=0.0
      10 CONTINUE
C----- CARD DATA INPUT ORDER-----
      READ(2,20) IAMT,IOPT
      READ(2,30) (AGIBR(I),I=1,24)
      READ(2,30) (RGIBR(I),I=1,24)
      READ(2,20) ISTAR,LIMIT,INTER
      READ(2,11)NTSRK ,(TBRK(I),TRATE(I),I=1,NTBRK)
      READ(2,30)XEMPT,SURTX,AMT1,AMT2,AMT3 ,AMT4
      11 FORMAT(12/4(F10.0,F10.2) )
      12 FORMAT(1H , ' INDIVIDUALS PAYING',F5.0, ' DOLLARS OR LESS IN FEDERAL
      1'/' TAXES OWE NO STATE TAX. ALL OTHERS PAY ACCORDING TO THE'/'
      2' FOLLOWING RATE SCHEDULE')
      13 FORMAT(1H ,3X'BRACKET'11X'RATE')
      14 FORMAT(1H ,F8.0'-F7.0,5X,F7.4)
      15 FORMAT(1H , 'THE INDIVIDUAL OWES NO STATE INCOME TAX IF HIS'
      1' ADJUSTED GROSS INCOME IS LESS THAN THE NUMBER OF ADULTS *F8.2'
      2'/1H , ' + THE NUMBER OF CHILDREN *F8.2' + THE NUMBER OF OTHER'
      3' DEPENDENTS *F8.2'+ F8.2', '/1H , 'ALL OTHERS PAY BY THE '
      4' FOLLOWING SCHEDULE-')
      17 FORMAT(1H1, 'OPTION NUMBER'12' IS USED.,.)
      20 FORMAT(8I10)
      30 FORMAT(8F10.0)
      WRITE(3,17) IOPT
      GO TO (43,40),IOPT
      40 WRITE(3,12) XEMPT
      GO TO 45
      43 WRITE(3,15) AMT1,AMT2,AMT3,AMT4
      45 WRITE(3,13)
      WRITE(3,14)(TBRK(I),TBRK(I+1),TRATE(I),I=1,NTBRK)
      50 DO 2000 L= ISTAR,LIMIT,INTER
      READ(6'NFILE')(I1,I2,ID3(I),ID4(I),ID5(I), I6,I7,ID8(I),D1(I),
      1D2(I),D3(I),D4(I),D5(I),D6 ,D7,D8,I=1,INDEX )

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DO 500 M=1,INDEX
AGI=D1(M)+D2(M)+D3(M)+D4(M)
FTD=D5(M)
C      AGI OR FTD CLASSING-----
      GO TO (150,160), IAMT
150 AMT=AGI
      GO TO 170
160 AMT=FTD
170 IF (AMT)180,180,190
180 ICLAS=1
      GO TO 215
190 DO 200 I=2,24
      IF (AMT-AGIBR(I))210,200,200
200 CONTINUE
      ICLAS=24
      GO TO 215
210 ICLAS=I-1
C      -----DETERMINING THE WEIGHT CLASS-----
      GO TO (7035,2151),IAMT
215 IF (AGI) 7000,7000,7010
7000 KCLAS=1
      GO TO 7040
7010 DO 7020 I=2,24
      IF (AGI-BGIBR(I))7030,7020,7020
7020 CONTINUE
      KCLAS=24
      GO TO 7040
7030 KCLAS=I-1
      GO TO 7040
7035 KCLAS=ICLAS
7040 KKK=ID8(M)
      FTD=D5(M)*SURTXX
      GO TO (216,217),KKK
216 K=KCLAS
      GO TO 218
217 K=KCLAS+24
218 GO TO (220,230),IOPT
C      -----OPTION NUMBER ONE -----
220 IF (FTD)3000,250,225
225 IF (AGI-(AMT1*ID3(M)+AMT2*ID4(M)+AMT3*ID5(M)+AMT4)) 3006,3006,3007
C      -----OPTION NUMBER TWO-----
230 IF (FTD)3000,250,3005
C      -----TAX CALCULATING SECTION-----
3000 FTD=-FTD
      CALL ITAX (NTBRK,TBRK,TRATE,FTD,TAX)
      FTD=TAX
      GO TO 250
3005 IF (FTD-XEMPT)3006,3006,3007
3006 L1=1
      GO TO 3010
3007 L1=2
3010 CALL ITAX (NTBRK,TBRK,TRATE,FTD,TAX)
      FTD=TAX
      GO TO (250,260),L1
C      -----SUMMING SECTION -----
250 ICLAS=ICLAS+24
260 TAGI(ICLAS)=TAGI(ICLAS)+(AGI*WATE(K))
      TFTD(ICLAS)=TFTD(ICLAS)+(FTD*WATE(K))

