

UNIVERSITY OF MINNESOTA
AGRICULTURAL EXPERIMENT STATION

A STUDY OF TAXATION IN MINNESOTA
WITH PARTICULAR REFERENCE TO
ASSESSMENTS OF FARM LANDS

GEORGE B. CLARKE AND O. B. JESNESS
DIVISION OF AGRICULTURAL ECONOMICS



UNIVERSITY FARM, ST. PAUL

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A STUDY OF TAXATION IN MINNESOTA WITH PARTICULAR REFERENCE TO ASSESSMENTS OF FARM LANDS

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INTRODUCTION

Rising tax rates throughout the United States have focused the attention of farmers and taxpayers generally upon resulting problems. Minnesota is in no better situation than the majority of states with respect to the relative weight of her tax burden. The upward trend in tax rates is an accompaniment of increasing demand for additional service, such as better roads and schools, better care of dependents, and more and better recreational facilities such as parks, playgrounds, and libraries.

As the burden of taxation becomes heavier, the importance of properly adjusting the load is enhanced. Some classes of society are likely to bear more than their fair share while others may escape with a comparatively light load. In some cases the load becomes so great that it no longer is borne and tax delinquency results. It is important, therefore, to examine the tax system to see whether taxes are distributed properly among those who should pay.

THE MINNESOTA TAX SYSTEM

Sources of Revenue

Table 1 shows the importance of the general property tax in the system, this tax furnishing nearly 80 per cent of the total revenue (76 per cent in 1930). It is almost the sole source of local revenue, providing the governmental subdivisions of Minnesota with 96.3 per cent of their tax money in 1930. The ordinary citizen thinks of his own taxes almost entirely in terms of the general property tax. The only other direct taxes likely to affect him are the automobile license tax and the gasoline tax. When the individual tax bill on general property is large, it is so mainly because of increased local expenditure since, in 1930 for example, only about 10 per cent of the general property tax went to the state, the rest of it to the counties and

* Formerly Assistant in Agricultural Economics.

their subdivisions. It is evident that, if tax rates on general property are to be kept down, either local expenditures must be curbed or new sources of revenue must be found.

Table 1
Revenue Derived from Taxes for the Year 1929 Payable in 1930*

Source of tax	To the state	To all minor political subdivisions	Total taxes
General property.....	\$12,494,130	\$111,580,410	\$124,074,540
Money and credits	220,643	1,103,214	1,323,857
Mortgage registry	61,616	255,145	316,761
Bushel tax.....	96,385	*	96,385
Gross Earnings:			
Railroads	8,111,673	30,000	8,141,673
Telephones.....	845,908	*	845,908
Express	48,478	*	48,478
Sleeping cars	60,796	*	60,796
Freight lines	98,867	*	98,867
Inheritance tax	1,539,636	150,953	1,690,589
Insurance	1,862,639	*	1,862,639
Telegraph	40,917	*	40,917
Vessel tonnage	14,221	14,221	28,442
Fire marshal	56,432	*	56,432
Motor vehicles	10,790,885	*	10,790,885
Gasoline tax	6,142,125	2,750,000	8,892,125
Occupation tax	3,790,693	*	3,790,693
Royalty tax	1,044,475	*	1,044,475
Trust companies	2,215	19,934	22,149
Total.....	\$47,322,734	\$115,903,877	\$163,226,611

* Data supplied by Minnesota Tax Commission.

The principal purposes for which the general property tax is levied are shown in Table 2.

Table 2
Distribution of General Property Tax for Each \$1,000 of Taxable Value.
State Averages, 1930

Cities and Villages							
State tax				Local tax			
Revenue	Education	Road and bridge	Other special	Education	Road and bridge	County, except road and bridge	City and village, except road and bridge
\$2.50	\$1.81	\$1.00	\$0.36	\$27.51	\$5.09	\$7.91	\$30.96

Townships							
State tax				Local tax			
Revenue	Education	Road and bridge	Other special	Education	Road and bridge	County, except road and bridge	Township, except road and bridge
\$2.50	\$1.84	\$1.00	\$0.36	\$16.14	\$15.30	\$7.50	\$2.54

This table does not take into account the money and credits tax or state taxes derived from any other source than the general property tax. The principal local source of funds outside the general property tax is special assessments, such as ditch taxes in the townships and assessments for paving and the construction of sewerage systems in cities and villages. The percentage distribution of the general property tax is shown in Table 3.

Table 3
Percentage Distribution of General Property Tax. State Averages, 1930

	Local				
	Education	Road and bridge	County excent road and bridge	Local	State
Cities and villages	35.7	6.6	10.2	40.1	7.4
Township	34.2	32.4	15.9	5.4	12.1

Tables 2 and 3 show that a large proportion of the tax money goes to education and roads and bridges, especially in the townships. The proportion spent for roads and bridges is smaller in cities and villages than in townships, partly because some of the costs incurred for these purposes in the cities are paid for by special assessments. The principal reason for lower average tax rates in the country is that much less money is needed for local purposes by the townships. On the other hand, the urban dweller enjoys the benefit of many public services that can not well be rendered to a scattered rural population.

Method of Assessment

Assessments in Minnesota are on the township basis. Each township, city, and village elects its own assessor, giving a total of about 2,800 assessors in the state, not counting deputies. No qualifications are prescribed for the office of assessor. The regular pay of township assessors is \$4.00 a day while actually engaged in assessing.¹ No traveling expenses are allowed except in the case of required trips to the county seat, and no payment is made for office work. The only time paid for is that taken by the assessor in making his rounds. All assessing is done during May and June, and all values are fixed as of May 1. Much less time is allowed by law for the assessment of real estate than for that of personal property, in spite of the fact that the tax on real estate is much more important as a source of revenue. In 1929 the real estate tax was 87.4 per cent; that on personal property was 12.6 per cent of the general property tax. Real estate is assessed every two years; personal property is assessed yearly. Moreover, the assessor is expected to value each piece of personal property separately

¹ Higher pay is authorized in case of towns having a certain minimum assessed valuation and population above a certain figure.

and is forbidden to set average values on livestock.² If these requirements are fulfilled, the time the assessor can give to the valuation of real estate is very much restricted.

Classified Assessment Law

The Minnesota Assessment Law of 1913 provides that all property subject to assessment must first have its fair market value determined by the assessor. The assessed value for purposes of taxation will be the percentage of the "true" value prescribed by law for the particular class to which the property belongs. The law defines the classes of property and states in the case of each class the percentage of the fair market value to be taken as the assessed value. Iron ore, mined and unmined, is to be assessed at 50 per cent of its full value; household goods at 25 per cent; all agricultural products held for sale, stocks of merchandise, equipment for manufacturing, merchandising, or other non-agricultural pursuits, and all agricultural land, at $33\frac{1}{3}$ per cent of the full value; feed, seed, livestock, and machinery on farms and not held for sale, at 10 per cent of full value; all other property, including warehouses, elevators, the property of public service corporations, and land for urban purposes at 40 per cent of full value. Property subject to the gross earnings or any lieu tax is exempt from the provisions of the act. For example, automobiles are subject to the motor vehicle license tax and are not assessed or taxed in any other way. Before the passage of the law, property in Minnesota was supposed to be assessed at its full value. Progressive undervaluation on the part of the assessors over a long period of years finally made some remedy necessary. The law of 1913 was more or less designed to legalize the existing situation. To compel assessors to return to the old standard would have been upsetting, because tax rates were based on the assumption that property generally would be assessed at less than half its value. The law shows some interesting tendencies. Agriculture is favored with the lowest valuations and iron mining is given the highest. The purpose of the higher valuation of urban real estate is to assist cities and villages in avoiding conflict with laws which set an upper limit on tax rates for municipal purposes. The Tax Commission is endeavoring to hold assessors in line with the present law through its power to revise assessments; and has been accumulating real estate sales data in order to keep informed as to the changes in land values in all parts of the state.

² Page 35, Assessors' Manual, 1930.

Method of Equalization

Assessments are first equalized in each assessment district by a local board consisting, in townships, of the assessor and the town board; in cities and villages, of the assessor, clerk, and mayor, or president of the council, except in cities whose charters provide for a board of equalization. The revised assessment roll then goes to the county board of equalization, composed of the county auditor and the board of county commissioners. The final authority is the Minnesota Tax Commission, whose power to revise assessments of individual properties, classes of property and taxing districts is limited only by the requirement that the aggregate valuation of all property in the state as returned by the county auditor shall not be reduced by more than one per cent. The Tax Commission is thus supreme, and yet its power is very much limited by the size of its task. It can not delegate its authority and can review personally only a comparatively small part of the thousands of assessments made each year.

PLAN OF STUDY AND SOURCES OF DATA FOR AN ANALYSIS OF THE MINNESOTA ASSESSMENT SYSTEM

The importance of the general property tax in Minnesota already has been explained. As a method of taxation it can work well only when taxable property is valued correctly. The intent of the law is that people in the same taxing district shall pay the same amount of taxes on property of like class having the same market value. Inequality of taxation arises whenever important errors are made by the assessor in estimating fair market values. Valuation involves the use of judgment, and errors are inevitable, but they should be reduced or removed whenever possible. As far as justice to the taxpayer is concerned, the general property tax is no better than the system of assessment on which it is based. For that reason assessments are important and a consideration of them has occupied a prominent place in the study on which this bulletin is based.

