

# REVIEW OF AGRICULTURAL LAND VALUATION PROCEDURES

Office of State Tax Commissioner  
Cory Fong, Tax Commissioner

August 2007

As a result of the passage and approval of House Bill 1303, the Property Tax Division of the Office of State Tax Commissioner will be conducting a review of the valuation procedure used by each county to determine the value for agricultural land. The following is a brief narrative of the components each county will be required to provide to the Property Tax Division. If the requested material is not available, documentation from the Director of Tax Equalization stating the reason why will be required in its place.

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## Valuation schedule

A valuation schedule lists the total taxable acres for each mapping unit/soil classification for a county, and the Mapping Unit/Soil Classification (MU/SC's) corresponding price per acre. The method by which the MU/SC are indexed must accompany the schedule, as well as the source. This source may be crop yield, animal unit month, or a determination of a county soil committee.

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## Modifiers

A modifier adjusts the value per acre for a MU/SC that has a limitation on its productive capability. A list of modifiers should include a detailed description of each modifier and the MU/SC that is primarily affected by the limiting condition. Modifiers are applied in percentage per acre. A limit to the total percent of modification per parcel should be established.

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## Consideration of use

The actual use of agricultural land must be considered when determining the final value of a parcel. The source of the land use can be obtained from Farm Service Agencies, aerial photographs, and local assessment inspections. An explanation of how an adjustment for use is applied to a parcel should accompany the parcel data sheet.

To complete the review of agricultural land valuation procedure, each county will be asked to provide the following information for selected townships to ensure this method of valuation is being implemented consistency throughout the county.

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### **Data sheets or property records**

A parcel data sheet or property record includes information relevant to the valuation of a specific parcel. The information should include:

1. The legal description of the parcel
2. Acreage – deeded, taxable, and exempt
3. Mapping units/soil classification
4. Acreage of mapping units/soil classifications
5. Value per acre for mapping units/soil classification
6. Acreage, modifier name, and percentage of acres subject to modification
7. Total valuation

Some counties already have property tax programs that can generate a data sheet, while others may use a property card that is updated by writing in changes by hand. A Microsoft Excel spreadsheet or Microsoft Access database may also be means for generating these records.

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### **Soil maps for selected townships**

Maps of selected townships that show the MU/SC by color coding, the parcel boundaries, and actual use will be requested. Such maps may be computer generated with use of a Geographic Indexing System, or can be copies of maps from the soil survey book that have been colored.

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### **Certification of compliance or noncompliance**

Completion of the review will be followed by letter of compliance. Prior to 2010 this letter will be sent to the County Director of Tax Equalization, and the Board of County Commissioners. Any county that has not completed the required components for compliance will be notified and provided with direction as to how compliance may be attained.

The components for compliance are:

1. Implementation of soil survey method of valuation
2. Implementation of approved modifiers
3. Implementation of use consideration

Beginning with the 2010 tax year and after, the North Dakota State Treasurer must be informed as to which counties are not in compliance with the provisions established by HB 1303, and instructed to withhold five percent of that county's state aid distribution each month.



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1. Valuation schedule for soils
2. Modifiers
3. Consideration of use
4. Data sheets or property records for all parcels within selected townships
5. Soil maps for selected townships
6. Certification of compliance or noncompliance
  - Prior to 2010
  - 2010 and after

**1. Valuation schedule for soils (See Attachment #1)**

- Total taxable acres for each mapping unit/soil classification for county
- Index of mapping unit/soil classification
  - Source of index
  - Crops chosen
  - Other
- Explanation of methodology used to apply indexes
  - Example: average of yields
  - Involvement of county soils committee
  - Adjustments made to specific mapping units/soil classifications
    - Example: mapping unit in Region A is prone to water retention, while in Region B it is well drained. The mapping unit will have both wet and dry phases and associated indexes
    - Evidence of uniform application throughout county

**2. Modifiers**

- Detailed description and explanation of each modifier used
- Mapping unit/soil classification primarily affected
- Percentage applied per acreage
- Maximum percent adjustment per parcel

