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## Staff Papers Series

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HOW FARM REAL ESTATE TAXES ARE CALCULATED IN MINNESOTA

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### **Department of Agricultural and Applied Economics**

University of Minnesota Institute of Agriculture, Forestry and Home Economics St. Paul, Minnesota 55108 HOW FARM REAL ESTATE TAXES ARE CALCULATED IN MINNESOTA

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by

#### Arley D. Waldo\*

Minnesota has a complex, classified property tax system. Different classes of property are assessed at different percentages of market value, and state-paid property tax credits reduce the tax liability of some property owners. This paper describes some of the basic features of the Minnesota property tax system and illustrates how net property taxes on farm real estate are calculated. The examples are based on provisions in effect for taxes levied in 1985 and payable in 1986.

#### PROPERTY CLASSIFICATION AND VALUATION

The first step in the property tax process is to determine the classification of all taxable property and to estimate its market value. This is the responsibility of local property tax assessors. Some local governments—townships and municipalities—may choose not to employ their own assessors. In such cases, the county is responsible for conducting the assessment at the expense of the local unit. In Minnesota, assessors are appointed, rather than elected, and must meet state certification requirements.

Nearly all personal property is exempt from taxation. Consequently, the Minnesota property tax is almost exclusively a tax on real property—land and structures. Property taxes provide nearly all of the <u>tax</u> revenue of local units of government. There is no state property tax.

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#### Classification

In general, real estate classified as agricultural land includes parcels of 10 acres or more used for agricultural purposes. This may include cropland, pastureland, timberland, waste and unusable land, and land withheld from use under federal farm programs. Parcels of less than 10 acres may also be classified as agricultural land if used primarily for agricultural rather than residential purposes. Farm real estate includes agricultural land, dwellings on agricultural land, and farm buildings and other structures.

Farm real estate which the assessor classifies as agricultural land is then listed as either homestead or nonhomestead property. If the principal residence of the owner is on the farm, the property is classified as homestead farm real estate. The homestead classification extends to each shareholder of a "family farm corporation" and each partner in a farm operation who is actively engaged in farming and resides on the land. Farmland need not be contiguous to qualify as homestead property. However, noncontiguous land cannot be farther than two townships (or cities) from the homestead. All farm real estate that does not qualify as homestead property is classified as nonhomestead agricultural property. For example, a farm leased to a tenant by an absentee owner would be classified as nonhomestead farm real estate.

#### Estimated Market Value

The property tax assessor is responsible for estimating the current market value of all taxable property. The assessor is to determine, as closely as possible, the actual market value of property using whatever appraisal methods he or she deems appropriate. Actual sales prices are used as one measure of the validity of estimated market value. Studies comparing assessors' estimated market value with actual sale prices are conducted by the Minnesota Department

of Revenue. In valuing farmland, the law also instructs assessors "to consider and give recognition to its earning potential as measured by its free market rental rate."

Property tax assessors obviously have a difficult job in estimating current market values when real estate prices are changing rapidly. The market for agricultural land is a leading example. From the mid-1970's to 1981, the estimated value of farmland per acre in Minnesota increased by about 250 percent. Today, farmland values are probably less than half their 1981 levels.

#### ASSESSED VALUATION

The assessed valuation of property is based on its classification, estimated market value, and the assessment ratios (percentages) established by state law. For a given class of property, the assessed (taxable) value of each parcel is calculated as follows:

Estimated x Assessment = Assessed Market Value x Ratio = Value

The total assessed valuation of a taxing jurisdiction represents its tax base (i.e., the tax base of a township, city, county, school district, or special district). Since taxing jurisdictions overlap, property will be subject to taxes levied by several different governmental units.

#### TAX RATES

Local units of government "certify" their property tax levies in dollars to the county auditor. The county auditor is then responsible for calculating property tax rates and determining the taxes payable for individual parcels of

property. Tax rates are calculated as follows:

For example, suppose a school district levies a property tax of \$500,000 and has a total assessed valuation of \$12,500,000. Its tax rate would be:

$$\frac{500,000}{12,500,000} = .040 = 40 \text{ mills}$$

Note that property tax rates are usually expressed in mills. A mill is 1/10 of 1 percent. A tax rate of 40 mills means that the tax is \$40 for each \$1,000 of assessed (not market) valuation. Property tax rates are often referred to as mill rates.

