



# Soils/Land Class

# Use-value

# Assessment Program

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# Outline



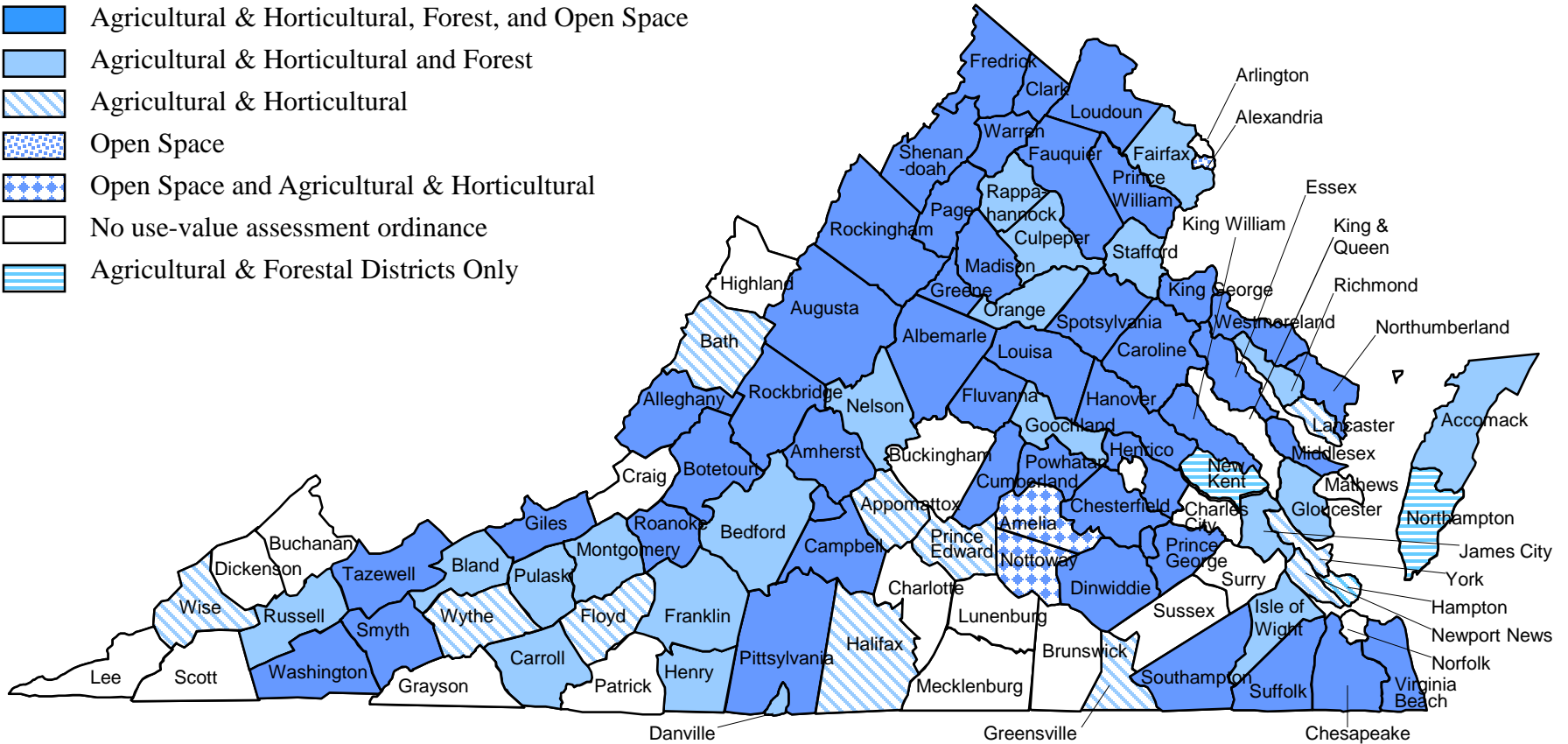
- Updates
- Land Classes
- Discussion



# TY2017: Counties/Cities\* with use-value assessment ordinances



- Agricultural & Horticultural, Forest, and Open Space
- Agricultural & Horticultural and Forest
- Agricultural & Horticultural
- Open Space
- Open Space and Agricultural & Horticultural
- No use-value assessment ordinance
- Agricultural & Forestal Districts Only



\* Counties/Cities are identified from annual use-value reports and may differ from actual implementation. Contact government officials in each county/city for the current use-value implementation. Not all participating cities are identified on this map.