**3. Consideration of use**

- Source for determining use as cropland, noncropland, other
  - Farm Service Agency
  - Aerial Photographs
  - Verification with property owner
  - Local assessment official inspection
  - Other
- Explanation of division between cropland, noncropland, other
- Explanation of how adjustment for use consideration is made to each parcel



**4. Data sheets or property records for all parcels within selected townships (See Attachment #2)**

- Legal description
- Acreage – deeded, taxable, and exempt
- Mapping units/soil classification
- Acreage of mapping units/soil classifications
- Value per acre for mapping units/soil classification
- Acreage, modifier name, and percentage of acres subject to modification
- Total valuation

**5. Soil maps for selected townships (two or more) (See Attachment #3)**

- Mapping units/soil classification – preferably color coded
- Parcel boundaries – an overlay on soil map
- Use – cropland or noncropland
- List of mapping units/soil classification
- Description - association of classes
  - Based on use
  - Based on land capability rating – Soil Survey

**6. Certification of compliance or noncompliance – North Dakota Office of State Tax Commissioner**

- Prior to 2010
  - Compliance
    - Checklist
      - ◆ Implementation of soil survey method of valuation
      - ◆ Implementation of approved modifiers
      - ◆ Implementation of use consideration
    - Officials notified
      - ◆ County Director of Tax Equalization
      - ◆ Board of County Commissioners

- Noncompliance
  - Checklist – areas of noncompliance
    - ◆ Implementation of soil survey method of valuation
    - ◆ Implementation of approved modifiers
    - ◆ Implementation of use consideration
  - Directions for attaining compliance
  - Officials notified
    - ◆ County Director of Tax Equalization
    - ◆ Board of County Commissioners
- 2010 and after
  - Certificate of compliance
    - County Director of Tax Equalization
    - Board of County Commissioners
    - Documentation – North Dakota Office of State Tax Commissioner
  - Certificate of noncompliance
    - County Director of Tax Equalization
    - Accompanied by directions to attain compliance
    - Board of County Commissioners
    - North Dakota State Treasurer
    - Accompanied by instructions for withholding funds
    - Documentation – North Dakota Office of State Tax Commissioner
  - Spot check of compliance
    - Documentation – North Dakota Office of State Tax Commissioner

**METHOD I: AVERAGE OF YIELDS****EXAMPLE 1: Data Sheet****Acres and Yields**

Mapping unit	County acres	Yields per Acre						AUMs
		Wheat	Flwrs	Beets	Soy beans	Hay	Corn	
BbD2	2,909	14	---	---	---	1.20	---	---
Br	1,992	---	---	---	---	---	---	1.95
Br(i)	300	inundated						---
Co	1,926	32	1,350	14.50	20	2.60	61	---
Co(i)	150	inundated						---
EmB	1,601	24	1,100	---	19	1.90	58	---
Ey	1,595	---	---	---	---	---	---	0.30
Gr	10,587	39	1,700	16.00	27	3.10	89	---
Lp	1,724	45	2,000	20.00	33	3.60	99	---
Water	2,284	inundated						---
Total	25,068							

County Average Values	
Cropland value per acre	\$451.76
Noncropland value per acre	\$81.88
Inundated value per acre	\$8.19
Agricultural value per acre	\$367.25

- NDSUc County average value per acre of cropland calculated by NDSU  
 NDSUn County average value per acre of noncropland calculated by NDSU  
 NDSUi Ten percent of NDSU noncropland value per acre  
 NDSUav County average agricultural value per acre as calculated by NDSU  
 Co.YIc County yield index for cropland  
 Co.YIn County yield index for noncropland  
 Co.YIi County yield index for inundated land



