

LAND VALUATION METHODS SURVEY

PRINCE GEORGE COUNTY REAL ESTATE ASSESSOR'S OFFICE

LAND VALUATION METHOD SURVEY

Survey Sent to 202 Real Estate Assessment Stakeholders:

- Assessors and/or Commissioners of Revenue for 100+ Localities
- Department of Taxation representatives
- SCC (Public Service Valuation division) representatives
- Public sector supervisory appraisers at 20+ localities
- Private Sector Assessment Contract Appraisal Company principals (3 companies)

Four Major Topics:

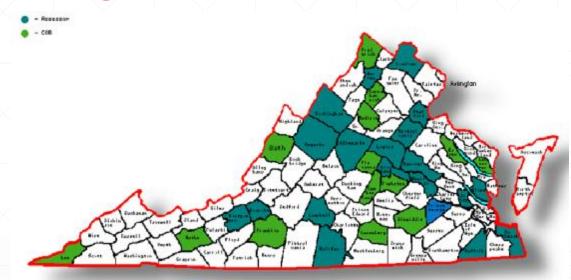
- Land Valuation Models
- Procedures for Parcels with Limited Access
- Valuation of Open versus Timber Parcels
- Land Use Program





SURVEY RESPONDENTS

Responde	nts
Counties	31
Cities	16
Stakeholders	4
TOTAL	51

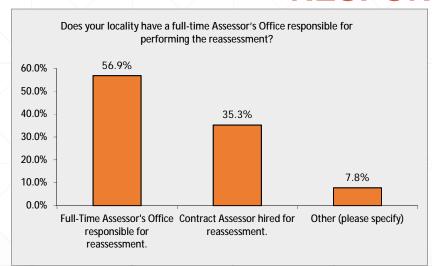


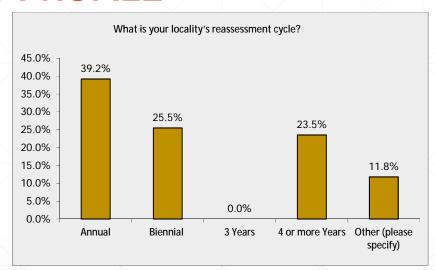
	COU	NTIES	
Albemarle	Franklin	Lancaster	Rappahannock
Augusta	Frederick	Lee	Roanoke
Bath	Gloucester	Loudoun	Rockingham
Campbell	Goochland	Louisa	Spotsylvania
Cumberland	Halifax	Lunenburg	Stafford
Dinwiddie	Hanover	Madison	Warren
Essex	Henrico	Montgomery	Wythe
Fluvanna	James City	Powhatan	

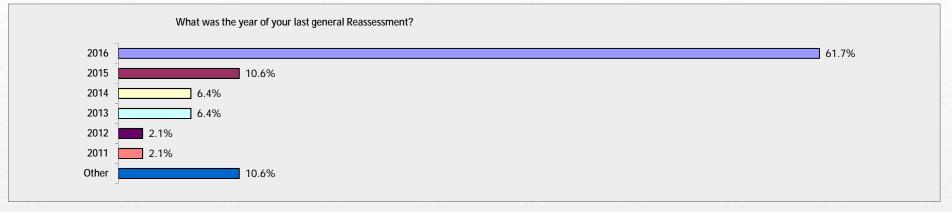
CIT	TES			
Alexandria	Martinsville			
Charlottesville	Paquoson			
Danville	Portsmouth			
Falls Church	Salem			
Franklin	Suffolk			
Hampton	Virginia Beach			
Harrisonburg	Waynesboro			
Manassas Park	Williamsburg			

