

Testimony

North Dakota Agricultural Land Valuation Model, NDSU's Role

**North Dakota Legislature
House Agriculture Committee
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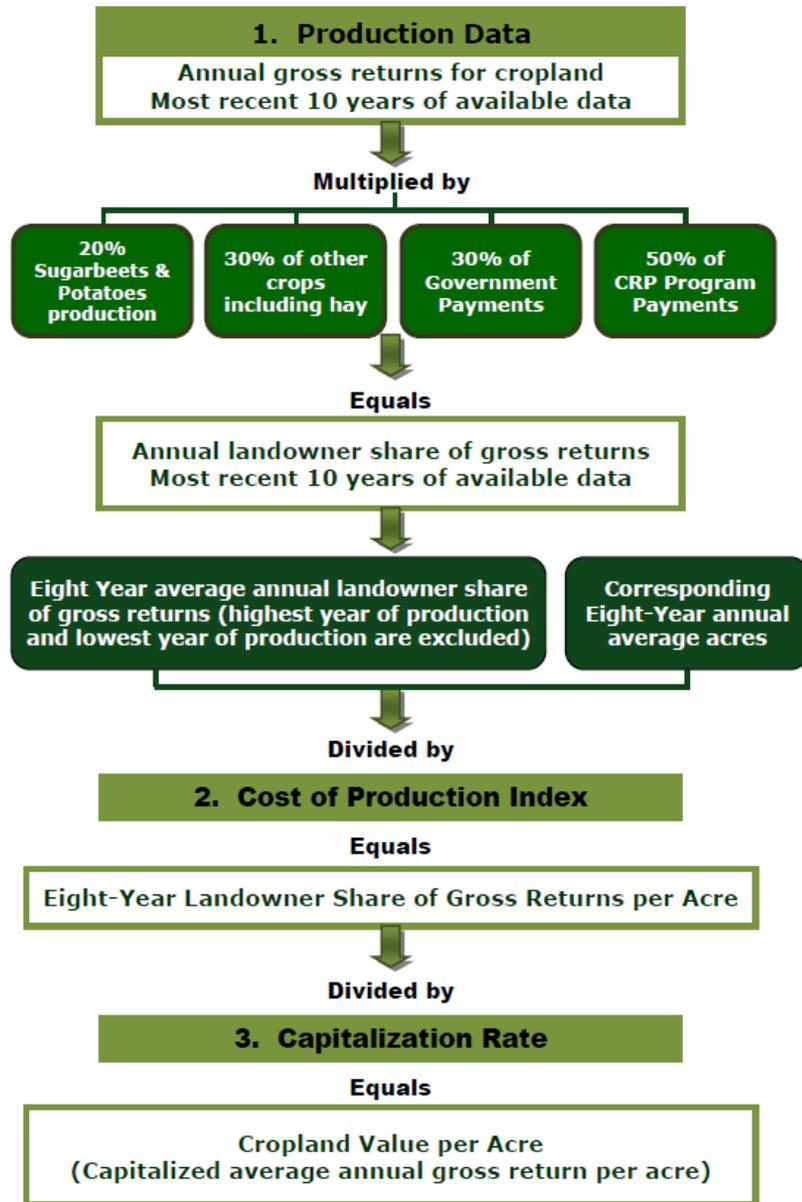
North Dakota Century Code

57-02-27.2. Valuation and assessment of agricultural lands.

