

# Farmland Assessment 101 & What's to come

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# Overview

- History of Property Assessment
- Farmland Assessment Law
- Farmland Valuation
- Legislative Change:
  - *and what's to come*

# Property Assessment and Taxation



## History



# History of Property Tax in Illinois

## **1818-1932 State-levied property tax**

- All property, personal and real taxed.

*Originally property taxes were collected/used only by State government.*

## **1932 Local property taxes**

- *State last levied a property tax in 1932* and replaced lost revenue with a state sales tax.
- Local governments continued to levy and collect tax on property as their main source of revenue.



# History of Property Tax in Illinois

Real Property = land/permanent attachments

Personal Property = all non-real property

- Eliminated for individuals in 1969
- Eliminated in 1979 for business entities, but now pay a replacement tax on income or invested capital.



# Property Tax Basis

Based on the Value of Property  
Owned

First constitution in 1818 - levy  
taxes based on valuation -  
every person shall pay property  
tax in proportion to the value  
of property owned



# Ratio of equalized assessed value to sale price:

- 1818-1930 direct proportion to value
- 1930s changed to 55%
- 1970 changed to 50%
- 1975 changed to 33.33%

## Historic Level of Assessment



# VALUATION

## Three Basic Approaches

- Cost Approach
- Sales Comparison Approach
- Income Capitalization Approach



# FARMLAND ASSESSMENT ACT

- Original enactment in 1977
  - Began to move away from fair cash market valuation to agricultural use valuation in assessing farmland for property tax purposes.
  - Moved towards identifying land use to determine value.
  - Established a formula to determine productivity and assessed value.



# OTHER STATES

- Most states use a farmland assessment program
- Many of those use Illinois' farmland assessment model

# Farmland Assessment



## Administration



# Administrative Responsibilities

- Illinois Department of Revenue
  - Calculates/certifies use-value assessment
  - Guidelines for compliance
- County Farmland Assessment Review Committee
  - Review use-value data
  - Review county assessment practices
  - Hold a public hearing (use value data & assess plan)
- Local Assessing Officials
  - Township/multi-township assessor
  - Chief County Assessment Officer (CCAO)



# Administrative Responsibilities

- **County Boards of Review**
  - Evaluates all assessments (including farmland)
  - Change assessments (made improperly)
  - Appeals from landowners (makes adjustments)
  
- **IL Property Tax Appeal Board (PTAB)**
  - Appeals by property owners
  - Complaints by farmland assessment review committee
  - Decision final not subject to administrative review by court



# Farmland Assessment



## Applying the Law



# Farmland Assessment Law

Farm parcels divided into four parts:

- Farm Homesite - land used residentially
  - market value, BoR, State Equalization
- Farm Residence
  - market value, BoR, State Equalization
- Farm Buildings
  - contributory value, BoR
- Farmland
  - use value, BoR





# LAND USE CATEGORIES

- **Cropland** – All lands from which crops are harvested or hay cut; lands in vineyards, nursery and greenhouse crops.
- **Permanent Pasture** - Includes pasture land except woodland pasture, & pasture qualifying under cropland (ex-rotational pasture)
- **Other Farmland** – Woodland pasture, woodland including woodlots, timber tracts, & land in forestry program.
- **Wasteland** – Land not put into above categories. Not a result of management decision. Ex - creeks, streams, ponds





# Land Use - Valuation

- **Cropland** - Valuation foundation. Assessed according to EAV of soil productivity index - certified by IDOR
- **Permanent Pasture** - Assessed at 1/3 its debased PI EAV as cropland
- **Other Farmland** - Assessed at 1/6 its debased PI EAV as cropland
- **Wasteland** - Assessed on contributory value to other farmland - assessed 1/6 value.



# Illinois Soils by Productivity Index (PI)

PI  
Range:

82

130

Certified Values for Assessment Year 2016 (\$ per acre)						
Average Management PI	Gross Income	Non-Land Production Costs	Net Land Return	Agricultural Economic Value	Equalized Assessed Value	* 2016 Certified Value
82	\$607.82	\$493.30	\$114.53	\$2,164.95	\$721.65	\$52.45
83	\$613.96	\$496.85	\$117.11	\$2,213.78	\$737.93	\$54.06
84	\$620.09	\$500.40	\$119.69	\$2,262.61	\$754.20	\$55.67
85	\$626.23	\$503.95	\$122.28	\$2,311.44	\$770.48	\$57.34
86	\$632.36	\$507.50	\$124.86	\$2,360.27	\$786.76	\$59.02
87	\$638.49	\$511.05	\$127.44	\$2,409.10	\$803.03	\$60.63
88	\$644.63	\$514.60	\$130.02	\$2,457.93	\$819.31	\$62.13
89	\$650.76	\$518.15	\$132.61	\$2,506.77	\$835.59	\$68.33
90	\$656.90	\$521.70	\$135.19	\$2,555.60	\$851.87	\$74.73
91	\$663.03	\$525.26	\$137.77	\$2,604.43	\$868.14	\$81.14
92	\$669.16	\$528.81	\$140.36	\$2,653.26	\$884.42	\$87.54
93	\$675.30	\$532.36	\$142.94	\$2,702.09	\$900.70	\$93.95
94	\$681.43	\$535.91	\$145.52	\$2,750.92	\$916.97	\$100.36
95	\$687.57	\$539.46	\$148.11	\$2,799.75	\$933.25	\$106.76
96	\$693.70	\$543.01	\$150.69	\$2,848.59	\$949.53	\$113.16
97	\$699.83	\$546.56	\$153.27	\$2,897.42	\$965.81	\$119.56
98	\$705.97	\$550.11	\$155.86	\$2,946.25	\$982.08	\$125.95
99	\$712.10	\$553.66	\$158.44	\$2,995.08	\$998.36	\$133.06
100	\$718.24	\$557.21	\$161.02	\$3,043.91	\$1,014.64	\$142.74
101	\$724.37	\$560.76	\$163.61	\$3,092.74	\$1,030.91	\$152.98
102	\$730.50	\$564.31	\$166.19	\$3,141.57	\$1,047.19	\$163.51
103	\$736.64	\$567.87	\$168.77	\$3,190.40	\$1,063.47	\$174.14
104	\$742.77	\$571.42	\$171.36	\$3,239.24	\$1,079.75	\$183.86
105	\$748.91	\$574.97	\$173.94	\$3,288.07	\$1,096.02	\$192.14
106	\$755.04	\$578.52	\$176.52	\$3,336.90	\$1,112.30	\$200.53
107	\$761.17	\$582.07	\$179.11	\$3,385.73	\$1,128.58	\$208.85
108	\$767.31	\$585.62	\$181.69	\$3,434.56	\$1,144.85	\$216.34
109	\$773.44	\$589.17	\$184.27	\$3,483.39	\$1,161.13	\$223.69
110	\$779.58	\$592.72	\$186.85	\$3,532.22	\$1,177.41	\$231.12
111	\$785.71	\$596.27	\$189.44	\$3,581.06	\$1,193.69	\$240.51
112	\$791.84	\$599.82	\$192.02	\$3,629.89	\$1,209.96	\$250.99
113	\$797.98	\$603.37	\$194.60	\$3,678.72	\$1,226.24	\$261.65
114	\$804.11	\$606.92	\$197.19	\$3,727.55	\$1,242.52	\$272.51
115	\$810.25	\$610.48	\$199.77	\$3,776.38	\$1,258.79	\$283.50
116	\$816.38	\$614.03	\$202.35	\$3,825.21	\$1,275.07	\$294.72
117	\$822.51	\$617.58	\$204.94	\$3,874.04	\$1,291.35	\$306.09
118	\$828.65	\$621.13	\$207.52	\$3,922.87	\$1,307.62	\$317.60
119	\$834.78	\$624.68	\$210.10	\$3,971.71	\$1,323.90	\$329.33
120	\$840.92	\$628.23	\$212.69	\$4,020.54	\$1,340.18	\$347.44
121	\$847.05	\$631.78	\$215.27	\$4,069.37	\$1,356.46	\$394.19
122	\$853.18	\$635.33	\$217.85	\$4,118.20	\$1,372.73	\$438.47
123	\$859.32	\$638.88	\$220.44	\$4,167.03	\$1,389.01	\$453.64
124	\$865.45	\$642.43	\$223.02	\$4,215.86	\$1,405.29	\$475.48
125	\$871.59	\$645.98	\$225.60	\$4,264.69	\$1,421.56	\$522.88
126	\$877.72	\$649.53	\$228.19	\$4,313.52	\$1,437.84	\$571.59
127	\$883.85	\$653.09	\$230.77	\$4,362.36	\$1,454.12	\$621.63
128	\$889.99	\$656.64	\$233.35	\$4,411.19	\$1,470.40	\$642.69
129	\$896.12	\$660.19	\$235.93	\$4,460.02	\$1,486.67	\$662.80
130	\$902.26	\$663.74	\$238.52	\$4,508.85	\$1,502.95	\$683.13

The 5-year capitalization rate is 5.29% percent.

# Income Capitalization Formula

**Gross Income**

- Non-land expenses

Net Return to Land

**Net Return to Land**

/ Capitalization rate

Agriculture Economic Value



**Agriculture Economic Value**

X .3333

Equalized Assessed Value



# Data Supporting Calculation

- Commodity Prices
- Non-land Production Cost
  - Seed, fertilizer, fuel
  - Labor, storage
- Farm Mortgage Interest Rate



# Five-Year Running Averages

- Gross incomes, production costs & Interest rates used in formula are 5-yr running averages. Balances year-to-year variations.
- Allows for data collection & utilization. Lags 2 years behind assessment year.
- 2017 assessments incorporate data from 2011 - 2015.