Method of Districting

In order to attack the problem of assessment, it was necessary first to divide the state into districts because of wide differences in land values in different localities. The study was not made by counties, because in most counties the number of cases was too small to give reliable averages when the farms were grouped according to sale value. The county is a political and not necessarily a physical or geographical unit. If there were only one assessor in each county the assessment situation would vary from county to county because of individual dif-

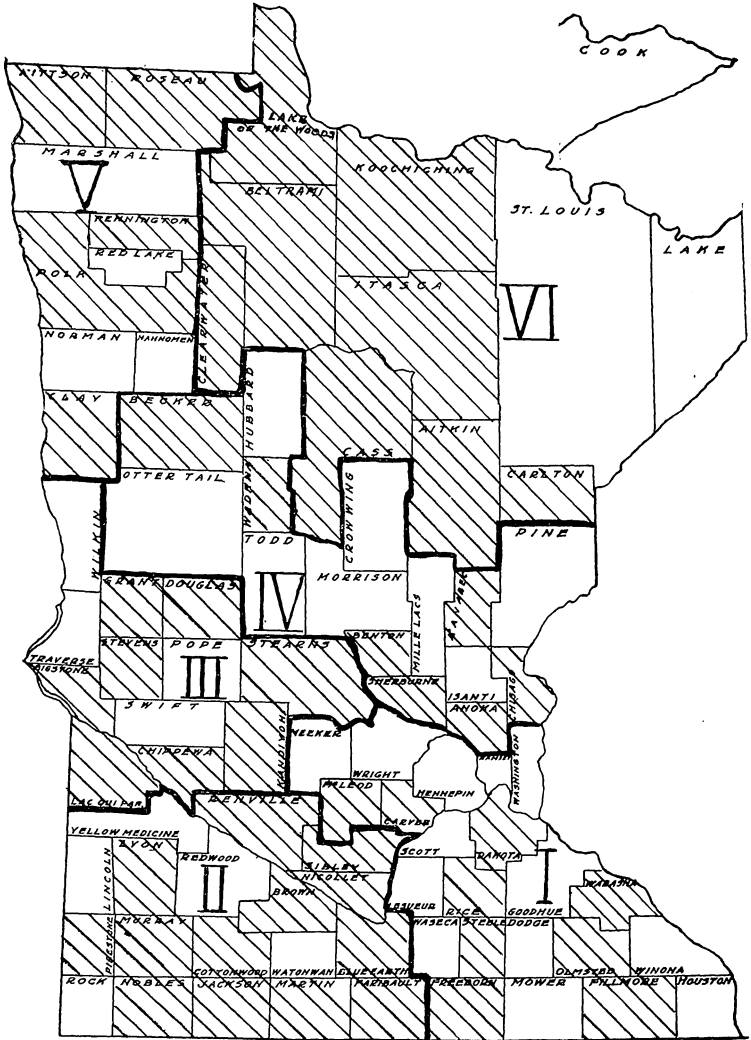


Fig. 1. Districts Used in the Study
 Cross lines indicate counties from which sales data were taken

ferences among assessors, if for no other cause. Where assessments are on the township basis, this reason for analyzing the data from each county separately disappears. The districting used was already adopted by the Division of Agricultural Economics, of the University of Minnesota, for an index of farm income. This districting appeared well suited to the present purpose because land values showed considerable homogeneity within each district. The location of the districts is shown in Figure 1.

Source of Data

The State Tax Commission sends field men to the county court-houses to collect data of sales of real estate where the true consideration is given in the deed. The field men are instructed to take only records of bona fide sales, excluding forced sales, sales between relatives, and trades. The data thus gathered, including the date of sale, the names of the parties, the number of acres (in the case of a farm), the sale price, and the assessed value, are recorded on cards and filed by townships and counties in the office of the Tax Commission. This material is used by the Tax Commission to guide assessors in their work and furnish information for tax equalization purposes. It has provided the data for the analysis of assessments in this bulletin, making it possible to compare sale and assessed values among individuals, groups, and sections of the state. It also makes possible comparisons between the assessment of platted and unplatted property and the tracing of trends in assessment for both.

Method of Sampling

In the analysis of assessments, care was taken to get an adequate and unbiased sample of sales of farm property. Sales for the years 1924 to 1927 were taken in order to eliminate, as far as possible, the war inflation and the worst of the post-war deflation of farm values. Of a total of 10,624 sales of unplatted property recorded by the Minnesota Tax Commission for the four-year period, 3,655 were used as a sample in this study. As already stated, the study was made by districts. In selecting the counties to be studied, the chief consideration was to have them well scattered over the district. Other things being equal, counties having the most sales were selected because it was felt that in those counties the market would be better established. In many of the counties all of the sales were taken. Where they were not, sales were taken by townships in alphabetical order until a sufficient sample had been taken. Districts I, II, and III were more carefully sampled than the others because they are older regions agriculturally with much less undeveloped land than is the case with the rest of the state. Land values appear to be more stable and assessments more accurate where the agricultural possibilities are better known. By selecting a large number of sales in southern Minnesota, an opportunity was afforded for a careful study of assessments in that part of the state, where the assessment system seems to function best.

There are 22 counties in District I, nine of which were included in this study. Hennepin and Ramsey counties were omitted. Thirteen of the 18 counties in District II were selected and 8 of the 12 in District III. In District IV, 7 counties out of 15 were selected for

study; in District V, 5 out of 9; in District VI, 8 out of 11. District VI was sampled only for the years 1926 and 1927. Cook, Lake, and St. Louis Counties were omitted because of the lack of Tax Commission data for these two years. The number of sales taken by districts is as follows: District I, 577; District II, 1,100; District III, 543; District IV, 703; District V, 386; District VI, 346; a total of 3,655 sales. The total number of sales recorded by the Tax Commission for the same period is as follows: District I, 2,890; District II, 2,633; District III, 1,545; District IV, 2,249; District V, 840; District VI, 467; total for the state, 10,624 sales of farms. The chief reason for believing that the data represent a fair sample of conditions in the state is the uniformity and consistency of results. No county was rejected because its sales failed to conform to the general pattern. In all the state, only about half a dozen sales were discarded from the sample. In a few cases the assessment percentages ran over 250 per cent. One or two sales were for more than \$400 per acre. Such cases as these unduly affect means and standard deviations and contribute little to an understanding of the problem. No sales of farm land of less than 20 acres were taken, in order to exclude as far as possible tracts whose chief value is for residence or summer resort purposes.

RELATION BETWEEN ASSESSED AND SALE VALUE OF FARMS IN THE SIX DISTRICTS

Method of Analysis

The first analysis of assessments in this study was by districts on the basis of the sale value of the farm. As already explained, unplatted real estate is assessed in this state at one third of its estimated fair market value. Multiplying assessments by 3 gives the "true and full" value for comparison with actual sale values. To make this comparison, samples of sales from each district were thrown into scatter diagrams in which the vertical scale showed the sale value of the farm and the horizontal scale the percentage that true and full value was of assessed value. Figure 2 shows the scatter diagram for District I. In this table are shown 577 farms ranging in sale value from under \$5,000 to more than \$40,000. There are 132 farms selling for less than \$5,000 with an average ratio of 101.6 per cent of true and full assessed value to sale value. In other words, these farms were assessed³ on the average slightly more than any of the higher value groups. Even more important is the fact that these farms were assessed anywhere from 25 per cent to 205 per cent of their sale value,

³ Unless otherwise indicated, for the rest of this bulletin "assessed value" is "true and full assessed value."

DISTRICT I

1924-25-26-27

Per Cent Assessed Value Is of Sale Value

Sale Value of Farm in Thousands	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	Totals	Mean	*	†	
	45						1																		
40					1																				
35						1																			
30							1	1																	
25						3	3	5																	
20			1	1	9	7	6	3	4																
15			1	3	4	16	18	16	14	8	4	1													
10				1	8	11	26	21	25	21	4	4	6	1											
5					8	18	24	35	25	23	17	18	8	6	3		1								
	1	2	1	4	11	19	24	9	12	13	14	6	3	4	1	4	1	2	1						
Totals	1	3	6	26	70	97	108	76	68	38	37	20	10	7	1	5	1	2	1			577	92.3	25.69	27.83

* Standard deviation.

† Coefficient of variation.

Counties

Fillmore, Olmsted, Wabasha, Steele, Dakota, McLeod, Carver, Freeborn, Rice

Fig. 2. Specimen Scatter Diagram, Showing Grouping for the Comparison of Assessed Values of Farms With Their Sales Values in District I.

indicating great inaccuracy of assessment, shown also by the large standard deviation of 34.42.⁴ The next group consists of 186 farms selling between \$5,000 and \$10,000. The average percentage of the assessed value of the sale value in this group is 96.6 per cent. These farms were assessed between 55 and 175 per cent of their sale value. The standard deviation for the group is 24.53. The value group between \$10,000 and \$15,000 contains 128 farms with an average ratio of assessed to sale value of 89.2 per cent, a range from 45 per cent to 145 per cent, and a standard deviation of 20.33. All the farms above \$20,000 in value are put into one group, 46 farms assessed on the average at 77 per cent of their sale value, having a range of assessment from 45 per cent to 105 per cent.

Table 4 shows that for District I there is a progressive decline in the average assessment percentage from the lowest value group to the highest. Sixty-seven per cent of the farms are assessed less than their sale value; one as low as 25 per cent of what it sold for. Thirty-three per cent were assessed higher than their sale value, one farm as high as 205 per cent. The standard deviation as used in Figure 2 is a measure of accuracy of assessment. If assessments are fairly accurate, the assessment percentages will tend to be closely grouped around the average for all the farms in the sample and the standard deviation will be small. If assessments are inaccurate, farms are likely, in any given case, to be assessed much more or less than they can be sold for, and the standard deviation will be large. Judging by the standard deviation there is a tendency not only to under assessment in the higher value groups but also to greater accuracy of assessment in the sense that there is less variation from the average. The standard deviation shows the same progressive reduction in size from the lowest to the highest value group as the assessment percentage. It is to be noted, however, that the significance of the standard deviation depends on the size of the average. A standard deviation of 25 is a larger percentage of a mean of 75 than it is of a mean of 100. In order to secure comparable measures of variation, the standard deviation is taken as a percentage of the mean, giving what is known as the coefficient of variation, shown in the last column of the table. The coefficient of variation also shows a tendency to greater accuracy of assessment in the higher value groups.

It remains to be seen whether the conditions found in District I prevail throughout the state. The same analysis was made for the other five districts as for District I and is summarized in Table 4.

⁴ The standard deviation is a statistical measure which indicates the scattering of the items about their arithmetic mean (average). Other things being equal, the smaller the standard deviation, the more closely do the various items cluster about the mean. The standard deviation is calculated by finding the difference between each item and the mean, squaring these, totalling, dividing by the number of items, and extracting the square root of the result.