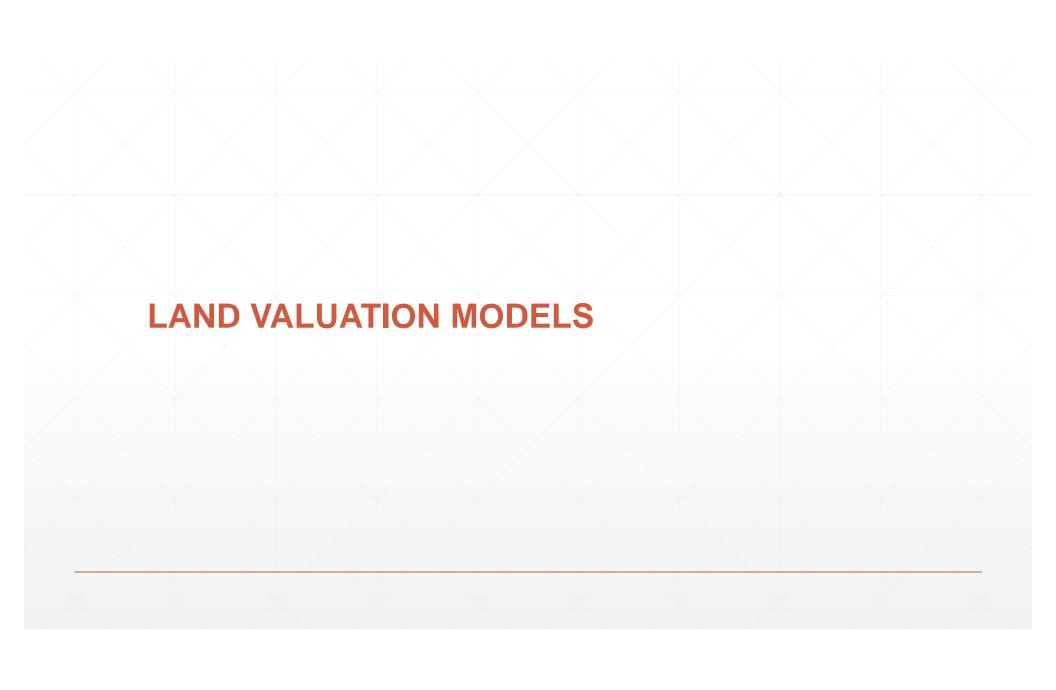
STAKEHOLDERS
Department of Taxation
SCC
Contract Assessment Firm

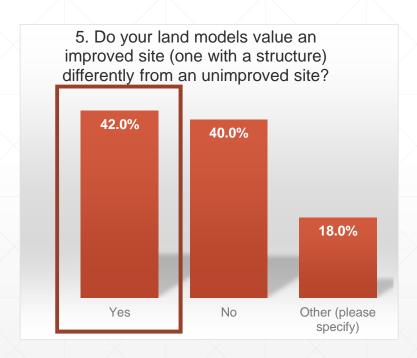
RESPONDENT PROFILE







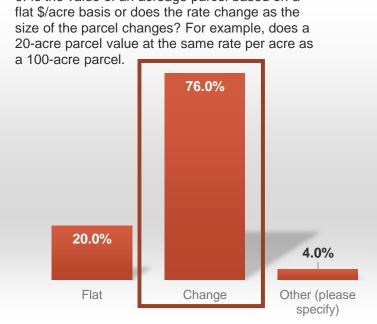




Other and/or Comments

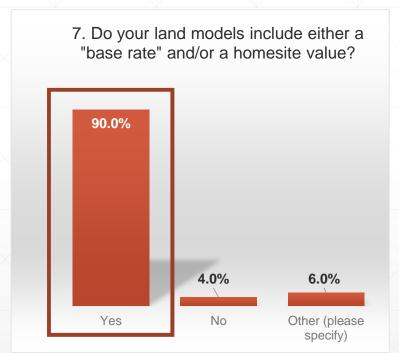
- Depends usually yes but if a subdivision, etc. all lots may have same value except for amenities.
- [Locality] very rural, on large tracts of land we value a house site on 1 acre and the remaining residual acreage at a lesser rate per acre. But a site with a dwelling will be valued higher along with a well septic or public water hookup.
- Property valued with house site even when not improved. Acre 20 acres or less. Some exceptions.
- One would assume that a site with a structure would have infrastructure(w/s/e/etc) that would add value to the site.