1	2	3	4	5	6	7
Mapping unit	Avg YI	Acres	Product	\$ per Ac	Proof	Adj \$
				<u>\$451.76</u>		<u>\$367.25</u>
			<i>Col. 2</i>	<i>x Col. 2</i>	<i>Col. 5</i>	<i>x Col. 5</i>
Cropland			<i>x Col. 3</i>	<i>÷ Co YIc</i>	<i>x Col. 3</i>	<i>÷ Av per Ac</i>
BbD2	0.3222	2,909	937	197.15	573,509	206.59
Co	0.6759	1,926	1,302	413.58	796,555	433.38
EmB	0.5546	1,601	888	339.36	543,315	355.61
Gr	0.8492	10,587	8,990	519.62	5,501,217	544.50
Lp	1.0000	1,724	1,724	611.89	1,054,898	641.19
Cropland subtotals		18,747	13,841		8,469,494	
Co. YIc <i>(Sum product ÷ Sum acres)</i>			0.7383			
			Crp \$ per Ac		451.78	
				<u>\$81.88</u>		
				<i>x Col. 2</i>		
				<i>÷ Co YIn</i>		
Noncropland						
Br	1.0000	1,992	1,992	131.30	261,550	137.59
Ey	0.1538	1,595	245	20.19	32,203	21.16
Noncropland subtotals		3,587	2,237		293,753	
Co. YIn <i>(Sum product ÷ Sum acres)</i>			0.6236			
			NC \$ per Ac		81.89	
				<u>\$8.19</u>		
				<i>x Col. 2</i>		
				<i>÷ Co YIi</i>		
Inundated land						
Br(i)	1.0000	300	300	8.19	2,457	8.58
Co(i)	1.0000	150	150	8.19	1,229	8.58
Water	1.0000	2,284	2,284	8.19	18,706	8.58
Inundated subtotals		2,734	2,734		22,392	
Co. YIi <i>(Sum product ÷ Sum acres)</i>			1.0000			
			Inun \$ per Ac		8.19	
County Totals		25,068			8,785,639	
Average value per Acre					350.47	



Feb 28, 2007

## Rural Land Owner - Data Sheet for 2006

39000000990000

School 39

County

Taxable Acres 159.96

Fire 18

Parcel

39000000990000 990

Park 0 None

Township

39.0002 131-86 Township

Legal Description:

Section

1NE

Twp 131

Range 86

01-131-086 S1/2NE-L 1-2

QDesc

From Both

QQDesc

Map Number 0

Soil Type	Modifiers	Soil Class	Reduction Percentage	Modified Value	Taxable Acres	Value of Land
1B	AMOR LOAM (\$222.21 / \$0)					
MOD	UNCROPABLE		15	\$188.88	1.60	\$302.21
UNMOD	CROPLAND			\$222.21	4.58	\$1,017.72
					6.18	\$1,319.93
1C	AMOR LOAM (\$191.09 / \$0)					
MOD	UNCROPABLE		15	\$162.43	10.20	\$1,656.75
UNMOD	CROPLAND			\$191.09	11.54	\$2,205.18
					21.74	\$3,861.93
5D	AMOR-CABBA LOAMS (\$0 / \$94.09)					
NON	NONCROP			\$94.09	19.45	\$1,830.05
					19.45	\$1,830.05
6B	ARNEGARD LOAM (\$293.3 / \$0)					
MOD	UNCROPABLE		15	\$249.31	4.30	\$1,072.01
UNMOD	CROPLAND			\$293.30	24.32	\$7,133.06
					28.62	\$8,205.07
80C	VEBAR FINE SANDY LOAM (\$0 / \$123.55)					
NON	NONCROP			\$123.55	68.51	\$8,464.41
					68.51	\$8,464.41
84D	VEBAR-FLASHER COMPLEX (\$0 / \$93.47)					
NON	NONCROP			\$93.47	15.46	\$1,445.05
					15.46	\$1,445.05
**Modified Price Per Acre and Total				\$156.91	159.96	\$25,100.00

## Acre Totals by Modifier Type

CROPLAND (U)	40.44
NONCROP (P)	103.42
UNCROPABLE (M)	16.10