Table 4

Average Ratios of Assessed Value to Sale Value, Standard Deviations, and Coefficients of Variation by Groups of Farms, Districts I to VI

Sale value	Number of farms	Average ratio of assessed to sale value, per cent	Standard deviation	Coefficient of variation
District I—Fillmore, Olmsted, Wabasha, Steele, Dakota, McLeod, Carver, Freeborn, and Rice Counties				
\$20,000 to \$45,000	46	77.0	13.93	18.09
15,000 to 20,000	85	81.1	18.03	22.23
10,000 to 15,000	128	89.2	20.33	22.79
5,000 to 10,000	186	96.6	24.53	25.39
0 to 5,000	132	101.6	34.42	33.87
District II—Blue Earth, Brown, Cottonwood, Faribault, Jackson, Lyon, Martin, Murray, Nicollet, Nobles, Pipestone, Renville, and Sibley Counties				
\$30,000 to \$55,000	30	70.7	12.03	17.02
25,000 to 30,000	34	79.1	15.55	19.66
20,000 to 25,000	138	79.6	12.80	16.08
15,000 to 20,000	214	87.0	14.72	16.92
10,000 to 15,000	263	87.2	19.57	22.44
5,000 to 10,000	265	95.2	24.20	25.42
0 to 5,000	156	98.7	30.43	30.83
District III—Bigstone, Chippewa, Douglas, Grant, Kandiyohi, Lac qui Parle, Stearns, and Stevens Counties				
\$20,000 to \$45,000	41	68.4	14.42	21.08
15,000 to 20,000	56	79.3	17.91	22.59
10,000 to 15,000	108	84.8	18.99	22.39
5,000 to 10,000	159	91.4	25.56	27.98
0 to 5,000	179	101.5	33.99	33.49
District IV—Anoka, Becker, Benton, Chisago, Kanabec, Sherburne, and Wadena Counties				
\$ 7,500 to \$17,500	67	70.1	21.74	31.01
5,000 to 7,500	82	73.7	24.83	33.69
2,500 to 5,000	174	77.1	26.88	34.86
0 to 2,500	380	96.6	38.82	39.67
District V—Clay, Kittson, Pennington, Polk, and Roseau Counties				
\$10,000 to \$25,000	43	72.9	24.92	34.18
7,500 to 10,000	33	77.1	21.99	28.52
5,000 to 7,500	62	79.8	31.44	39.40
2,500 to 5,000	136	91.1	32.62	35.81
0 to 2,500	112	103.7	35.49	34.22
District VI—Aitkin, Beltrami, Carlton, Cass, Clearwater, Itasca, Koochiching, and Lake of the Woods Counties				
\$ 4,000 to \$11,000	19	51.3	30.12	58.7
3,000 to 4,000	30	53.0	15.05	28.4
2,000 to 3,000	42	69.3	30.00	43.3
1,000 to 2,000	135	83.6	32.16	38.5
0 to 1,000	120	102.9	40.50	39.4

Significance of Results

The smallest difference between the average assessment percentages of the highest and lowest value groups is in District I, 24.6 per cent. In District II the difference is 28.0 per cent; in District III, 33.1 per cent; in District IV, 26.5 per cent; in District V, 30.8 per cent. In District VI farms selling for less than \$1,000 are assessed, on the average, twice as high in relation to their sale value as farms selling for \$4,000 or more. There is a decided tendency, tho there are some exceptions, for standard deviations and coefficients of variation to become smaller in the upper value groups, indicating more accurate assessment of the more valuable farms. General inaccuracy of assessments prevails, as indicated by wide ranges and high standard deviations. Ranges of assessment percentages, average ratios of assessed to sale value, standard deviations and coefficients of variation for the entire sample from each district are given in Table 5.

Table 5
Comparison of the Six Districts

	Number of farms	Average ratio of assessed to sale value, per cent	Range per cent	Standard deviation	Coefficient of variation
District I	577	92.3	25 to 205	25.69	27.83
District II	1,100	89.1	25 to 195	22.05	24.76
District III	543	90.3	35 to 195	26.81	29.69
District IV	703	86.6	15 to 205	34.62	39.98
District V	386	89.7	15 to 195	34.06	37.97
District VI	346	84.1	15 to 205	38.09	45.29

Districts IV, V, and VI have wider ranges and higher standard deviations than the other three districts. This is in line with the assumption that a better job can be done in estimating land values in a region long developed where the agricultural possibilities are well known than in a region where much of the land is not under cultivation and its value is more a matter of conjecture than in the more settled regions.

The analysis thus far has shown that high value farms tend to be underassessed and low value farms overassessed throughout the state. It is also evident that any individual farm, whether of low or high sale value, stands a good chance of being assessed anywhere from a fraction of its value up to much more than its fair market value. In the lowest value groups of a given area this difference may vary from one quarter of the sale value of the farm to twice its value. The bias of assessment in favor of high value farms is sufficiently serious, but the great inaccuracy of assessment giving wide ranges in the value groups, especially the lower ones, is still more serious.

CAUSES OF UNDERASSESSMENT OF HIGH VALUE FARMS

The cause for the situation indicated by the preceding analysis needs next to be explained, if possible. A farm may have a high sale value because it contains a large number of acres or because of a high value per acre. It becomes necessary to consider whether farms are underassessed because they have a large number of acres or because of high value per acre or for both reasons.

Analysis of Assessments in the Six Districts on the Basis of the Number of Acres in the Farm

In attempting to determine the influence of the number of acres in the farm on the tendency to overassess or underassess unplatted real estate in relation to its sale value, the same sales were used in each district as in the previous analysis. They were grouped by districts in scatter diagrams as before, the only difference being that in this case the vertical scale represented the number of acres in the farm. A specimen scatter diagram for District I is shown in Figure 3. Table 6 gives the results for all of the districts.

An inspection of Table 6 shows a quite different situation from that indicated by Table 4. Except for the tendency of the farms under 40 acres to have the lowest assessment percentages in each district, there is no apparent bias in the percentage of their sale value at which the different sizes of farms are assessed. The 80-acre farms seems to fare as well as the 160-acre or 240-acre farms and vice versa.

In Districts I, II, and III the larger farms appear to be assessed more accurately than the small farms. Standard deviations and coefficients of variation become progressively smaller as we go up the scale from the smaller to the larger farms. This tendency does not appear in Districts IV, V, and VI.

DISTRICT I

1924-25-26-27

Per Cent Assessed Value Is of Sale Value

Number of Acres	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	Totals	Mean	*	†	
	360								2	1															
320																									
280						1		1																	
240									1	1															
200																									
160					1	6	15	13	14	14	8	3	6	3	1										
120			1			11	6	12	7	9	5	6													
80				2	11	21	37	41	33	27	11	15	5	3	4	1	1			1					
40		1		3	11	18	25	26	17	14	12	10	6	4	2					1					
0			2	1	3	12	12	10	3	2	2	3	3							1		1			
Totals		1	3	6	26	70	97	108	76	68	38	37	20	10	7	1	5	1	2	1		577	92.3	25.69	27.83

* Standard deviation.
 † Coefficient of variation.

Counties

Fillmore, Olmsted, Wabasha, Steele, Dakota, McLeod, Carver, Freeborn, Rice

Fig. 3. Scatter Diagram Showing Ratios of Assessed Value to Sale Value When Farms Are Grouped on the Basis of the Number of Acres in the Farm

Table 6
Average Ratios of Assessed Value to Sale Value When Sales Are Grouped
According to Number of Acres in Farm

Number of acres	Number of farms	Average ratio of assessed to sale value, per cent	Standard deviation	Coefficient of variation
District I				
200 to 360	14	85.0	11.96	14.07
160 to 200	84	97.3	22.33	22.95
120 to 160	58	91.9	22.75	24.76
80 to 120	213	92.4	24.78	26.82
40 to 80	153	92.5	19.04	31.39
0 to 40	55	85.5	31.70	37.08
District II				
240 to 520	43	86.2	18.20	21.11
200 to 240	40	89.5	14.13	15.79
160 to 200	292	88.5	19.83	22.41
120 to 160	152	87.4	17.47	19.99
80 to 120	360	91.6	25.96	28.34
40 to 80	180	89.1	26.35	29.57
0 to 40	33	77.4	31.14	40.23
District III				
200 to 440	50	89.2	28.43	31.87
160 to 200	129	88.3	21.90	24.80
120 to 160	56	88.2	26.06	29.55
80 to 120	133	92.7	27.55	29.71
40 to 80	137	91.7	31.50	34.35
0 to 40	38	89.5	35.29	39.43
District IV				
200 to 400	19	84.5	32.19	38.09
160 to 200	63	88.0	32.39	36.81
120 to 160	55	86.3	32.97	38.20
80 to 120	217	89.2	33.22	37.24
40 to 80	289	86.6	36.35	41.97
0 to 40	60	76.2	34.07	44.71
District V				
200 to 400	26	92.7	32.02	34.54
160 to 200	144	90.6	34.43	38.00
120 to 160	52	90.0	37.66	41.84
80 to 120	74	91.4	31.56	34.53
0 to 80	90	85.9	31.29	36.43
District VI				
200 to 440	8	97.5	31.13	31.93
160 to 200	35	89.9	36.52	40.62
120 to 160	25	97.8	41.81	42.75
80 to 120	114	83.9	41.84	49.87
40 to 80	130	83.1	34.94	42.05
0 to 40	25	65.0	26.83	41.28

Analysis of Assessments on the Basis of Value per Acre

The next step in the study was to measure the extent to which assessors are influenced by value per acre. For this purpose scatter diagrams of the same sales as before were again prepared for each district. This time the vertical scale measured value per acre, the horizontal scale the percentage assessed value was of sale value. Figure 4 is a specimen scatter diagram showing conditions in District I. Farm

DISTRICT I

1924-25-26-27

Per Cent Assessed Value Is of Sale Value

	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	Totals	Mean	*	†		
325						1																				
300								1																		
275				1		2			1																	
250							5	1	1																	
225																							42	67.1	11.45	17.06
200				2	7	9	8	3																		
175				1	7	8	2	4	2																	
150			2	1	8	18	20	12	8	1	1	1		1												
125				1	2	12	29	17	15	13		1	1													
100					2	8	26	40	30	23	7	6	1													
75		1	1			3	7	19	13	20	17	17	7	2	1											
50						4		5	4	9	9	9	8	6	5	1	4	1	1	1						
25							4	6	3	2	3	2	3	1	1											
0											1	1														
Totals		1	3	6	26	70	97	108	76	68	38	37	20	10	7	1	5	1	2	1		577	92.3	25.69	27.83	

* † See Fig. 3.