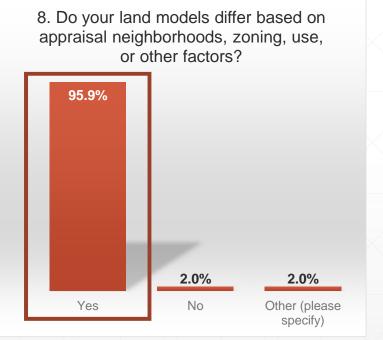
6. Is the value of an acreage parcel based on a flat \$/acre basis or does the rate change as the a 100-acre parcel.

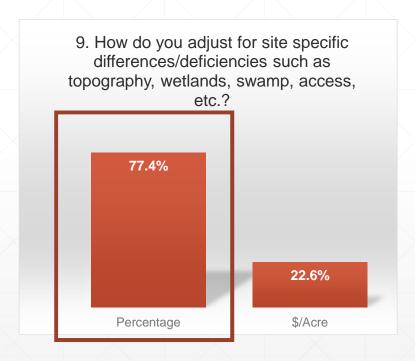


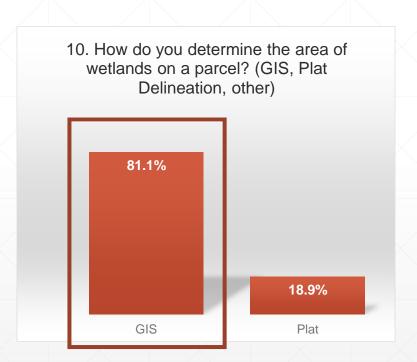
Other and/or Comments

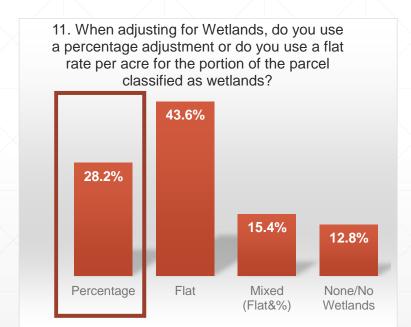
- A sliding scale based upon size of the farm.
- The rates go down as the parcel size goes up (size curve). We value based on a flat homesite (1 acre) rate plus surplus (acreage over 1 acre).
- The rate does not change based upon the size of the parcel. We have a flat rate for open, wooded, swamp, etc.
- We have a scale, that is formulated from the sales study, in which the price per acre decreases as the acreage of the parcel increases









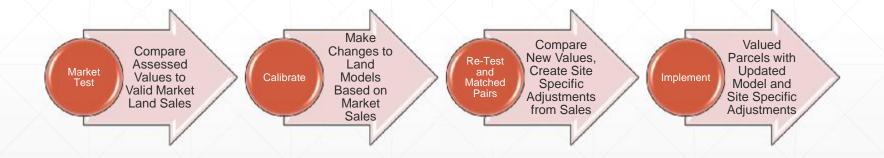


Other and/or Comments

- Flat acre. Land has to be rough and not used for crop production. Anywhere from \$500 to \$3,000 depending on areas in agriculture type land.
- Percentage Adjustment based on the impact of the flood plain to the parcel.
- Low of \$500 to \$1000/acre. Some localities want a %.
- Sometimes use both...based on what impact the wetlands have on the parcel.
- Percentage and flat rate not consistent.

LAND VALUATION MODELS: PRINCE GEORGE

MODEL DEVELOPMENT PROCESS:



LAND VALUATION PROCESS: Highest and Best Use

FAIR MARKET VALUE is a function of the parcel's HIGHEST AND BEST USE.