An individual parcel of property will be subject to taxes imposed by several different governmental units. Farm real estate will typically be taxed by the county, school district, and township in which the property is located. It may also be taxed by one or more special districts (e.g., soil and water conservation districts, watershed districts, etc.). For purposes of illustration, let's assume that the following tax rates apply to a particular farm:

Taxing Jurisdiction	Tax Rate
County	30 mills
School District	40 mills
Township	4 mills
Special Districts	<u> 1 mill</u>
Total Tax Rate	75 mills

#### GROSS AND NET PROPERTY TAXES

Suppose that a farm has an estimated market value of \$660,000 and an assessed value of \$116,240. If the tax rate is 75 mills, the gross tax on the farm will be:

Assessed Value	х	Tax Rate	=	Gross Tax
\$116,240	x	.075	=	\$8,718

The gross tax on farm real estate will be reduced by one or more state-paid property tax credits to arrive at the net property tax payable by the owner. The two most important credits are the state school agricultural credit and the homestead credit. One or more additional credits may apply in certain instances.

#### EXAMPLE: HOMESTEAD FARM REAL ESTATE

To illustrate how the net property tax on a farm homestead is calculated, let's consider a 640 acre farm where the value of the farmland, farm buildings, and other structures is estimated by the assessor to average \$1,000 per acre and the homestead dwelling is valued at \$20,000. The 1985 estimated market value of the farm for taxes payable in 1986 is then:

	Assessor's Estimated Market Value
House, Garage, and 1 Acre	
House (including garage) One Acre (on which house is locat	\$20,000 ted) 1.000

\$21,000

Total

First 320 Acres (excluding house, garage, and 1 acre)	
Included in Homestead Base Excess over Homestead Base Total	\$ 43,000 \$276,000 \$319,000
Remaining Acres Over 320	·
320 Acres	\$320,000
Total Estimated Market Value	
House, garage, and 1 acre First 320 acres (excluding house, garage, and 1 acre	\$ 21,000
Included in Homestead Base Excess over Homestead Base	\$ 43,000 \$276,000
Remaining 320 Acres Total	\$320,000 \$660,000

The reason for dividing the estimated market value of the farm into these components is because two different assessment ratios apply to homestead farm real estate and because of the way in which the state school agricultural credit is calculated. This will become apparent as we go along.

#### Assessed Value

The assessed value of property, as noted earlier, is calculated as a percentage of the assessor's estimated market value. These percentages are referred to as assessment or classification ratios. Assessment ratios are set by state law. For taxes payable in 1986, the assessment ratios for agricultural homestead real estate are:

	Assessment Ratio
****	
First \$64,000 of market value Excess market value over \$64,000	14% 18%

The lower assessment ratio applies to what is known as the homestead base value. Under current state law, the homestead base value is adjusted automatically each year to reflect statewide changes in property values.

In our example, assessed value is calculated as follows:

House, Gara	ge, and 1 Acre		
Multi	ated Market Value plied by: Assessment s: Assessed Value	Ratio	\$21,000 .14 \$ 2,940
First 320 A and 1 acr	cres (excluding house	, garage,	
Inclu	ded in Homestead Base		
Multi	ated Market Value plied by: Assessment s: Assessed Value	Ratio	\$43,000 .14 \$ 6.020
Exces	s Over Homestead Base		
Multi	ated Market Value plied by: Assessment s: Assessed Value	Ratio	\$276,000 .18 \$ 49,680
Total	Assessed Value		
Exces	ded in Homestead Base s over Homestead Base otal		\$ 6,020 49,680 \$ 55,700
Remaining A	cres Over 320		
Multi	ated Market Value plied by: Assessment s: Assessed Value	Ratio	\$320,000 .18 \$ 57,600
Total Asses	sed Value		
Next Remai	e, Garage, and 1 Acre 319 Acres ning 320 Acres otal		\$ 2,940 55,700 57,600 \$116,240

Note that the lower assessment ratio (14 percent) applies to the value of the house, garage, and one acre plus any additional value up to the homestead base value of \$64,000. In this example, the estimated market value of the house, garage, and one acre is \$21,000; therefore an additional \$43,000 of estimated market value is assessed at the 14 percent rate (\$64,000 - \$21,000 = \$43,000). All estimated market value in excess of \$64,000 is assessed at the higher rate (18 percent).