# Updates: Personnel



- Matt Holt, new AAEC Department Head starts mid August 2017
- Lex and I are still working



# Updates: Model



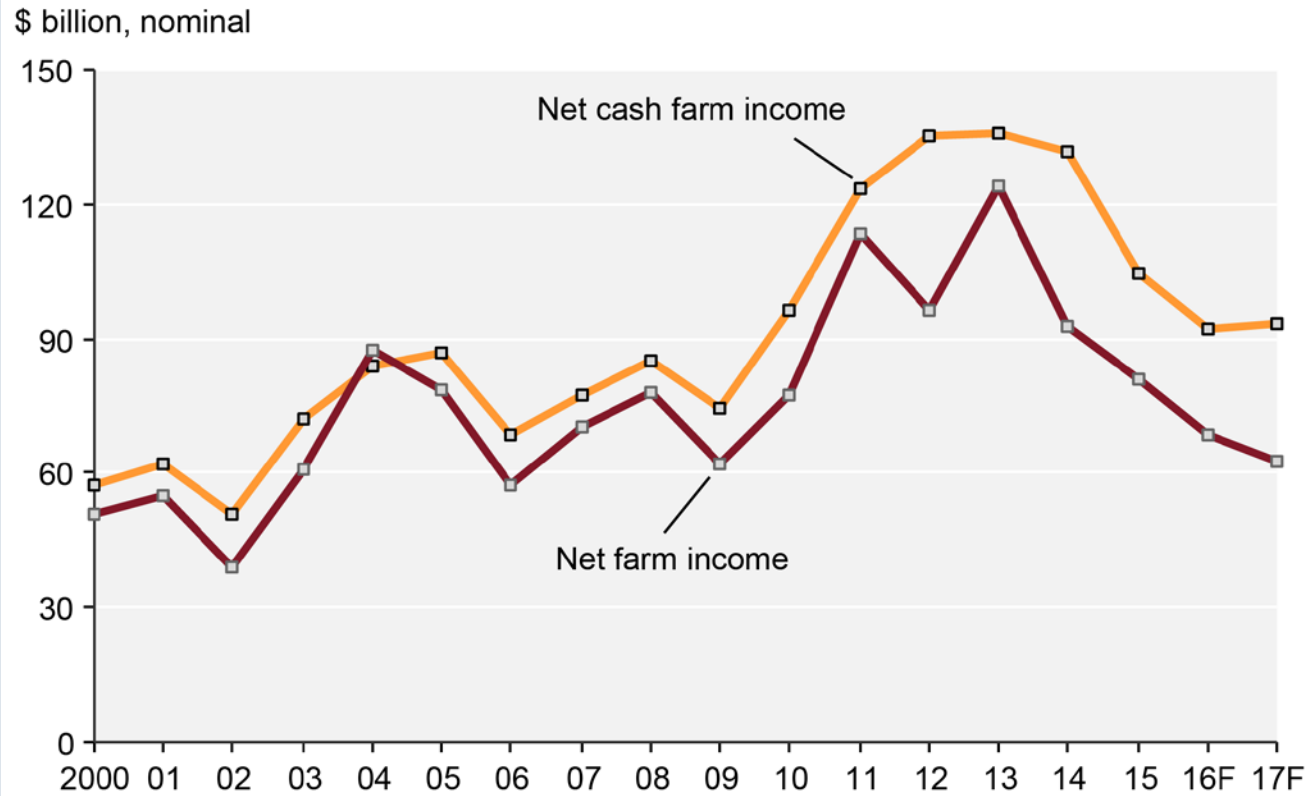
- New non-irrigated land capability classes acreages data for land class I-VIII
- USDA Natural Resources Conservation Service's SSURGO database
- Soil index now based on land classes I-VIII in past I-IV.
- Limited changes to estimates



# Profits?



Net farm income and net cash farm income, 2000-2017F



Note: F = forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

Data as of February 7, 2017.