Highest and Best Use is defined as the reasonable, probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, and financially feasible and that results in the highest value, requires that the appraiser analyze four criteria grouped into two sub-elements:

TEST 1: Reasonably Probable

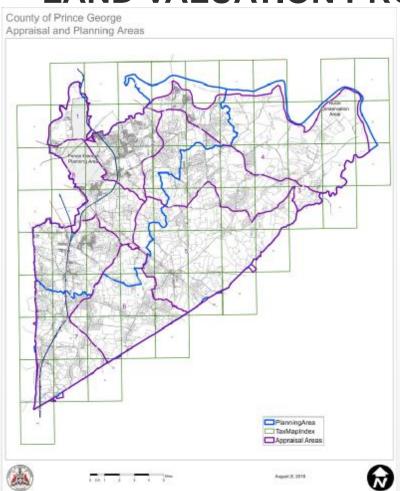
- 1. Physically Possible
- 2. Legally Permissible

TEST 2: Appropriately Supported

- 3. Financially Feasible
- 4. Maximally Productive

Dictionary of Real Estate Appraisal, 5th Edition, Appraisal Institute 2010

LAND VALUATION PROCESS: LOCATION



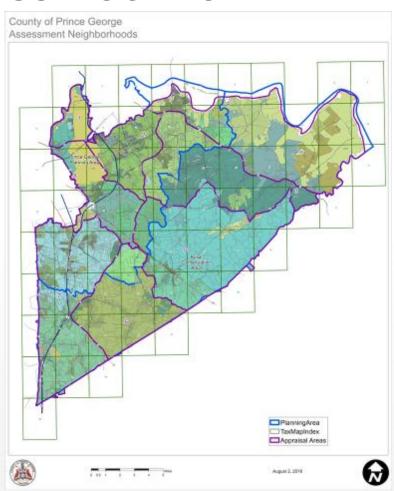
Eight Appraisal Areas

- The 8 Appraisal Areas generally correspond with the County's Supervisor Districts: District 1 includes areas 5,6,7, and 8; District 2 includes areas 1,2,3, and 4.
- Geographically similar neighborhoods are grouped to form Appraisal Areas.
- Boundaries include by roads, water bodies, monuments, or other influences (Fort Lee).
- Appraisal Areas include all types of land uses both complimentary and independent.
- Appraisal Areas may include neighborhoods of single-family and multi-family uses as well as retail, commercial, and office uses that serve these "rooftops".

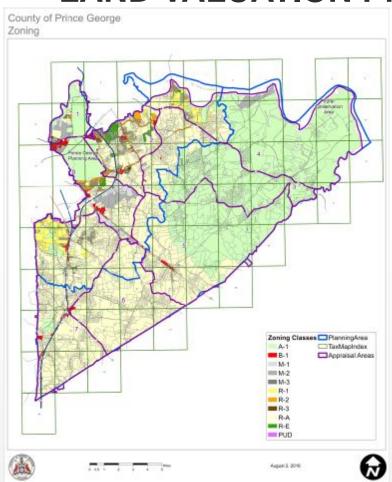
LAND VALUATION PROCESS: LOCATION

106 Appraisal Neighborhoods

- Each platted subdivision is generally an individual Appraisal Neighborhood.
- Appraisal Neighborhoods can include subdivisions or geographic areas with similar influences.
- Appraisal Neighborhoods generally have homogeneous land uses, similar Property Class Codes, similar Highest and Best Uses, and similar legally permissible uses (Zoning and Planning Areas).
- The first number of an appraisal neighborhood corresponds with the appraisal area it is in. For example neighborhood 4001 would be located inside Area 4.
- Neighborhoods are important to appraisers in that they provide a framework, or context, in which property value is estimated.



LAND VALUATION PROCESS: HBU TEST 1



HIGHEST AND BEST USE

Site Specific Adjustments are guided by the Second Test of Highest and Best Use:

TEST 1: Reasonably Probable

- 1. Physically Possible
- 2. Legally Permissible
- Land Models are developed based Appraisal Neighborhoods (Location), Size (Physically Possible), and Zoning or other Restrictions (Legally Permissible).
- Zoning, the Prince George Planning Area and the Conservation Area impact the Legally Permissible uses for a parcel.
- Areas 5, 6, and 7 have R-A Zoning areas that are split by the Planning Areas
- Areas 3 and 4 are split by the Planning Areas, but the Zoning general follows the division.