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      FNUM(ICLAS)=FNUM(ICLAS)+(1*WATE(K))
500  CONTINUE
2000 CONTINUE
      ISTAR=LIMIT
      INDEX=12
      K1=K1+1
      GO TO (50,2010),K1
2010 READ(2,2020) (TTAGI(I),I=1,48)
      READ(2,2020) (TTDUE(I),I=1,24)
      READ(2,2020) (RNUM(I),I=1,48)
2020 FORMAT(4F20.2)
      CALL LINK(PCOMP)
      END

```

VARIABLE ALLOCATIONS

AGIBR=7FFE	TAGI =7FCC	TFTD =7F6C	FNUM =7F0C	TTDUE=7EAC	RNUM =7E4C
D5 =0074	WATE =00D4	RGIBR=0106	TBRK=0138	TRATE=016A	D1 =0184
AMT3 =018E	AMT4 =0190	D6 =0192	D7 =0194	D8 =0196	AGI =0198
ID4 =01BD	ID5 =01CA	ID8 =01D7	NFILE=01D9	LOC =01D9	I =01DA
ISTAR=01DF	LIMIT=01E0	INTER=01E1	NTBRK=01E2	L =01E3	I1 =01E4
ICLAS=01E9	KCLAS=01EA	KKK =01EB	K =01EC	L1 =01ED	

STATEMENT ALLOCATIONS

11 =01FE	12 =0205	13 =024F	14 =025C	15 =0265	17 =02E9
40 =03F2	43 =03FA	45 =0406	50 =042C	150 =0488	160 =048E
210 =048B	215 =04C7	7000 =04CC	7010 =04D2	7020 =04E2	7030 =04F0
218 =0522	220 =0528	225 =052F	230 =0554	3000 =055B	3005 =056D
260 =0595	500 =05C2	2000 =05CA	2010 =05E8		

FEATURES SUPPORTED

ONE WORD INTEGERS

IOCS

CALLED SUBPROGRAMS

ITAX	FADD	FADDX	FSUB	FSUBX	FMPY	FMPYX	FLD	FLDX
SWRT	SCOMP	SFIO	SIOFX	SIOF	SIOI	SUBSC	SNR	CARDZ
SDI								

REAL CONSTANTS

.000000E 00=01F2

INTEGER CONSTANTS

1=01F4 5=01F5 48=01F6 13=01F7 0=01F8 2=01F9

CORE REQUIREMENTS FOR

COMMON 626 VARIABLES 498 PROGRAM 1084

END OF COMPILATION

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// FOR
*ONE WORD INTEGERS
*LIST ALL
*IOCS(CARD,TYPEWRITER,DISK,1132PRINTER)
  DIMENSION SR(24),FR(24)
  COMMON AGIBR(25),TAGI(48),TFTD(48),FNUM(48),TTDUE(48),RNUM(48),
  1TTAGI(48)
  T1=0.0
  T2=0.0
  T3=0.0
  T4=0.0
  T5=0.0
  T6=0.0
  T7=0.0
  T8=0.0
  T9=0.0
  T10=0.0
  T11=0.0
  T12=0.0
  10 FORMAT(1H1,40X'TAX INFORMATION,IOWA 1966')
  20 FORMAT(1H1,40X'TAX INFORMATION,FEDERAL PROPOSAL')
  30 FORMAT(1H ,55X'PAYS'////)
  40 FORMAT(1H ,55X'NOPAY'////)
  50 FORMAT(1H ,3X'AGI CLASS'6X'RNUM'10X'AGI'9X'TDUE'//)
  60 FORMAT(1H ,F8.0'-F7.0,3F12.0)
  70 FORMAT(1H ,3X'AGI CLASS'5X'FED RATE'4X'STATE RATE'3X'FR/SR'8X'
  1STATE TDUE'3X'FED TDUE'8X'EQ.RATE'////)
  80 FORMAT(1H ,F8.0'-F7.0,3F12.4,2F12.0,F12.4)
  90 FORMAT(1H ,3X'AGI CLASS'6X'FED.NUM.'3X'STATE NUM.'3X'FN/SN'//)
  100 FORMAT(1H ,F8.0'-F7.0,2F12.0,F12.4)
  110 FORMAT(1H1,40X'COMPARITIVE TAX INFORMATION')
  115 FORMAT(1H ,3X,'TOTAL'8X,3F12.0)
  WRITE(3,10)
  WRITE(3,30)
  WRITE(3,50)
  DO 120 I=1,24
    T1=T1+RNUM(I)
    T2=T2+TTAGI(I)
    T3=T3+TTDUE(I)
  120 WRITE(3,60) AGIBR(I),AGIBR(I+1),RNUM(I),TTAGI(I),TTDUE(I)
  WRITE(3,115) T1,T2,T3
  WRITE(3,20)
  WRITE(3,30)
  C
  C
  THIS PROGRAM IS CALLED PCOMP
  PROGRAM 2-PERCENT OF FEDERAL

  WRITE(3,50)
  DO 130 I=1,24
    T4=T4+FNUM(I)
    T5=T5+TAGI(I)
    T6=T6+TFTD(I)
  130 WRITE(3,60) AGIBR(I),AGIBR(I+1),FNUM(I),TAGI(I),TFTD(I)
  WRITE(3,115) T4,T5,T6
  WRITE(3,10)
  WRITE(3,40)
  WRITE(3,50)
  DO 140 I=25,48
    K=I-24
    T7=T7+RNUM(I)
    T8=T8+TTAGI(I)

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      T9=T9+TTDUE(I)
140 WRITE(3,60) AGIBR(K),AGIBR(K+1),RNUM(I),TTAGI(I),TTDUE(I)
      WRITE(3,115) T7,T8,T9
      WRITE(3,20)
      WRITE(3,40)
      WRITE(3,50)
      DO 150 I=25,48
      K=I-24
      T10=T10+ FNUM(I)
      T11=T11+TAGI(I)
      T12=T12+ TFTD(I)
150 WRITE(3,60) AGIBR(K),AGIBR(K+1),FNUM(I),TAGI(I),TFTD(I)
      WRITE(3,115) T10,T11,T12
      WRITE(3,110)
      WRITE(3,70)
      DO 160 I=1,24
      SRATE= TTDUE(I)/TTAGI(I)*100
      FRATE= TFTD(I)/TAGI(I) *100
      EQRT=TTDUE(I)/TFTD(I)*100
      RATIO= FRATE/SRATE
160 WRITE(3,80)AGIBR(I),AGIBR(I+1),FRATE,SRATE,RATIO,TTDUE(I),TFTD(I)
      EQRT
      WRITE(3,110)
      WRITE(3,30)
      WRITE(3,90)
      DO 170 I=1,24
      RATIO=FNUM(I)/RNUM(I)
170 WRITE(3,100) AGIBR(I),AGIBR(I+1), FNUM(I), RNUM(I),RATIO
11 FORMAT(1H1,40X,'TABLE',///1H ,33X,'RATE OF TAXATION BY INCOME CLAS
15 FOR PLAN',///1H ,28X,'PAY RETURNS',23X,'NO PAY RETURNS',17X,'TAX
2 RATE' //4X,'INCOME CLASS',5X,'NUMBER',4X,'TOTAL INCOME',3X,'TAX D
3UE',3X,'NUMBER',4X,'TOTAL INCOME',3X,'TAX DUE',2X,'FED RATE',2X,
4'STATE RATE')
      WRITE(3,11)
      A=0
      B=0
      C=0
      D=0
      E=0
      F=0
      DO 13 I=1,24
      FR(I)=TFTD(I)/(TAGI(I)+TAGI(I+24))
      SR(I)= TTDUE(I)/(TTAGI(I)+TTAGI(I+24))
15 SR(I)=SR(I)*100
      FR(I)=FR(I)*100
12 FORMAT(1H ,F8.0'- ' F7.0,F10.0,F15.0,2F10.0,F15.0,F10.0,2F10.3)
      WRITE(3,12)AGIBR(I),AGIBR(I+1),FNUM(I),TAGI(I),TFTD(I),
1FNUM(I+24),TAGI(I+24),TFTD(I+24),FR(I),SR(I)
      A=A+FNUM(I)
      B=B+TAGI(I)
      C=C+TFTD(I)
      D=D+FNUM(I+24)
      E=E+TAGI(I+24)
      F=F+TFTD(I+24)
13 CONTINUE
      WRITE(3,14)A,B,C,D,E,F
14 FORMAT(1H , ' TOTAL ' 1X ,F10.0,F15.0,2F10.0,F15.0,F10.0)
      CALL EXIT