# Soils

- Soils of VA have been mapped by Soil Scientist since 1901 (Prince Edward County)
- Web Soil Survey (WSS)  
<https://websoilsurvey.sc.egov.usda.gov/>
- Virginia's Geospatial Extension Program at  
<http://gеп.frec.vt.edu/>

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# Soilweb Apps

- Android

<https://play.google.com/store/apps/details?id=casoilresource.apps.soilweb&hl=en>

- iPhone

<https://itunes.apple.com/us/app/soilweb-for-the-iphone/id354911787?mt=8>

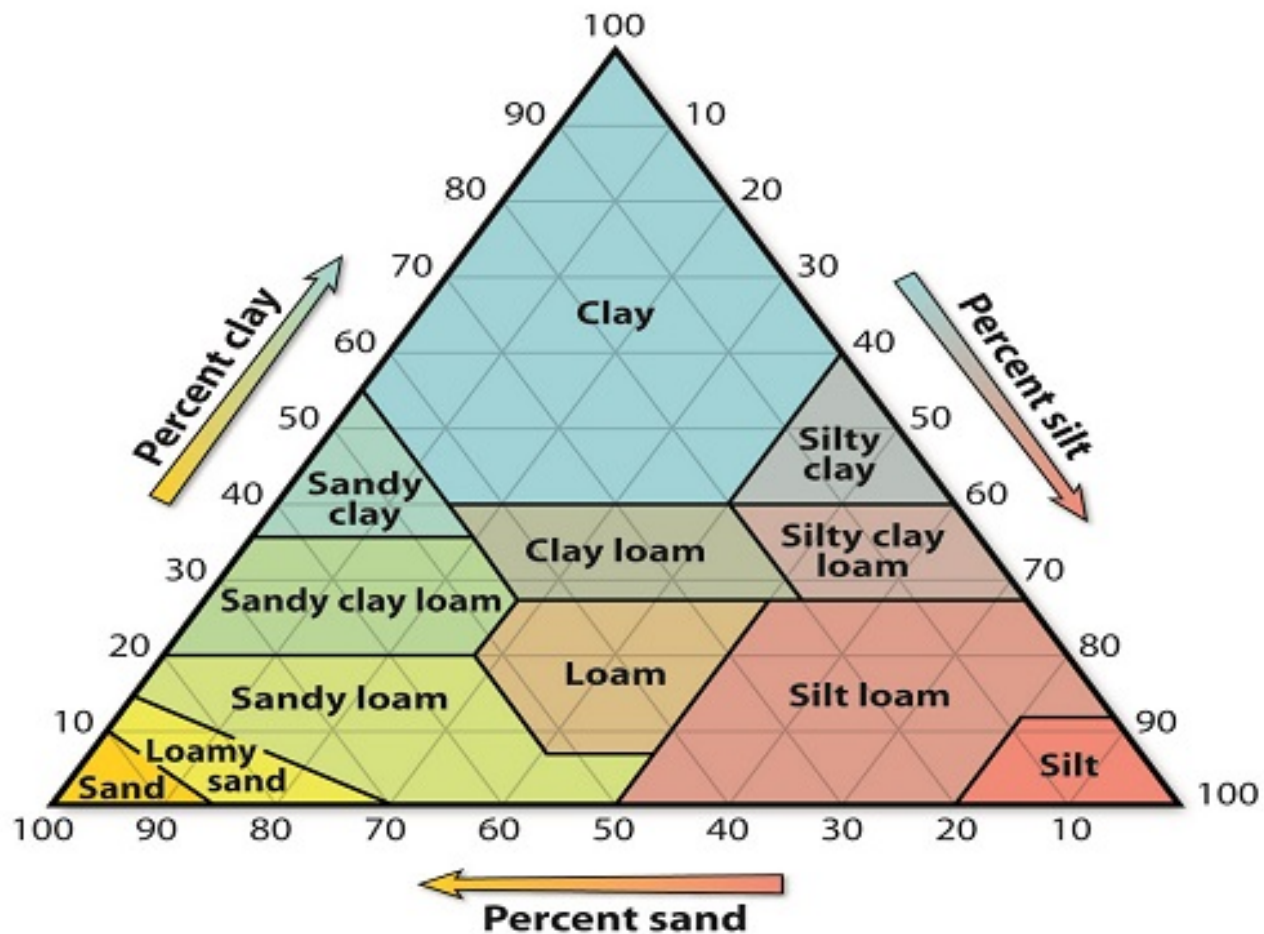


# Web Soil Survey (WSS) for Essex County

<https://websoilsurvey.sc.egov.usda.gov>

9B Emporia sandy loam, 2 to 6 percent slopes





This is the textural triangle. If you know the percent clay (flat line) and percent sand or silt, you can draw lines into the triangle to figure out what textural category the soil belongs too.