- Base models developed based on Location, Size, and Legally Permissible Uses (Test 1 of Highest and Best Use.
- Models based on "Economies of Scale" the larger the parcel, the lower the rate per acre.

Size (Acres)	<u>Base</u>	Per Acre	<u>Value</u>	\$/Acre
50	\$22,300	\$3,000	\$169,300	\$3,386
100	\$22,300	\$2,500	\$269,800	\$2,698

- Valuation Models based on Test 1 of HBU produce equitable values for "typical" parcels with similar Location, Physically Possible, and Legally Permissible characteristics.
- Similar parcels in different appraisal neighborhoods (Location) or with different Legally Permissible Uses will value differently.

Size (Acres)	NH	<u>Base</u>	Per Acre	<u>Value</u>	\$/Acre
50	3001	\$22,300	\$3,000	\$169,300	\$3,386
50	7000	\$19,500	\$2,700	\$151,800	\$3,036

Sites improved with water and sewer (or well and septic) have an adjusted Base value:

> Base: 22.300 12,000 Improvement: 34,300 Total

Type	<u>Size</u>	<u>NH</u>	<u>Base</u>	Per Acre	<u>Value</u>	\$/Acre
Vacant	5	3001	\$22,300	\$7,100	\$50,700	\$10,140
Improved	5	3001	\$34.300	\$7.100	\$62,700	\$12.540

FY18 LAND MODEL COMPARISON

NH:3001 **ZONING: RA** PLAN: PD **PCC: 600**

25-29 22.300

40-49 22,300

50-74 22,300

75-99 22.300

100-149 22,300

150-199 22,300

200-299 22,300

300-399 22.300

400-499 22,300 1,800

1.900

300-399

400-499

21,200

21,200

1,700

1,600

Acres

10

11

13

14

15

16 17

19

20-24

30-39

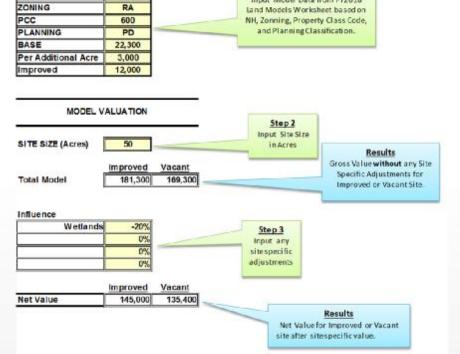
NH:4000 ZONING: A1 PLAN: RC **PCC: 600**

		-					_
		Each			Each		
		Addn'l			Addn'l		
	Base	<u>Acre</u>	<u>Acres</u>	<u>Base</u>	<u>Acre</u>	<u>Acres</u>	Bas
	22,300	0	1	21,200	0	1	19
	22,300	9,500	2	21,200	8,800	2	19
	22,300	8,400	3	21,200	7,800	3	19
	22,300	7,600	4	21,200	7,100	4	19
	22,300	7,100	5	21,200	6,600	5	19
	22,300	6,700	6	21,200	6,100	6	19
	22,300	6,300	7	21,200	5,800	7	19
	22,300	6,000	8	21,200	5,500	8	19
	22,300	5,800	9	21,200	5,300	9	19
	22,300	5,500	10	21,200	5,100	10	19
	22,300	5,400	11	21,200	4,900	11	19
	22,300	5,200	12	21,200	4,700	12	19
	22,300	5,000	13	21,200	4,600	13	19
	22,300	4,900	14	21,200	4,500	14	19
	22,300	4,700	15	21,200	4,400	15	19
	22,300	4,600	16	21,200	4,200	16	19
	22,300	4,500	17	21,200	4,100	17	19
	22,300	4,400	18	21,200	4,000	18	19
	22,300	4,300	19	21,200	4,000	19	19
	22,300	4,100	20-24	21,200	3,800	20-24	19
	22,300	3,800	25-29	21,200	3,600	25-29	19
	22,300	3,600	30-39	21,200	3,400	30-39	19
	22,300	3,300	40-49	21,200	3,100	40-49	19
	22,300	3,000	50-74	21,200	2,800	50-74	19
	22,300	2,700	75-99	21,200	2,500	75-99	19
)	22,300	2,500	100-149	21,200	2,300	100-149	19
)	22,300	2,300	150-199	21,200	2,100	150-199	19
)	22,300	2,100	200-299	21,200	1,900	200-299	19