#### Gross Property Tax

The gross property tax on the farm is its total assessed value multiplied by the property tax rate. Let's assume in this example that the local property tax rate is 75 mills (i.e., the tax is 7.5 percent of the farm's assessed value). The gross tax before the subtraction of property tax credits is:

House, Garage, and 1 Acre	
Assessed Value	\$ 2,940
Multiplied by: Tax Rate	.075
Equals: Gross Tax	\$ 220.50
First 320 Acres (excluding house, garage, and 1 acre)	
Assessed Value	\$ 55,700
Multiplied by: Tax Rate	.07:5
Equals: Gross Tax	\$4,177.50
Remaining Acres Over 320	
Assessed Value	\$ 57,600
Multiplied by: Tax Rate	.075
Equals: Gross Tax	\$4,320.00
Total Gross Tax	
House, Garage, and 1 Acre	\$ 220.50
Next 319 Acres	4,177.50
Remaining 320 Acres	4,320.00
Total	\$8,718.00

#### State School Agricultural Credit

All farm real estate, both homestead and nonhomestead, is eligible to receive a state-paid school agricultural credit. This credit reduces the property tax liability of the owners of farmland. The credit is calculated as a percentage of the gross tax. The amount of this credit is paid directly to local school districts by the state. For taxes payable in 1986, the state school agricultural credit for homestead farm real estate is:

Applies to Tax on:	Percent of Gross Tax
First 320 Acres (excluding house, garage, and 1 acre)	36%
Excess Over 320 Acres	26%

The school agricultural credit in this example is calculated as follows:

First 320 Acres	(excluding	house,
garage, and 1	acre)	
Gross Tax		
Multiplied	by: Perce	ent Credit

# Gross Tax \$4,177.50 Multiplied by: Percent Credit .36 Equals: School Agricultural Credit \$1,503.90

#### Remaining Acres Over 320

Gross Tax		\$4,320.00
Multiplied by:	Percent Credit	.26
	Agricultural Credit	\$1,123.20

#### Total School Agricultural Credit

House, Garage, and 1 Acre	\$ 0
Next 319 Acres	1,503.90
Remaining 320 Acres	1,123.20
Total	\$2,627.10

Note that the school agricultural credit does not apply to the tax on the house, garage, and one acre.

#### Property Tax after School Agricultural Credit

Gross Property Tax on Farm \$8,718.00

Minus: School Agricultural Credit 2,627.10

Equals: Tax after Credit \$6,090.90

#### Homestead Credit

Homestead farm real estate receives the same state-paid homestead credit as nonagricultural homesteads. This credit is calculated as a percentage of the property tax liability remaining after subtraction of the state school agricultural credit. For taxes payable in 1986, the homestead credit is 54 percent of the tax up to a maximum credit of \$700. In this example, the homestead credit is:

Tax after School Agricultural Credit \$6,090.90
Multiplied by: Percent Credit .54
Equals \$3,289.09

Since this amount exceeds \$700, the farm in this example would receive the maximum credit of \$700.

#### Net Property Tax

The net property tax payable on the farm in this example is:

Gross Property Tax \$8,718.00
Minus: School Agricultural Credit 2,627.10
Minus: Homestead Credit 700.00
Equals: Net Property Tax \$5,390.90

The "effective" tax rate--net tax as a percentage of estimated market value--in this example is:

$$\frac{\text{Net Property Tax}}{\text{Estimated Market Value}} = \frac{\text{Effective}}{\text{Tax Rate}}$$

$$\frac{\$ 5,390.90}{\$660,000.00}$$
 = .0082 = 0.82%

This example does not take into account any additional property tax credits which may apply to certain parcels of real estate. Other credits include the wetlands credit, native prairie credit, disaster credit, agricultural preserves credit, etc. Special tax provisions apply to the homesteads of blind and disabled persons.

#### EXAMPLE: NONHOMESTEAD FARM REAL ESTATE

To show how the net property tax on nonhomestead farm real estate is calculated, let's use the same farm as an example. Now, however, we will assume that the owner does not live on the farm and that the farm is rented to a tenant. Therefore, the farm does not qualify as homestead property.