Counties

Fillmore, Olmsted, Wabasha, Steele, Dakota, McLeod, Carver, Freeborn, Rice

Fig. 4. Specimen Scatter Diagram, District I, Showing Ratios of Assessed to Sale Value When Farms Are Grouped According to Value per Acre

real estate in this district runs from less than \$25 per acre to more than \$300 per acre. All the farms selling for more than \$200 per acre are grouped together. The column of totals gives the number of farms in each group between certain values per acre. The next column gives the corresponding average percentage of assessed value to sale value. Sales at the top and bottom of the scale are lumped together to give a sufficient number in the group for a reasonably stable average. Table 7 summarizes results for all the districts.

Table 7
Average Ratios of Assessed to Sale Value When Farms Are Grouped According to Sale Value per Acre

Sale value per acre	Number of farms	Average ratio of assessed to sale value, per cent	Standard deviation	Coefficient of variation
District I				
\$200 to \$325	42	67.1	11.45	17.06
150 to 200	97	73.5	17.20	23.40
125 to 150	91	83.6	15.09	18.05
100 to 125	143	90.5	15.41	17.03
75 to 100	108	103.7	21.86	21.08
50 to 75	67	124.6	31.07	24.94
0 to 50	29	110.9	30.33	27.35
District II				
\$175 to \$325	50	61.8	11.22	18.15
150 to 175	98	72.3	17.24	23.84
125 to 150	252	79.0	12.68	16.05
100 to 125	362	88.5	14.92	16.86
75 to 100	240	100.1	16.41	16.39
50 to 75	75	119.7	27.44	22.92
25 to 50	23	124.6	40.91	32.83
District III				
\$125 to \$500	47	63.9	12.92	20.22
100 to 125	95	71.0	14.65	20.63
75 to 100	150	83.6	17.18	20.55
50 to 75	160	94.9	21.24	22.38
0 to 50	91	126.1	30.85	24.46
District IV				
\$100 to \$175	50	63.8	18.18	28.50
75 to 100	73	69.1	18.12	26.22
50 to 75	140	74.1	23.46	31.66
25 to 50	218	82.8	30.29	36.58
0 to 25	222	109.0	39.49	36.23
District V				
\$ 75 to \$175	40	65.5	18.94	28.92
50 to 75	83	77.8	22.67	29.10
25 to 50	152	90.7	32.66	36.00
0 to 25	111	106.1	36.77	34.65
District VI				
\$ 50 to \$110	29	43.6	19.25	44.2
40 to 50	18	49.4	14.99	30.3
30 to 40	44	64.3	23.74	36.9
20 to 30	70	71.7	25.34	35.4
10 to 20	143	97.5	32.72	33.6
0 to 10	42	122.9	44.53	36.2

The difference between the assessment percentages of low value and high value farms on the basis of total sale value was noted above. When the same farms are grouped according to value per acre, the difference in the average percentage that assessed value is of sale value between the farms of high values per acre and those of low values is very large.

Table 8
Differences Between Average Assessment Percentages for Highest and Lowest Value Groups of Farms Compared (a) When Farms Are Grouped According to Total Sale Value (b) When Farms Are Grouped According to Value per Acre

	Grouping based on total sale value difference, per cent	Grouping based on value per acre difference, per cent
District I	24.6	43.8
District II	28.0	62.8
District III	33.1	62.2
District IV	26.5	45.2
District V	30.8	40.6
District VI	51.6	79.3

In District III the average percentage of assessed value to sale value was nearly twice as great for farms that sold for less than \$50 per acre as for farms that sold for more than \$125 per acre. In Districts II and VI the differences in the assessment ratio between the groups of farms of highest and lowest values per acre were even greater. In regard to accuracy of assessment as indicated by the coefficients of variation, there appears to be less variation, therefore presumably greater accuracy, in the higher value groups of all districts except District VI.

Significance of Results

This analysis indicates that assessors are not influenced by the number of acres in the farm. The mere fact that one farm contains more or fewer acres than another will not in itself affect the percentage of its sale value at which the farm is assessed. But the assessor evidently tends to be influenced by value per acre. The tendency shown to assess low value acres high and high value acres low appears to be the only reason for the relative underassessment of high value farms discussed previously. Two possible explanations suggest themselves for the lower assessment of farms having high values per acre. These are (1) adherence to average values in assessing and (2) undervaluation of improvements.

The Minnesota law requires that each piece of property, real or personal, subject to assessment shall be valued at what it would bring at private sale. The purpose of the law and the instructions of the Tax Commission are against the setting of average values in assess-

ing.⁵ The assessor, however, in the face of the requirement that his task must be completed in two month's time, can hardly be expected to give the careful consideration to each item of property contemplated by the law. Moreover, as previously stated, nearly all of the time allowed for assessment in odd-numbered years and a large part of it in even-numbered years is required for the assessment of personal property, in spite of the relative unimportance of the latter as a source of revenue. Besides the lack of time for the careful assessment of real estate, the average township assessor is handicapped by a lack of office space and office help. Under such circumstances it is to be expected that the assessor will be guided rather by average values than by a careful appraisal of each individual tract. When this happens it follows that high value farms will tend to be assessed at less than they will sell for and low value farms for more. This does not mean that assessors do not discriminate between farms, but that they do not discriminate enough.

The proper valuation of improvements is a difficult matter. In Minnesota they are valued separately from the land. Clearing, breaking, and stone removal, altho very important as affecting land values, are not classed as improvements. Improvements are such things as buildings, windmills, wells, drains, and fences.⁶ To value buildings, wells, and drains separately from the land is illogical. A ditch or a well has no value apart from the land. Many cases have occurred and are occurring where farms have sold for less than the cost of the buildings on them. Types of farming often affect the value of buildings. A silo which may have been a valuable adjunct to a dairy farm, might become worthless to the farmer if the type of farming should change. Nevertheless, the separate listing and valuation of improvements serve to call to the attention of the assessor elements of value that might otherwise be overlooked. It is doubtful if the average assessor has the time or facilities to do this part of his task as carefully as it should be done.

In any farming locality it generally will be found that unimproved land sells for less per acre than improved. This study has shown the very marked tendency in Minnesota to assess low value acres at a high percentage of their sale value and high value acres at a low percentage. This points to a tendency of the general property tax to become a tax on bare land values.

In describing the Minnesota tax system it was pointed out that personal property formed only about 13 per cent of the total assessed valuation and real estate 87 per cent. If relatively unimproved property is assessed high the effect will be to throw a comparatively large

⁵ See Minnesota Assessors' Manual, 1930, page 35.

⁶ Minnesota Assessors' Manual, 1930, pages 8 and 35.

part of the tax burden on land with little or no improvements. In some respects this might be considered a healthy tendency, but it may have the effect either of hastening agricultural development in some cases faster than general economic conditions will justify or it may have the opposite effect of causing abandonment and tax delinquency whenever present income and future prospects do not seem to justify the payment of heavy taxes. The tax delinquency situation will be discussed later in this bulletin.

Comparison of Pre-War and Post-War Conditions in Districts I and II

The existence of the conditions previously described, inaccurate assessments giving great inequality of tax burden among real properties having the same value, and bias in assessment—lightening the tax burden of high value properties and increasing the burden on those of low value—in all parts of the state in spite of great differences in underlying conditions and in relation to both platted and unplatted real estate, seems to show that these conditions are not accidental but are a part of and a result of the system of assessment.

The question may be asked as to whether or not these conditions are temporary, arising out of the unsettled land values that prevailed during the war period. Data for the years 1924-27, inclusive, were employed for this study because land values during these years were somewhat more stable than during the war and the years immediately following. Furthermore, considerable reliance was placed upon Districts I and II in drawing conclusions because these districts are older and more fully developed. For the purpose of comparing the situation with that of an earlier period, information was obtained for Districts I and II for the period 1914-15. Table 9 summarizes the data for the earlier period.

A glance at Table 9 shows that conditions in 1914-15, before land values had become particularly disturbed by the World War, were substantially the same as in the after-the-war period considered here. In District I in 1914-15 the highest value group of farms was assessed on the average at 68.0 per cent of the sale value of the farms. The lowest value group was assessed at 94.5 per cent, giving a difference between the two extremes of 26.5 per cent. For the period 1924-27, the difference between the corresponding assessment percentages was 24.6 per cent. In District II the difference between the assessment percentages for the high and low value groups was 25.1 per cent. In 1924-27 the difference was 28.0 per cent. On the basis of value per acre, the difference between the assessment percentages for the highest and lowest value acres in 1914-15 was 70.2 per cent. In the period 1924-27, the same difference was 43.8 per cent. In District II the

difference between the assessment percentages for the highest and lowest value acres was 60.7 per cent in 1914. In the period 1924-27, it was 62.8 per cent. Table 10 gives comparative measurements of the distributions of sales in the two districts for the periods compared.

Table 9
Summary of Results of Analysis of Assessments in Districts I and II
for the Period 1914-15

Sale value	Number of farms	Average ratio of assessed to sale value, per cent	Standard deviation	Coefficient of variation
Distribution based on sale value of farm				
District I				
\$25,000 to \$35,000	10	68.0	.....	.....
20,000 to 25,000	24	65.0	15.13	23.28
15,000 to 20,000	74	76.2	12.40	16.27
10,000 to 15,000	120	76.3	16.42	21.52
5,000 to 10,000	165	85.6	25.06	29.28
0 to 5,000	164	94.5	32.87	34.78
Distribution as a whole	555	83.4	25.74	30.86
District II				
\$25,000 to \$75,000	22	71.3	12.99	18.22
20,000 to 25,000	34	74.4	14.13	18.99
15,000 to 20,000	62	74.2	14.06	18.95
10,000 to 15,000	141	86.1	18.80	21.84
5,000 to 10,000	147	90.4	20.48	22.65
0 to 5,000	77	96.4	26.90	27.90
Distribution as a whole	483	86.0	21.30	24.77
Distribution based on sale value per acre				
District I				
Value per acre				
\$150 to \$225	17	55.6	15.13	27.2
125 to 150	54	63.5	12.58	19.8
100 to 125	148	73.9	14.08	19.3
75 to 100	171	81.8	15.39	18.8
50 to 75	127	96.2	22.09	22.96
0 to 50	38	125.8	43.06	34.2
District II				
\$125 to \$200	30	66.0	11.06	16.76
100 to 125	92	70.8	14.70	20.76
75 to 100	195	81.1	11.79	14.54
50 to 75	137	99.1	17.34	17.50
25 to 50	29	126.7	27.18	21.45