# Essex County Land by Class

<b>Soil Class</b>	<b>Acres</b>	<b>%</b>	<b>Corn</b>	<b>Alfalfa</b>	<b>Soybean</b>	<b>Grass-Legume Hay</b>	<b>Wheat</b>	<b>AUMS</b>
<b>1</b>	10,143	6%	136	2.9	45	4.4	60	8.3
<b>2</b>	63,999	35%	119	2.1	39	3.8	58	7.6
<b>3</b>	9,916	5%	98	1.5	31	3.4	49	6.6
<b>4</b>	25,892	14%	74	0.8	22	2.9	39	6
<b>5</b>	10,956	6%	-	-	-	-	-	3.8
<b>6</b>	0	-	-	-	-	-	-	-
<b>7</b>	38,713	21%	-	-	-	-	-	2.5
<b>8</b>	4,987	3%	-	-	-	-	-	-
<b>Other</b>	18,492	10%	-	-	-	-	-	-
<b>Total</b>	183,098		-	-	-	-	-	-

# Augusta County Land by Class

Soil Class	Acres	%	Corn	Alfalfa	Soybean	Grass-Legume Hay	Wheat	AUMS
<b>1</b>	1,021	0.2%	160	5.5	50	4.0	64	8.5
<b>2</b>	98,188	15.5%	97	2.3	34	3.2	52	7.5
<b>3</b>	149,188	23.5%	90	0.8	29	2.8	48	6.2
<b>4</b>	100,044	15.8%	68	1.6	22	1.8	37	3.9
<b>5</b>	-	-	-	-	-	-	-	-
<b>6</b>	39,012	6.2%	32	0.9	10	0.1	17	1.7
<b>7</b>	217,530	34.3%	-	-	-	-	-	-
<b>8</b>	16,631	2.6%	-	-	-	-	-	-
<b>Other</b>	12,096	1.9%	-	-	-	-	-	-
<b>Total</b>	633,709							



# Weights



## USDA Land Classes for Ag use

Land Capability Classes	Productivity Index
Class I - Excellent cropland	1.50
Class II - Good cropland	1.35
<b>Class III - Average cropland</b>	<b>1.00</b>
Class IV - Below average cropland – strip cropping only, hay	0.80
Class V – Good Pasture, hay	0.60
Class VI – Pasture	0.50
Class VII – Very limiting - Pasture only	0.30
Class VIII – Not suitable to agriculture – steep or wet	0.10



# Essex



Land Class	Reported Acreage	Productivity Index	Weighted Acreage
I	6,584	1.5	9,876
II	24,576	1.35	33,178
III	4,305	1.0	4,305
IV	3,738	0.8	2,990
V	72	0.6	43
VI	0	0.5	0
VII	1,598	0.3	479
VIII	--	--	--
<b>Total</b>	<b>40,873<sup>1</sup></b>		<b>50,872<sup>1</sup></b>

Soil Index Factor  $50,872 \div 40,873 = 1.245$  (old 1.273)<sup>1</sup>

<sup>1</sup>Revised 7-31-17. Only soil classes I thru VII are used in soil index calculations.



# Essex TY2017



## Use Value Class III soils, new Index

	Use Value =	Use Value	÷	Soil index
	Without risk =	\$2,520	÷	1.245 <sup>1</sup>
<b>Without Risk Class III</b>				<b>\$2,020<sup>1</sup></b>
	=			
	With risk	\$2,400	÷	1.245 <sup>1</sup>
<b>With Risk Class III =</b>				<b>\$1,930<sup>1</sup></b>

<sup>1</sup> Revised 7-31-2017



*Thanks!*  
*&*  
*Discussion & Questions?*

*[usevalue.agecon.vt.edu](http://usevalue.agecon.vt.edu)*