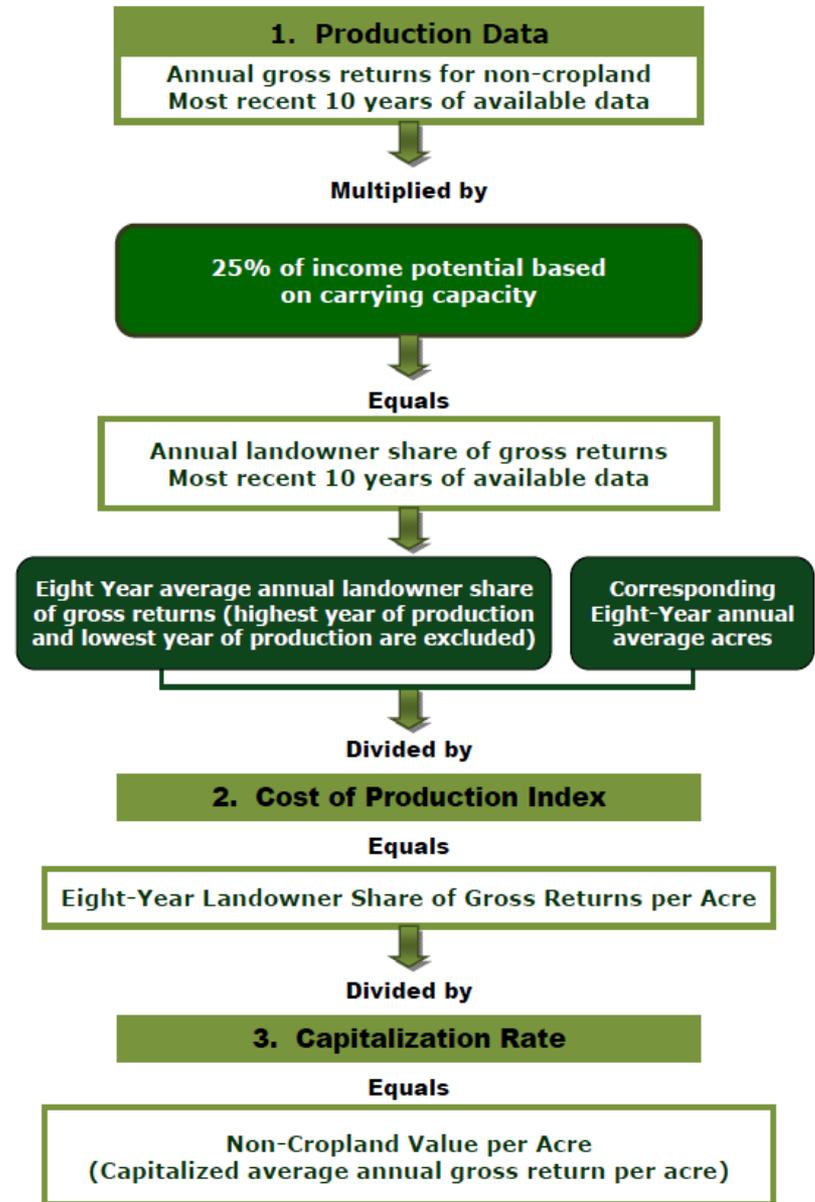
“The **department of agribusiness and applied economics of North Dakota state university** shall compute annually an estimate of the average agricultural value per acre of agricultural lands on a statewide and on a countywide basis; shall compute the average agricultural value per acre for cropland, noncropland, and inundated agricultural land for each county; and shall provide the tax commissioner with this information by December first of each year.”

The formula is set in statute by the North Dakota Legislature

Calculation for Cropland Value



Calculation for Non-Cropland Value



Valuation and Assessment of Agricultural Land

- Agricultural value is defined as the “capitalized average annual gross return”
- Annual gross return for:
 - Cropland growing sugar beets or potatoes equals 20 percent of annual gross income produced
 - Cropland growing all other crops equals 30 percent of annual gross income produced
 - Irrigated production is reduced by 50 percent before applying the 20 or 30 percent calculation
 - Land used for grazing equals 25 percent of annual gross income potential based upon animal unit carrying capacity of the land

Estimating the Value of Native Rangeland and Pasture

- Estimating the value of native rangeland and pasture involves estimating the value of calves and cull cows produced per acre of those lands. These estimates are based on the livestock carrying capacity, measured in animal unit months (AUMs). One AUM is assumed to be enough grazing capacity to support a 1,000 pound cow and her calf for one month.

Capitalization Rate

- The data is used to develop the interest rate to be used to capitalize the landlord share of gross revenue. It is the set of annual average land loan interest rates for the average risk borrower in ND. The interest rate that is developed is based on the last 12 years, with the high year and the low year dropped (Olympic average), so the rate that results is the average of the ten remaining years.

(Senior Asset/Liability Analyst, AgriBank, FCB, St. Paul, MN)

Cost of Production Index

- An index of prices paid for items used for production, interest, taxes and wage rates
- From the Economic Research Service (ERS) of the USDA.
- Reduces the landowners share of gross return

Results of Calculations

- Three numbers are calculated for each the 53 counties.
 - Cropland value
 - Non-cropland value
 - Weighted value based on the acres of cropland and non-cropland in the county
- Each Dec. 1st the results are sent the State Supervisor of Assessments & Property Tax Division Director for review. The tax department certifies the results and sends the results to each county.
- It is now in the counties hands and the job of NDSU is done.

Thank you

NDSU NORTH DAKOTA
STATE UNIVERSITY

Any Questions?

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