Table 10
Means and Measures of Variation for the Distributions of Sales in Districts I and II, 1914-15 and 1924-27

Period	Range per cent	Number of sales	Average ratio of assessed to sale value, per cent	Standard deviation	Coefficient of variation
District I					
1914-15	25 to 225	555	83.4	25.74	30.86
1924-27	25 to 205	577	92.3	25.69	27.83
District II					
1914-15	35 to 195	483	86.0	21.30	24.77
1924-27	25 to 195	1,100	89.1	22.05	24.76

ASSESSMENT OF PLATTED PROPERTY

Source of Material in Sample

This study has been concerned primarily with the assessment of agricultural lands, consequently no attempt has been made to secure as complete a sample of sales of platted property as of unplatted. However, for the purpose of obtaining some comparison between unplatted and platted property, sales data regarding the latter from representative counties in each district were used. The counties from which data were taken are Anoka, Becker, Bigstone, Blue Earth, Brown, Carver, Chisago, Clay, Dakota, Douglas, Faribault, Marshall, Martin, Polk, Stearns, Wabasha, Waseca, and Washington. The Tax Commission does not collect sales data from St. Paul, Minneapolis, and Duluth. Out of 6,818 sales of platted property during 1926 and 1927, data of which were collected by the Minnesota Tax Commission, 1,662 were used for the present analysis. These include sales data from villages and towns as well as from cities in the counties from which samples were taken. All sales were thrown together in a single scatter diagram because the number available from any one town was likely to be small. Table II shows the number of sales taken from the larger places in the sample.

Table II
Range of Assessment Ratios in Certain Minnesota Cities

	Number of sales	Range in ratios of assessed to sale value, per cent
Towns over 10,000		
Mankato	41	32.1 to 192.0
St. Cloud	45	41.5 to 110.0
Towns 5,000 to 10,000		
Stillwater	46	44.8 to 225.0
South St. Paul	97	8.3 to 185.7
New Ulm	58	19.2 to 145.0
Moorhead	51	28.8 to 140.0
Crookston	41	40.7 to 160.8

Analysis of Assessments

"True and full" values of platted real property are obtained by multiplying assessed values by two and one-half, as platted property is assessed at 40 per cent of its full value as determined by the assessor. A scatter diagram of 1,662 sales of platted real estate was prepared in the same manner as previously with the unplatted real estate in order that comparisons might be made between assessed and sale value. Table 12 gives the results.

Table 12
Ratios of Assessed Value to Sale Value. Platted Real Estate in
Selected Counties

Sale value	Number of sales	Average ratio of assessed to sale value, per cent	Standard deviation	Coefficient of variation
\$6,000 and above	83	65.7	22.70	34.57
5,000 to \$6,000	63	75.2	29.28	38.94
4,000 to 5,000	107	70.8	18.95	26.77
3,000 to 4,000	184	74.7	22.51	30.14
2,000 to 3,000	254	84.2	25.17	29.88
1,000 to 2,000	359	84.0	36.31	43.22
0 to 1,000	612	93.7	43.66	46.58
Totals	1,662	79.7	35.61	44.68

A comparison with Table 4 shows that about the same conditions prevail in the assessment of platted real estate as in the case of the unplatted. Average ratios of assessed value to sale value become larger as we go down the table to the lower value groups. The difference between the lowest and highest assessment percentages is about the same as the average difference in Table 4. Greater inaccuracy of assessment of platted real estate is indicated by larger standard deviations and coefficients of variation in Table 12 than is the case with most of the groups of unplatted real property. Individual tracts of platted real estate were assessed anywhere from 5 per cent to 255 per cent of their sale value. The average assessment ratio for the platted property is 79.7 per cent. The lowest average ratio for unplatted real property in any district is 84.1 per cent. The conclusion is on the basis of these results, that assessments of real estate in cities and villages show as much bias in favor of high value properties as in the rural districts and that they show fully as much inaccuracy. There is also indicated a disposition to assess platted real estate on the average at a lower percentage of its sale value than unplatted real estate.

Changes in the Average Assessment Percentages for Platted and Unplatted Real Estate Between 1914-15 and 1926-27

At the present time it appears that urban real estate is assessed at a lower average percentage of its sale value than farm real estate. The figures on which this conclusion is based are statewide averages compiled by the State Tax Commission from all of its sales data for the two-year period 1926-27. If we go back to 1914-15 we find the opposite to be true in four districts out of six. Table 13 compares the two periods.

Table 13
Average Percentage That True and Full Assessed Value Was of Sale Value
in Each District Compared for the Periods 1914-15 and 1926-27

	1914-15			1926-27		
	Unplatted, per cent	Platted, per cent	Difference, per cent	Unplatted, per cent	Platted, per cent	Difference, per cent
District I	81.1	77.9	3.2	84.7	73.7	11.0
District II	79.8	80.0	-0.2	84.2	78.4	5.8
District III	79.7	82.0	-2.3	85.8	71.0	14.8
District IV	80.5	83.2	-2.7	73.3	71.5	1.8
District V	86.0	86.4	-0.4	87.0	74.9	12.1
District VI	92.6	82.3	10.3	67.5	51.0	6.5

Except in District VI, the differences in assessment of unplatted and platted property in 1914-15 were not large enough to be significant. It may be noted that in four of the six districts, the platted was assessed at a slightly higher percentage than the unplatted. The figures for 1926-27 show an opposite situation, the unplatted being assessed at a higher average percentage in each district and the difference being important in at least three of the districts, I, III, and V. The difference was negligible only in District IV. The effect of such a change is to place a larger share of the state and county taxes upon unplatted real estate. The change was brought about chiefly because unplatted real estate in three districts out of five in 1926-27 was assessed at higher percentages of its sale value on the average than in 1914-15 while the platted was assessed decidedly lower in all districts. Table 14 brings out this fact.

Table 14
Changes in the Assessment Percentages for the Two Classes of Property
from 1914-15 to 1926-27

	Unplatted			Platted		
	1914-15, per cent	1926-27, per cent	Diff erence, per cent	1914-15, per cent	1926-27, per cent	Difference, per cent
District I	81.1	87.7	3.6	77.9	73.7	-4.2
District II	79.8	84.2	4.4	80.0	78.4	-1.6
District III	79.7	85.8	6.1	82.0	71.0	-11.0
District IV	80.5	73.3	-7.2	83.2	71.5	-11.7
District V	86.0	87.0	1.0	86.4	74.9	-11.5
District VI	92.6	67.5	-25.1	82.3	61.0	-21.3

Farm land values have shown a decided drop from the war peak. While there have been some readjustments in city property values they have not been so great. As real estate is assessed only once in every two years, changes in assessed values naturally will lag behind those in sale value. This probably explains, in part at least, the shift that appears to have taken place between these two periods.

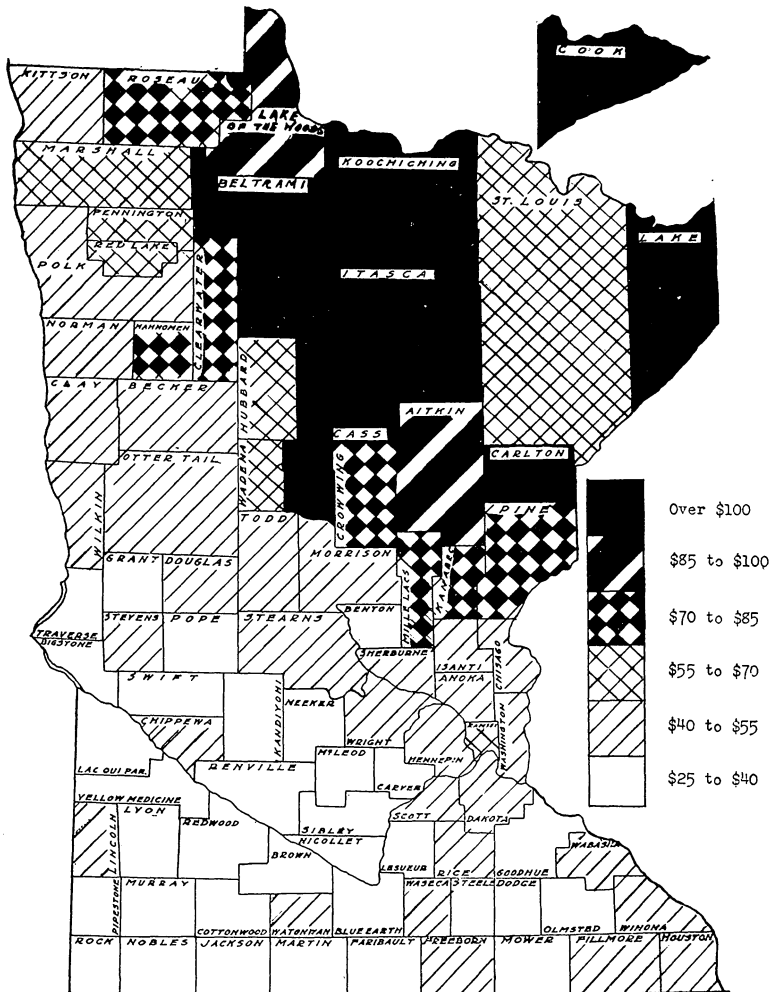


Fig. 5. Taxes per \$1,000 Taxable Value in the Townships of Each County

TAX DELINQUENCY AS RELATED TO THE TAX BURDEN IN THE COUNTIES OF MINNESOTA

Relative Tax Burdens in the Counties

An inspection of Figure 5, showing the taxes for each \$1,000 of assessed valuation in the townships of each county in 1929, reveals the fact that tax rates are heaviest in the cut-over section of Minnesota. Seven counties in that region had taxes of more than \$100 for each \$1,000 of assessed valuation, the highest rate being \$166.44. All of the 16 counties of northeastern Minnesota except St. Louis and Hubbard Counties are included within the group having taxes of

more than \$70 per \$1,000 of taxable value. Two counties on the edge of the cut-over area, Roseau and Mahnomens, also, belong to this group.