NH:7000 **ZONING: RA** PLAN: RC PCC: 600

Each Addn'l <u>Acre</u> 9,500 0 9,500 8,200 9.500 7.300 6,600 9,500 9,500 6,200 9,500 5,800 5.500 9,500 9,500 5,200 9.500 5,000 9.500 4.800 9,500 4.700 9,500 4,500 9.500 4,400 9.500 4.200 9,500 4,100 9,500 4,000 9.500 3.900 9.500 3.800 9,500 3,800 9,500 3,600 9.500 3,400 9,500 3,200 9,500 3,000 9,500 2,700 9.500 2.400 9,500 2,100 9,500 1,900 19,500 1,700 300-399 19,500 1.500 19,500 400-499 1,400

LAND VALUATION PROCESS: HBU TEST 2



Step 1

Input Model Data from FY2018

Model Inputs FY2018 Land Model

Workbook

3001

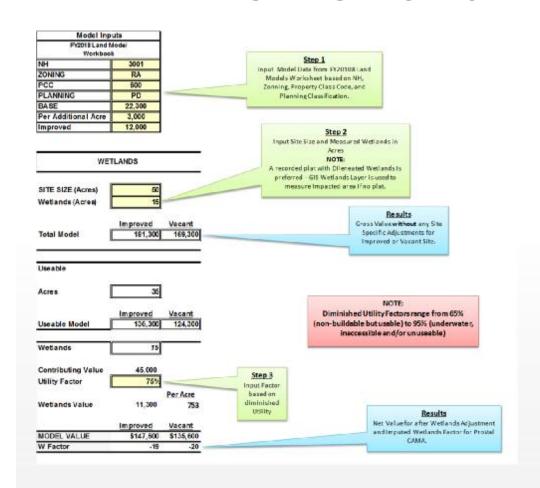
HIGHEST AND BEST USE

Mass Appraisal Land Modeling is guided by the First Test of Highest and Best Use:

TEST 2: Appropriately Supported

- 3. Financially Feasible
- 4. Maximally Productive
- A use can be Physically Possibly and Legally Permissible, but not be Financially Feasible to develop to its Maximally Productive use.
- Test 2 of Highest and Best Use guides in the development of Site Specific Adjustments – Adjustments to parcels that have similar Location, Physically Possible, and Legally Permissible attributes, but have features or challenges that are not "typical".
- Site Specific Adjustments are developed from sales using Matched Pair Analysis.
- Typical Site Specific Adjustments include Wetlands, Topography, Non-Perc Soils, Restrictive Easements, and Access.