As before, we will consider a 640 acre farm where the value of the farmland and farm buildings and structures is estimated by the assessor to average \$1,000 per acre and the farm dwelling is valued at \$20,000. The 1985 estimated market value of the farm for taxes payable in 1986 is then:

	Assessor's Estimated  Market Value
House, Garage, and 1 Acre	
House (including garage) One Acre (on which house is located)	\$20,000 1,000
Total	\$21,000

#### Remaining Acres

639 Acre	S	
Total Estimate		

House, Garage, and 1 Acre	\$ 21,000
Remaining 639 Acres	639,000
Total	\$660,000

The total estimated market value is the same as in the example for a farm homestead. The tax calculation is simpler in this case because non-homestead farm real estate receives the same percentage state school agricultural credit regardless of the number of acres and because there is no homestead credit.

#### Assessed Value

For taxes payable in 1986, the assessment ratio for nonhomestead farm real estate is 18 percent. In this example, assessed value is calculated as follows:

#### House, Garage, and 1 Acre

Total

Estimated Market Value	\$ 21,000
Multiplied by: Assessment Rati	.18
Equals: Assessed Value	\$ 3,780
Remaining 639 Acres	
Estimated Market Value	\$639,000
Multiplied by: Assessment Rati	.18
Equals: Assessed Value	\$115,020
Total Assessed Value	
House, Garage, and 1 Acre	\$ 3,780
Remaining 639 Acres	115,020

\$118,800

Although the assessment ratio for nonhomestead farm real estate is the same regardless of farm size, this example separates out the assessed value of the farm dwelling, garage, and one acre because the state school agricultural credit does not apply to the tax on this portion of total estimated market value.

#### Gross Property Tax

As before, the gross property tax on the farm is its total assessed value multiplied by the local property tax rate. Again, we will assume the property tax rate is 75 mills. The gross property tax before the subtraction of property tax credits is:

#### House, Garage, and 1 Acre

Assessed Value Multiplied by: Tax Rate Equals: Gross Tax	\$ 3,780 .075 \$ 283.50
Remaining 639 Acres	
Assessed Value Multiplied by: Tax Rate Equals: Gross Tax	\$ 115,020 .075 \$8,626.50
Total Gross Tax	
House, Garage, and 1 Acre	\$ 283.50

#### State School Agricultural Credit

Total

Remaining 639 Acres

Nonhomestead farm real estate is eligible to receive the state school agricultural credit. For taxes payable in 1986 the credit is 26 percent of the gross property tax, excluding the tax on the house, garage, and one acre. The percentage credit is the same regardless of the size of

 $\frac{8,626.50}{$8,910.00}$ 

the farm. Recall that the credit for the first 320 acres of homestead farm real estate (excluding the house, garage, and one acre) was 36 percent.

The school agricultural credit in this example is:

### 640 Acres (excluding house, garage and 1 acre)

Gross Tax			\$8,626.50
Multiplie	d by:	Percent Credit	.26
Equals:	School	Agricultural Credit	\$2,242.89

#### Net Property Tax

The net property tax payable on the farm in this example is:

Gross Pi	coperty	Tax		\$8,910.00
Minus:	School	Agricultural	Credit	2,242.89
Equals:	Net Pi	coperty Tax		\$6,667.11

The effective tax rate is:

$$\frac{\$ 6,667.11}{\$ 660,000.00} = .0101 = 1.01\%$$

Again, this example does not take into account any other property tax credits which may apply to specific parcels of property.

Note that the effective tax rate on nonhomestead farm real estate is higher than the tax rate on homestead farm real estate—in these examples, 1.01 percent for nonhomestead property as compared with 0.82 percent for homestead property. The difference is due to the homestead credit, the higher school agricultural credit that applies to homestead farm real estate, and the difference in assessment ratios.

#### CONCLUDING NOTE

In Minnesota, local units of government levy property taxes--often subject to levy limitations imposed by state law. Local property tax levies relative to the property tax base determine the property tax rate. All property within a given taxing jurisdiction is subject to the same local tax rate. However, the effective tax rate on different classes of property will vary because of differences in assessment ratios and in state provisions for property tax credits. And the composition of the local tax base will also affect the distribution of property tax burdens among different classes of property.

The purpose of this paper was to illustrate how property taxes on farm real estate are calculated. These examples are based on provisions in effect for taxes payable in 1986. Keep in mind that property tax provisions are frequently changed by the legislature.