According to the agricultural census of 1925, land in farms comprises less than 20 per cent of the total land area of the 16 counties, less than 15 per cent in the 7 counties with the highest tax rates in relation to taxable wealth. Of the 30 counties in Minnesota in which taxes were less than \$40 for each \$1,000 of assessed valuation in 1929, 29 had more than 80 per cent of their land area in farms in 1925.⁷ The average for the 30 is more than 90 per cent.

There is a distinct tendency in the townships of Minnesota, that is, in that part of each county not included in cities and villages, for the tax rates to increase as the per capita wealth decreases. In the 19 counties having taxes of \$60 or more for each \$1,000 of taxable value, the 1925 census value of all farm property divided by the number of inhabitants composing the farm population gives a per capita value of \$1,378.91. On the same basis the per capita value of all farm property in the 30 counties in southern and southwestern Minnesota having the lowest average tax rates is \$4,315.17.

The cause for the greater tax burden on the farming population of counties less suited to agriculture is to be found in the combination of low per capita wealth in the townships and high per capita costs for such public services as roads and schools. Where less than 50 per cent of the land is used for farming (less than 3 per cent in two counties) the farms are likely to be far apart. It was pointed out earlier in this bulletin that in all the counties the larger share of the taxes are those levied by the local authorities for local purposes. Koochiching County, with an approximate land area in 1925 of 2,010,240 acres, had a farm population of 5,280. At the same time, Rock County had a farm population of 6,320 and an approximate area of 314,880, a larger farming population on less than one-sixth of the area. There can be no doubt that the per capita cost of roads and schools in the townships of Rock County will be very much less than the cost of providing the farming population of Koochiching County with equal facilities. In the 19 northeastern Minnesota counties whose taxes in 1929 were over \$60 per \$1,000 of assessed valuation, the cost of education in the townships on the average was \$29.50 per capita on the basis of the farming population, as given by the 1925 census. Roads and bridges in the townships in the same area had a per capita cost of \$18.50. Using the same method of calculation, the average per capita cost of education in the townships of the 30 southern counties having the lowest tax rates was \$15.55 in 1929. The per capita cost of roads and bridges was \$17.25.

⁷ The exception is Swift County, in which 79.9 per cent of the land area was in farms in 1925.

with the result that property may be taxed too heavily and incomes not enough. Special assessments for improvements such as drainage ditches may be a cause. There is reason to believe that all of these maladjustments exist in Minnesota. In discussing the assessment system it was stated that low value real properties, both platted and unplatted, are assessed on the average at more than their sale value and that high value properties on the average are assessed less than their sale value. It is a matter of common knowledge that the lowest value city properties and tracts of unplatted real estate selling at very low prices per acre are the ones in any locality most likely to have few or no improvements and a very low current income. If the assessment system causes such properties to be valued at a higher percentage of their sale value than is the case with other properties, they will have to pay relatively high taxes. These are also the properties the owner is most likely to abandon when taxes become burdensome. No doubt most of the tax delinquency in northern Minnesota is due to high costs of government and therefore high taxes relative to average incomes from land. The situation is made worse by inequalities in the assessment system. As said before, less than half of the land in the cut-over section is in farms. Much of it is in the hands of land and lumber companies. When these companies are no longer able to secure an income from timber on the land and find that the land sells slowly if at all, they are likely to come to the conclusion that it does not pay to keep up the taxes when these mount either because of increased government expenditures or because of peculiarities in the operation of the assessment system.

Tax delinquency is not only an indication that something is wrong with the tax system. It is, in itself, a cause of further trouble. When any considerable portion of the taxes remains unpaid it becomes necessary to increase tax rates in order to obtain the same revenue as before, thus penalizing those who pay their taxes. Unless something checks this movement, the result will be practical confiscation of the property of many taxpayers. Table 15 shows both present and accrued tax delinquency by districts and counties. There is not enough tax delinquency in Districts I, II, and III to cause concern, except possibly in two or three counties. In District IV there were seven counties with more than \$250,000 uncollected taxes for 1927 and previous years on January 31, 1931. In District V the lowest percentage of current tax delinquency is 12.19 per cent of the 1929 levy. In District VI, St. Louis County is apparently a shining exception to the general situation because of the presence of its iron mines and the city of Duluth. Itasca County also seems to be in a relatively favorable position because of its iron mines. It should be remembered, however, that tax

delinquency is largely a rural problem. Townships and rural school districts not having iron mines may be in serious straits because of high rates and tax delinquency altho tax conditions are good for the county as a whole. Information obtained in a study of the forest region by the Forest Taxation Inquiry indicates a large amount of delinquency among land owners of both St. Louis and Itasca Counties. Table 16 presents its findings in seven of the cut-over counties.

Table 15
Tax Delinquency in Minnesota*

County	Total Taxes levied, including special assessments, 1929	Amount of 1929 taxes uncollected Jan., 1931	Per cent of 1929 taxes uncollected	Total uncollected taxes, Jan., 1931
District I				
Carver	\$ 621,780	\$ 8,028	1.29	\$ 12,038
Dakota	1,668,085	125,887	7.55	231,151
Dodge	510,443	26,852	5.26	58,542
Fillmore	1,015,758	17,098	1.68	25,351
Freeborn	1,401,825	57,129	4.08	81,028
Goodhue	1,283,221	18,724	1.46	40,467
Hennepin	29,898,806	1,721,815	5.76	3,330,378
Houston	466,776	6,327	1.36	23,404
Le Sueur	689,857	9,218	1.34	30,993
McLeod	760,137	7,812	1.03	19,840
Meeker	592,350	21,967	3.71	32,277
Mower	1,229,422	48,548	3.95	85,741
Olmsted	1,507,071	55,476	3.68	79,399
Ramsey	15,263,075	1,216,457	7.97	3,370,461
Rice	1,160,542	26,900	2.32	44,378
Scott	507,686	9,928	1.96	37,892
Steele	770,672	13,068	1.70	24,157
Wabasha	681,724	12,616	1.85	24,537
Waseca	637,262	15,060	2.36	29,059
Washington	854,813	60,733	7.10	151,056
Winona	1,576,106	26,823	1.70	83,628
Wright	891,779	27,126	3.04	83,188
Weighted Av.	.....	.....	5.52	
District II				
Blue Earth	\$ 1,606,573	\$ 70,520	4.39	\$ 217,380
Brown	978,185	12,167	1.24	37,799
Cottonwood	744,788	31,440	4.22	36,340
Faribault	1,020,774	35,350	3.46	60,204
Jackson	904,636	18,498	2.04	37,256
Lincoln	541,516	36,070	6.66	101,595
Lyon	907,157	41,567	4.58	100,297
Martin	1,181,634	23,980	2.03	28,026
Murray	773,333	66,902	8.65	156,766
Nicollet	553,954	13,545	2.45	26,656
Nobles	901,365	21,831	2.42	52,815
Pipestone	539,627	19,053	3.53	59,053
Redwood	1,097,137	62,175	5.67	134,486
Renville	1,242,443	100,023	8.05	146,922
Rock	476,506	13,412	2.81	43,351
Sibley	627,793	6,807	1.08	24,591
Watonwan	593,343	19,250	3.24	36,925
Yellow Medicine	824,069	33,000	4.00	37,789
Weighted Av.	.....	.....	4.03	

* Data from Minnesota Tax Commission.

Table 15—(Continued)
Tax Delinquency in Minnesota*

County	Total taxes levied, including special assessments, 1929	Amount of 1929 taxes uncollected Jan., 1931	Per cent of 1929 taxes uncollected	Total uncollected taxes, Jan., 1931
District III				
Bigstone	\$ 388,277	\$ 32,066	8.26	\$ 81,951
Chippewa	642,305	31,506	4.91	33,299
Douglas	591,743	28,879	4.88	76,980
Grant	363,365	32,714	9.00	110,806
Kandiyohi	807,650	63,208	7.83	162,370
Lac qui Parle.....	657,560	38,487	5.85	55,385
Pope	452,420	60,322	13.33	100,107
Stearns	1,864,736	161,168	8.64	770,188
Stevens	480,831	41,357	8.60	50,597
Swift	671,617	84,893	12.64	161,000
Traverse	392,957	31,053	7.90	67,746
Wilkin	505,955	46,959	9.28	91,345
Weighted Av. ....	.....	.....	8.35	.....
District IV				
Anoka	\$ 769,153	\$126,906	16.50	\$425,299
Becker	625,189	104,050	16.64	354,741
Benton	403,529	29,233	7.24	45,233
Chisago	465,769	24,992	5.37	63,373
Crow Wing	1,245,158	143,609	11.53	843,609
Hubbard	362,829	128,019	35.28	452,412
Isanti	381,320	35,706	9.36	76,214
Kanabec	290,528	47,283	16.27	167,409
Mille Lacs	466,315	70,025	15.02	259,739
Morrison	750,674	66,864	8.91	348,393
Ottertail	1,379,512	82,656	5.99	223,645
Pine	781,049	222,785	28.52	815,248
Sherburne	278,530	24,999	8.98	74,370
Todd	719,886	71,826	9.98	171,826
Wadena	310,971	36,252	11.66	118,377
Weighted Av. ....	.....	.....	13.16	.....
District V				
Clay	\$1,021,229	\$124,518	12.19	\$351,718
Kittson	393,578	92,436	23.49	305,291
Mahnomen	250,251	97,455	38.94	403,196
Marshall	811,193	253,318	31.23	1,191,338
Norman	521,177	78,800	15.12	168,708
Pennington	427,302	130,677	30.58	568,625
Polk	1,479,734	201,515	13.62	592,686
Red Lake	273,129	56,646	20.74	398,123
Roseau	548,323	239,134	43.61	1,378,257
Weighted Av. ....	.....	.....	22.26	.....
District VI				
Aitkin	\$ 847,513	\$413,834	48.83	\$2,170,752
Beltrami	891,018	456,347	51.22	3,554,456
Carlton	917,714	105,118	11.45	588,574
Cass	694,917	320,440	46.11	1,570,440
Clearwater	301,431	103,822	34.44	373,329
Cook	262,811	104,488	39.76	619,579
Itasca	2,593,148	227,485	8.77	1,242,753
Koochiching	1,039,189	295,420	28.43	1,633,701
Lake	409,103	96,487	23.59	609,467
Lake of the Woods....	331,812	219,451	66.14	1,265,710
St. Louis	24,031,450	773,024	3.22	2,502,620
Weighted Av. ....	.....	.....	9.64	.....
Weighted av. without St. Louis County	.....	.....	28.26	.....
Weighted av. without St. Louis and Itasca Counties..	.....	.....	37.14	.....