# Calculated Values

- Formula produces “*Calculated Values*” for each soil type based on its Productivity Index.
- **Calculated Values** used to determine assessed value of farmland for tax purposes until 1986.



# Certified Values

- 1986 amendment to the law limited the change in farmland assessments for each PI to 10% a year.
- IDOR applies 10% limit to calculated values to determine the certified values for each PI.
- Certified Values now used to determine the assessed value of farmland for tax purposes.



# 2014 Certified Farmland Values

<b>Average Management PI</b>	<b>1 Gross Income</b>	<b>2 Non-Land Production Cost</b>	<b>3 Net Land Income</b>	<b>4 Agriculture Economic Value</b>	<b>5 Equalized Assessed Value</b>	<b>6 2014 Certified Value</b>
<b>82</b>	<b>\$546.67</b>	<b>\$447.33</b>	<b>\$99.34</b>	<b>\$1,770.83</b>	<b>\$590.28</b>	<b>\$15.26</b>
<b>109</b>	<b>\$699.85</b>	<b>\$541.19</b>	<b>\$158.66</b>	<b>\$2,828.11</b>	<b>\$942.70</b>	<b>\$186.50</b>
<b>111</b>	<b>\$711.20</b>	<b>\$548.15</b>	<b>\$163.05</b>	<b>\$2,906.43</b>	<b>\$968.81</b>	<b>\$203.32</b>
<b>116</b>	<b>\$739.56</b>	<b>\$565.63</b>	<b>\$174.03</b>	<b>\$3,102.22</b>	<b>\$1,034.07</b>	<b>\$257.52</b>
<b>121</b>	<b>\$767.93</b>	<b>\$582.91</b>	<b>\$185.02</b>	<b>\$3,298.01</b>	<b>\$1,099.34</b>	<b>\$357.00</b>
<b>130</b>	<b>\$818.99</b>	<b>\$614.20</b>	<b>\$204.79</b>	<b>\$3,650.44</b>	<b>\$1,216.81</b>	<b>\$645.93</b>



# Calculated vs. Certified Values

Average Management PI	1 Gross Income	2 Non-Land Production Cost	3 Net Land Income	4 Agriculture Economic Value
82	\$546.67	\$447.33	\$99.34	\$1,770.83
109	\$699.85	\$541.19	\$158.66	\$2,828.11
111	\$711.20	\$548.15	\$163.05	\$2,906.43
116	\$739.56	\$565.63	\$174.03	\$3,102.22
121	\$767.93	\$582.91	\$185.02	\$3,298.01
130	\$818.99	\$614.20	\$204.79	\$3,650.44

5 Equalized Assessed Value	6 2014 Certified Value
\$590.28	\$15.26
\$942.70	\$186.50
\$968.81	\$203.32
\$1,034.07	\$257.52
\$1,099.34	\$357.00
\$1,216.81	\$645.93

# Language Farmland Assessment Law

## (35 ILCS 200/10-115 (e))

- (e) The equalized assessed value per acre of farmland for each soil productivity index, which shall be 33-1/3% of the agricultural economic value, or a percentage as provided under Section 17-5; ...but any increase or decrease in the equalized assessed value per acre by soil productivity index shall not exceed 10% from the immediate preceding year's soil productivity index certified assessed value of the median cropped soil;
- House Bill 2651/Senate Bill 20



# Impact of SB 20

PA 98-0109

- Median PI for cropland soils = PI 111
- PI 111 Certified Value 2014 = \$203.32
- All 2015 PI values increased by \$20.33 which is 10% of the median.
- First year's estimated taxes increased \$1.50 per acre for all PI's based on 7.5% tax rate.



# 2015 Certified Farmland Values

Average Management PI	1 Gross Income	2 Non-Land Production Cost	3 Net Land Income	4 Agriculture Economic Value	5 Equalized Assessed Value	6 2015 Certified Value
82	\$581.41	\$476.18	\$105.29	\$2,093.21	\$697.74	(16.78) \$30.59
109	\$741.95	\$573.64	\$168.30	\$3,345.96	\$1,130.79	(205.15) \$201.83
101	\$694.40	\$544.77	\$149.63	\$2,974.77	\$991.59	(127.35) \$131.11
111	\$753.83	\$580.86	\$172.97	\$3,438.76	\$1,146.25	\$218.65
121	\$813.27	\$616.69	\$196.31	\$3,902.74	\$1,300.91	(392.70) \$372.23
130	\$866.77	\$649.45	\$217.31	\$4,320.33	\$1,440.11	(710.52) \$661.26