```

END

VARIABLE ALLOCATIONS

AGIBR=7FFE TAGI =7FCC TFTD =7F6C FNUM =7F0C TTDUE=7EAC RNUM =7E4C
 T2 =0062 T3 =0064 T4 =0066 T5 =0068 T6 =006A T7 =006C
 T12 =0076 SRATE=0078 FRATE=007A EQRT =007C RATIO=007E A =0080
 F =008A I =008E K =008F

UNREFERENCED STATEMENTS

15

STATEMENT ALLOCATIONS

10 =009D 20 =00AF 30 =00C4 40 =00CF 50 =00DB 60 =00F3
 110 =0164 115 =0177 11 =0182 12 =01FF 14 =020E 120 =0291
 170 =044A 15 =0485 13 =051C

FEATURES SUPPORTED

ONE WORD INTEGERS

IOCS

CALLED SUBPROGRAMS

FADDX FMPY FMPYX FDIV FDIVX FLD FLDX FSTO FSTOX
 SIOFX SIOF SUBSC CARDZ PRNTZ SDFIO

REAL CONSTANTS

.000000E 00=0094

INTEGER CONSTANTS

3=0096 1=0097 24=0098 25=0099 48=009A 100=009B

CORE REQUIREMENTS FOR

COMMON 626 VARIABLES 148 PROGRAM 1186

END OF COMPILATION

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