* Data from Minnesota Tax Commission.

Table 16
Tax Delinquent Acreage in Certain Minnesota Counties*

County	1926 Taxes delinquent one year or more		Absolutely delinquent land per cent of taxable land
	Per cent of total area	Per cent of taxable land	
Beltrami	40.52	52.16	26.10
Cass	22.44	27.98	13.13
Hubbard	29.89	30.63	5.72
Itasca	22.09	28.36	8.60
Koochiching	21.91	41.78	19.57
Lake	16.84	26.73	9.29
St. Louis	10.33	12.51	4.87

* Data on page 17 of a circular entitled "Forest Taxation in a Cutover Region," by Fred Rogers Fairchild and Herman H. Chapman, National Tax Association, 195 Broadway, New York City.

HOW CAN THE TAX DELINQUENCY SITUATION BE REMEDIED?

Land Classification

Tax delinquency in Minnesota is chiefly a land problem. Lumber companies have been allowed to denude the forest areas without making any provision for reforestation. Land companies and railroads have been permitted to sell land freely to settlers without regard to its suitability for agriculture. Settlers have sifted in all through the territory in widely scattered settlements. As a result, farming has been attempted in regions where the cost of clearing or the presence of poor soil or the absence of markets, or sometimes the combination of all three, have made such an undertaking inadvisable. The state is now confronted with the situation described above—counties with so sparse a population that necessary public services can be supplied only at a high per capita cost, low incomes from land poorly suited to agriculture, high taxes, and high percentages of tax delinquency.

The state still possesses large areas of land in all of the cut-over counties. It is in the process of acquiring more through tax delinquency. If these lands were inspected and classified as agricultural and non-agricultural land, that classified as non-agricultural could be withheld from sale as farm land and devoted to the use for which it is best suited. A large part of it is well adapted for reforestation. In determining the classification of land, cost of administering the local government, distance from markets, and cost of clearing will be as important considerations as matters of climate and soil. Land that is classed as non-agricultural now may be properly classed as agricultural some time in the future when increases in the population and changes in general economic conditions may warrant agricultural expansion. The world at large, and the United States in particular, is faced with a

plethora of agricultural products and a threatened shortage of timber. It seems reasonable, therefore, that state land that is poorly adapted to farming and fairly well suited to forestry should be devoted to the latter use.

Chapter 119 of the Laws of 1927 provides that land which has been tax delinquent for five years or more shall become the property of the state, to be held in trust for each of the taxing districts interested in the taxes and assessments due on the land. The land is then to be appraised by the county and classified by it as agricultural or non-agricultural, after which it is to be held for sale and may be bought at the appraised valuation by individuals, municipalities, or the state. The funds derived from the sale are to be distributed among the various governmental units in proportion to their claim on the taxes on the property. That part of the law requiring appraisal and classification of the land on the part of the county is hardly in line with progress toward the solution of the problem. Both appraisal and classification are highly technical matters best left to the state or experts appointed by it. The proper handling of the cut-over section is important to the welfare of the entire state. If left to county officials, the administration of delinquent land is likely to be influenced by the need of immediate revenue rather than by a long-time policy such as is needed by a reforestation program. Land held in trust under the provisions of the 1927 law does not lend itself to a reforestation program until its status finally is settled. Individuals and corporations wishing to engage in forestry should be encouraged to do so. The state should purchase any tax-delinquent land it deems advisable to incorporate into state forests. But a duty so important as the classification of land to determine its best use is one of state concern and should be performed by the state as part of a land classification project, including all the land both state and private, in any county where tax delinquency is large and likely to increase.

Concentration of Settlements

The classification of land in those counties where it is undertaken should include all of the land area, whether wild or in farms, in order to determine what shall be done with land that later may become tax delinquent as well as to aid in the administration of a forest crop taxation law. A further purpose is to furnish data for the concentration of settlements in the forest counties. As said before, widely scattered settlements increase the per capita cost of providing roads and schools. Access to markets and the establishment of marketing agencies are facilitated by a reasonable density of settlement. Fire protection can be furnished and selective logging operations can be carried

on to better advantage where forests are in large blocks. Moreover, the fire hazard is reduced where settlers are not scattered through the woods. Concentration of settlements may be brought about partly by withholding non-agricultural state land from sale. It also may be promoted by arranging with settlers to exchange badly situated or unproductive farms for state lands better adapted to agriculture in the same county. Schemes for equalizing the tax burden, such as giving supplementary aid to schools in the heavily taxed counties, have the defect that they promote and encourage agricultural development where it is not economically justifiable. Proper classification and the restriction of the settled area will help by reducing costs and by preventing the occupation of land that can not profitably be used for agriculture.

A Revised Forest Crop Tax Law

The Minnesota Legislature passed a forest taxation law in 1927. The law contains some good features and is a step in the right direction but it is ineffective in its present form. The Conservation Commission reported in September, 1930, that there was no land at that time listed under the provisions of the act. The chief defects in the law seem to be that applications for listing land under its provisions must be made to the county commissioners, who determine the suitability for forest purposes of the tract or tracts and who accept or reject the application as they see fit. The rate of taxation under the law, 8 cents per acre, of which 3 cents is for fire protection, is so low that county authorities refuse to list land and deprive their local units of sorely needed revenue. The Wisconsin law avoids these difficulties by leaving the classification of land and its listing for forest purposes to the Conservation Commission. Local needs are provided for by the payment on the part of the state of 10 cents an acre annually to the township in addition to the 10 cents an acre tax paid by the owner. When the timber is cut, a severance tax of 10 per cent of its stumpage value is paid to the state. The area registered under the Wisconsin law totalled 296,480 acres in October, 1930.⁸

A workable plan for forest taxation would reduce tax delinquency and promote private reforestation. Tax delinquent land is a drug on the market. The state has worked out no plan for dealing with it except to sell it if possible. When sold, it may become delinquent again. If taxes are low enough to justify holding potential forest land for the long period of waiting for a crop of timber, lumber companies in many cases may pay the taxes and develop their holdings. Companies can be made to pay high taxes on land with timber on it, but the limits are soon reached after the timber is cut. Once private owners

⁸ Letter from Wisconsin State Conservation Commission.

are started on the policy of establishing forests where timber will be regarded as a crop, the state can look forward to the day when land, now idle, will be productive and the severance tax will be a constant source of revenue. At the same time, the state will continue to have a large amount of land on its hands that should be classified as forest land and administered as such. On it also the state should pay an annual tax to the county, reimbursing itself by the sale of timber from the forests. Such a plan of state and private forestry combined with a land classification plan designed to keep settlers off land not suited for agriculture would go far toward solving the tax problem of the cut-over region. Lightening the tax burden on this part of the state at the expense of increased taxes elsewhere is a poor policy if it promotes the farming of land that should not be farmed under present conditions or for years to come. If settlers are kept out of such areas, the forest counties can be safely helped to solve their problems and decrease their tax load, because the welfare of one is the welfare of all.

SUMMARY AND CONCLUSIONS

Assessment System

The preceding analysis of assessments has demonstrated that two pieces of real estate in the same general locality having the same sale value may be assessed at valuations differing so widely that one owner may be compelled to pay taxes on an assessed value which is very much greater than that of the other. These differences arising through inaccuracy of assessment become less among the higher value properties, but still are great in any value group. Another source of inequality is the very marked tendency to assess high value properties at a lower percentage of their sale value than low value properties, a tendency which may arise from too close adherence to average values and a disposition to undervalue improvements. That assessors are not overawed by the mere size of the farm unit is shown by the fact that they do not discriminate in assessment between farms with many acres and those with few. High value acres tend to be underassessed whether they are in a large or a small farm. Low value acres are on the average overassessed in relation to their sale value regardless of the size of the farm.

The result of such inequality of assessment is to overload with taxes owners of certain real estate in all parts of Minnesota, even in those regions where the general tax situation is satisfactory. Overvaluing land with few or no improvements on it in some cases may promote early and ill-advised development and in other cases lead to tax delinquency and abandonment.

The following quotations from the 1928 Report of the Minnesota Tax Commission show rather clearly the conditions which the county boards of equalization are called upon to correct.

"The changes made in the assessed values of real and personal property in 1926 by county boards of equalization in an effort to correct the inequalities in the primary assessment of the local district of the same county, illustrate more eloquently than words the utter failure of the local assessor system, without a directing head, to even approximate equality in the valuation of property for the purposes of taxation. In some counties, assessed values were increased or decreased in every taxing district in the county, while in a number of counties, changes were necessary in all but one or two taxing districts. In a number of counties, these changes ranged from a nominal percentage of increase up to several hundred per cent, which indicates how widely local assessors differ in their judgment of values of property in the same county."⁹

"The percentage changes in real estate assessments varied from a nominal per cent up to 700 per cent, and covered an average of 7 out of every 10 assessment districts in the state."¹⁰

These statements of the Tax Commission relate to assessments as made by the township and village assessors and equalized by the township or village boards of equalization. They picture fairly well the unsatisfactory nature of the local system. It should be remembered, however, that the assessments dealt with in the present study had gone through the next two steps. They had been equalized by the county boards and later by the Tax Commission. The worst inequalities had been removed but enough remained to show that the present methods of assessment are inadequate. No question is raised here as to the conscientiousness with which county boards of equalization perform their duty or as to the sincerity and competence of the Tax Commission. But, in the nature of things, if the task of assessment is not done well in the first place, boards of equalization are powerless to do more than correct the most glaring errors and bring taxing districts more or less in line with each other.

Improved Assessments

It is not the intent of this bulletin to lay the blame for the assessment inequalities upon the assessors personally. As has been stated, these workers are engaged in a part-time job which must be completed in a limited time. No specifications are set up at present as to their qualifications. They probably are doing their work as well

⁹ Report of the Minnesota Tax Commission, 1928, p. 41.