# 2016 Certified Farmland Values

Average Management PI	1 Gross Income	2 Non-Land Production Cost	3 Net Land Income	4 Agriculture Economic Value	5 Equalized Assessed Value	6 2015 Certified Value
82	\$607.82	\$493.30	\$114.53	\$2,164.95	\$721.65	(18.45) \$52.45
90	\$656.90	\$521.70	\$135.19	\$2,555.60	\$851.87	(45.40) \$74.73
101	\$724.37	\$560.76	\$163.61	\$3,092.74	\$1,030.91	(139.70) \$152.98
111	\$782.71	\$596.27	\$189.44	\$3,581.06	\$1,193.69	\$240.51
121	\$847.05	\$631.78	\$215.27	\$4,069.37	\$1,356.46	(431.97) \$394.19
130	\$902.26	\$663.74	\$238.52	\$4,508.85	\$1,502.95	(781.57) \$683.13

# 2018 CERTIFIED FARMLAND VALUES

Average Management PI	1 Gross Income	2 Non-Land Production Cost	3 Net Land Income	4 Agriculture Economic Value	5 Equalized Assessed Value	6 2015 Certified Value
82	\$560.44	\$434.47	\$125.97	\$2,837.07	\$945.69	\$102.96
90	\$604.61	\$457.17	\$147.44	\$3,320.70	\$1,106.90	\$125.24
101	\$665.34	\$488.38	\$176.96	\$3,985.69	\$1,328.56	\$203.49
111	\$720.55	\$516.75	\$203.81	\$4,590.22	\$1,530.07	\$291.02
121	\$775.76	\$545.12	\$230.65	\$5,194.75	\$1,731.58	\$444.70
130	\$825.45	\$570.65	\$254.80	\$5,738.83	\$1,912.94	\$733.64

# Outlook

PI	2016 Certified Values  (\$21.86)	Taxes payable 2017  (7.5% tax rate)	2017 Certified Values  (\$24.05)	Taxes payable 2018  (7.5% tax rate)	2018 Certified Values  (\$26.45)	2019 Certified Values  (\$29.10)	2020 Certified Values  (\$32.01)
82	\$52.45	\$3.93	\$76.50	\$5.88	\$102.96	\$132.06	\$164.01
95	\$106.84	\$8.01	\$130.89	\$9.81	\$157.27	\$186.37	\$218.30
111	\$240.51	\$18.03	\$264.56	\$19.84	\$291.02	\$320.12	\$352.13
112	\$250.98	\$18.82	\$275.03	\$20.62	\$301.50	\$330.60	\$362.61
121	\$394.19	\$29.56	\$418.24	\$31.36	\$444.69	\$473.79	\$505.80
130	\$683.12	\$51.23	\$707.17	\$53.03	\$733.64	\$762.74	\$794.75

# Average Soil PI by County





# Questions and Comments on Farmland Assessments

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# Commercial Solar Farms Approach to Value



# Overview

- Commercial Solar Farm
- Valuation
- Legislative Approach:
  - *Understanding the new law*



# Commercial Solar Farm

- Public Act 100-0781
- Ground-installed device generating electricity from sun for the purpose of wholesale or retail sale & not consumption on the property where device resides.
- In counties fewer than 3,000,000

# Valuation

- Beginning assessment year 2018
- Real “property cost basis” \$218,000 per megawatt nameplate capacity.
  - Real property improvements
  - Land within project boundaries
  - 6 - 7 acres per megawatt
- Reassessed annually to calculate trending factors and depreciation

# Valuation

- Trending Factor
  - Equal to Consumer Price Index (CPI)
- Allowance for Depreciation
  - 25 years
  - Actual age ÷ 25 years
  - May not reduce value below 30% of its trended real property

# Solar Farm Assessment Example

2-year old Solar Farm - 2MW nameplate capacity  
**\$218,000 X 2 =**

2019 real property cost basis:	\$436,000
X Trending factor (hypothetical) 2.2%:	<u>+ 9,592</u>

Trended real property cost basis:	\$445,592
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Depreciation allowance:	
Actual age: 2yrs/25 =	X <u>.08</u>

Depreciation	\$35,647
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2020 fair cash value	\$409,945
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EAV: \$409,945 X .3333	<b>\$136,634</b>
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# Taxes

2-yr Old Solar Farm  
2MW Nameplate Capacity

EAV = \$136,634

Tax Rate= X 10%

Taxes \$13,663



# Tax Responsibility

- Solar farm liable for taxes on land & improvements
- Solar farm to acquire separate parcel identification number (PIN)
- Subject to tax sale if not paid
- Return to farmland assessment in the year following removal of solar farm as long as returned to a farm

# Questions and Comments on Solar Assessments

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