¹⁰ *Ibid.*, page 42.

as can be reasonably expected under the circumstances. The remedy seems to lie in having fewer and better trained assessors who will devote all their time to the work of assessment. Minnesota has approximately 2,800 assessors, too many for careful supervision on the part of the Tax Commission. Training is necessary for accurate assessment because the valuation of property is a technical matter, demanding the services of experts. If assessors were on a full time basis, assessments could be continuous instead of being at stated intervals. It would then be possible to follow trends in land values more closely and reduce lags and the inequalities of tax burden arising from them. A large share of the bias, also, should disappear if assessments were on a more scientific basis. The goal is greater accuracy in assessment, and the most important way to obtain it is by having well trained assessors under careful supervision. Fewer assessors would not only make better supervision possible, but would reduce the number of assessment districts. If there were one assessor to each county, there would be less likelihood of one local unit being favored in assessment at the expense of the others. Combining two or more counties into one assessment district would reduce county competition for low assessed valuations.

A county assessor system in itself will not necessarily provide assessors who are any better qualified or more efficient than township assessors. It will give the advantages of a larger assessment unit, such as reducing the number of assessors the Tax Commission must supervise, and helping to prevent local, competitive undervaluation. In order to assure that the assessors under a county or larger unit system would be better qualified than under the present system, certain standards would be necessary. It is a matter of common knowledge that a general election is an unsatisfactory way of selecting technical experts. The assessor needs to be an expert in appraising property and definite requirements of training and experience should be specified for the position. The selection of assessors by a board or on the basis of a civil service examination would offer an opportunity for the consideration of the relative merits of the prospects. Salaries sufficient to attract able men would be needed. Arrangements should be made for transportation because inspection of all property assessed is important. Office records and assistance would be necessary. The size of the assessment districts might be adjusted so as to include more than one county in some cases and perhaps to divide a county in certain other cases in order to obtain districts of appropriate size.

That merely increasing the size of the assessment districts from township to county units is not sufficient is suggested by the experience of Oregon, which has the county assessor system. A study of assess-

ments in that state indicates a situation little, if any, better than in Minnesota.¹¹ The county assessors in Oregon are elected instead of being chosen in the manner suggested above.

The intent of the law is that each property owner in the same governmental unit shall pay an equal amount of tax on an equal sale value, subject to the classification system which prevails in Minnesota. This intent is not carried out in full because of inequalities resulting from the present assessment system. There are too many assessors; the assessment units are too small; insufficient time is given for thoro work; the pay is not attractive to able men; no qualifications are prescribed for the office of assessor, and assessors are elected instead of being appointed. These are conditions that can be remedied.

The adoption of a taxation system that will distribute the load fairly, and economy in the expenditure of public revenues are matters of interest to the farmer and rightly so. However, in addition to these, farmers should give consideration to methods of improving assessments. An equitable distribution of the tax burden can not be secured without accurate assessments. The wide variations in assessments shown above indicate clearly the need for improvement. It is apparent that individual tax payers often are more concerned with seeking assessments favorable to themselves than they are with obtaining accurate assessments generally. Such efforts tend to make accurate assessments more difficult to obtain. There is need both for the development of better methods of assessment and for the adoption generally by taxpayers of attitudes more favorable to correct assessments. It is not sufficient to employ better trained assessors and to give them more opportunities and facilities for carrying on their work. They must also be permitted to carry on their work without interference from those whose property is being assessed.

A Better Land Policy

While the forest lands of northern Minnesota were still covered with merchantable timber it was worth while for owners to pay the taxes on them. When the timber was gone and settlers began to come in to take up the land for farming, the prospect of ready sale encouraged continued tax payment. With the agricultural depression of 1920 came a slackening in the settlement of the cut-over counties followed by a large amount of abandonment of unprofitable farms. In 1924 approximately 18.3 per cent of the total land area of the 16 cut-over counties was land in farms. By 1930, according to a preliminary report of the Bureau of Census, the number of farms in these counties was 9.1 per cent less than in 1924. Another indication of the

¹¹ Oregon Agr. Expt. Sta. Bull. 233, "A Study in the Ratios of Assessed Values to Sale Values of Real Property in Oregon," W. H. Dreissen.

extent of abandonment in this region is to be found in the reports of the Minnesota state auditor from 1920 to 1928, in which the number of acres of unsold state lands are given. The data on this subject from the reports are summarized in Table 17.¹¹

Table 17
Number of Acres of Unsold State Lands in the Sixteen Cut-Over Counties,*
Reported Biennially from June 30, 1920 to June 30, 1928

Date	Number of acres unsold	Increase	Per cent of increase
June 30, 1920	1,877,950		
June 30, 1922	1,822,269	-55,681	-3.0
June 30, 1924	1,814,613	-7,656	-0.4
June 30, 1926	1,895,521	80,908	4.5
June 30, 1928	1,997,992	102,471	5.4

Until June 30, 1923, the rate of sale of state land was greater than the rate of resumption of title on the part of the state through tax delinquency or otherwise, altho the two-year period, 1922 to 1924, showed only a small difference. From June 30, 1924, onward, the state's land holdings increased 4.5 per cent between 1924 and 1926, and 5.4 per cent between 1926 and 1928. This has meant an increase in recent years of the amount of state land for sale besides the increase in the amount for sale in private hands as the remaining timber is removed. Thus, the demand for land in these counties is decreasing with decrease in the number of farms and the supply of land for sale is increasing. Under such conditions, there can be little incentive for land and lumber companies to continue to hold the land and pay taxes at current rates.

The policy pursued up to the present has been to sell state land to farmers regardless of its suitability for farming purposes. Counties have been anxious to have the state dispose of tax-delinquent land within their borders at tax sales, thus often putting sub-marginal land back into farm use. Evidently such a policy tends to defeat its own purpose, if the purpose is to decrease the amount of tax delinquency. Various schemes have been tried to induce buyers to purchase tax delinquent land. A law passed by the 1925 Legislature provided that all unsold parcels of land subject to taxes delinquent for ten years or more and subject to sale for three years or more might be sold for not less than one-fifth of the total taxes as originally assessed.¹² This discount feature was repealed by Chapter 119 of the laws of 1927 to take effect after the sale of forfeited lands in November, 1927. The reason

¹¹ The counties included in this table are Aitkin, Beltrami, Carlton, Cass, Clearwater, Cook, Crow Wing, Hubbard, Itasca, Kanabec, Koochiching, Lake, Lake of the Woods, Mille Lacs, Pine, St. Louis.

¹² Minnesota State Legislature, Laws of 1925, chap. 208.

for the repeal seems to have been that land owners were taking advantage of the law to escape their tax obligations by letting their taxes go delinquent for ten years and then redeeming their land for one-fifth of the taxes they would otherwise have had to pay.

The 1928 report of the Minnesota Tax Commission states that most of the county auditors desire to have the discount provision of the 1925 law re-enacted.¹³ Such a provision might assist temporarily in disposing of the land, but if tax rates continue higher than the specific property can bear, it will again revert to the state. There is need for a land policy designed to assist in securing a better adjustment in land utilization. Some of the steps necessary to this end are the classification of all the land in those counties where tax delinquency is a serious problem in order to determine the best use to which each type of land can be put under existing circumstances and to withdraw from sale for farm purposes all public land classed as non-agricultural. Reducing local expenditures for roads and schools by concentrating settlements will aid the townships. A further step in the avoidance of tax delinquency is to adjust the tax load to the kind of land. A forest crop tax law so framed as to meet Minnesota conditions and promote private forestry is an example of this. It takes fifty years or more, depending on the species of tree, to grow saw timber. This is a long period for an individual to wait under the most favorable circumstances. It is, therefore, to be expected that the greater part of the forestry program in Minnesota will be carried on by the state and Federal governments. While state land is growing forests, a low rate of taxation, say 10 cents an acre, should be paid by the state to the county in which the state forest is located, because public land does not now pay taxes but does tend to increase the per capita cost of local government by making the settlements more widely scattered. Moreover, if the cut-over counties continue to lose tax-paying land at the present rate through resumption of title by the state over delinquent land, they will soon be in very serious straits financially and the remaining property owners will suffer severely from mounting tax rates.

Need of a Broad Tax Base

The demands of citizens for more, rather than less, public service and activity indicate decided limits to the possibilities of reduction of tax burdens through decreased public expenditure. This enhances the importance of giving careful consideration to the possible sources of revenue and their relative abilities to pay taxes in order to distribute the load. The widely prevailing tax delinquency in Minnesota is a warning that in many localities increasing general property tax rates will bring decreasing revenues in the near future, if that time has not

¹³ Report of the Minnesota Tax Commission, 1928, page 187.

already arrived in some counties. When the general property tax was first established as the principal basis of taxation in Minnesota, the possession of property was a fairly good indication of ability to pay taxes. Since that time the professional, mercantile, and manufacturing classes have been growing and the agricultural class has been declining in relative importance. Investments are no longer chiefly confined to tangible property. In the present organization of society large incomes are frequently earned with little or no ownership of taxable property. More and more money is being invested each year in securities subject only to the low 3-mill tax on money and credits.

Because of the inadequacy of the possession of property as a test of taxpaying ability, we ought to have a wide variety of taxes in order to decrease dependence on the general property tax. Under it the farmer is at a disadvantage in three ways. He can not earn his income without the ownership or rental of a large amount of real and personal property. He tends to reinvest surplus funds in farm property and thus increase his taxable wealth. His taxes are shifted slowly, if at all, to the purchaser of farm products because of the highly competitive nature of the farm business and because prices of most staple farm products are fixed in the world market. The general property tax works no better in the cities than it does in the country districts. A large part of the taxable wealth of cities in this state is composed of residence property. The need and use of housing accommodations are not necessarily commensurate with ability to pay taxes. At one time in England taxes were based on the number of windows in the home and thus the use of light was penalized. Under modern conditions, a system of local taxation which falls heavily on the house dweller and home owner without taking sufficiently into consideration wealth not in the form of tangible property or income not derived from its use is almost as crude and unscientific as the old window tax. The difficulty many cities are having in providing adequately for such fundamental necessities as good schools and well paved streets arises in part because the tax burden is not properly adjusted and not entirely because it is too heavy.

The state has made considerable progress in diversifying its forms of taxation, as is shown by Table I. Further progress in the same direction is needed. The abolition of the double liability of stockholders may induce more corporations to incorporate in Minnesota, thereby providing an additional source of revenue. Certain types of consumption taxes, such as the cigarette tax rejected by the 1927 legislature, are other possible sources. A suitable income tax would be a factor. A careful study of the problem would doubtless reveal other types of taxes well suited to present conditions and less likely to retard economic progress than further increases in the general property tax.