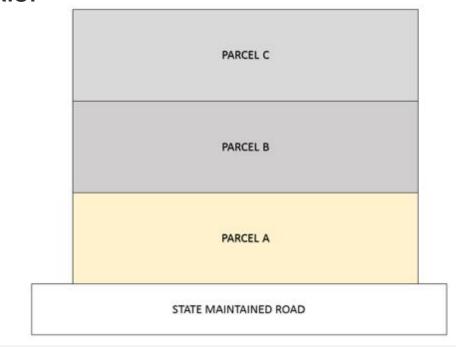
SITE SPECIFIC ADJUSTMENTS



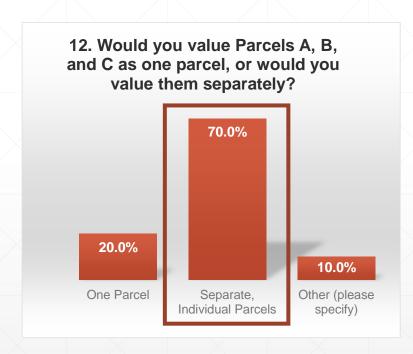
WETLANDS

- A Percentage Adjustment is developed based on the impact of the Wetlands to the parent parcel.
- Recorded Plat with Delineated Wetlands is preferred.
- GIS Wetlands Layer, as well as the RMA and RPA Layers, are used to measure the area in the absence of a plat.
- The impact of the Wetlands is determined by the loss of utility for the affected portion of the property. For example, even though the site may not allow for a building, it may be useable for recreational purposes.
- Diminished Utility Factors range from -65% to -95% for swampland (underwater, inaccessible, or unuseable).
- The result is a Wetlands Adjustment Factor that is applied to the entire parcel.

SCENARIO:

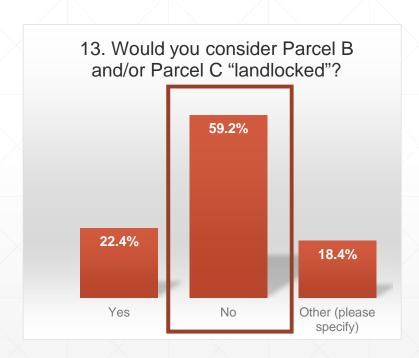


Parcels A, B, and C are contiguous parcels under the same ownership (persons or entity). Parcel A has State Maintained road frontage.



Other and/or Comments

- Would be considered as one parcel if owner requested combination to receive one tax bill. Our frontage/depth table adjustment would be applied.
- Depends on whether Parcels B and C are buildable or not.
- They would be valued separately. However, the fact that they are all owned by the same person would be taken into account.
- They may be included on one parcel record number, but each individual parcel would be given a value based on road frontage or lack of road frontage.
- We might combine the 3 parcels into 1 tax record if the owner was agreeable otherwise they would be assessed as 3 parcels.



Other and/or Comments

- Would consider these as residual to Parcel A.
- No, we would consider B & C to be excess land to Parcel A if the land is under the same ownership.
- No. Not since the same person owns all three parcels.
- If each of the three parcels were 10 acres, we would value all at the rate we are using for 30 acres. We would not consider them land locked if all three had the same ownership.
- Maybe not landlocked but definitely would be adjusted for access
- I would see if there were any deeded easements. I work very hard to not classify land as landlocked. In this case since the land owner owns all 3 parcels, I would not classify it as landlocked.
- To my understanding, there is technically no land locked land in the State of Virginia. There may be access issues, but there is no landlocked land.

14. What type of adjustment would you make when valuing Parcel B and/or Parcel C?

- None
- I would reduce the per acre value to show consideration for no road frontage.
- No home site value would be placed on B or C. We would value at same rate per acre for all 3 properties.
- There would be a discount per acre to arrive at FMV.
- Can't give accurate enough number to be quoted would need to see situation % downgrade usually.
- Percentage adjustment for access.
- 25% for B 50% for C.
- Possibly access.
- They would be valued as "rear" property. Really depends on where they are and how far off the road they are as to the difference in value. We have hard state maintained roads, as well as gravel/dirt state maintained roads.
- More than likely the lots would be given a flat value assessment based on the appraisers opinion.

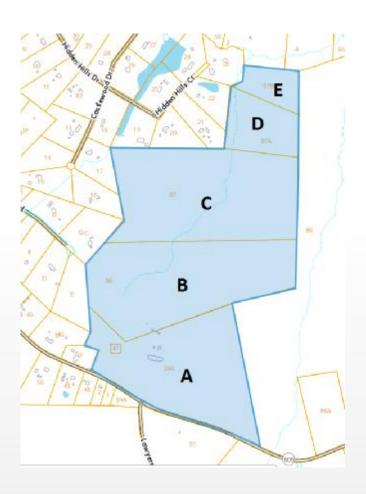
14. What type of adjustment would you make when valuing Parcel B and/or Parcel C?

- Our adjustment is the fact that the we value them at a lower per acre rate because we are considering them one parcel, even though they are three different parcels. I would reduce the per acre value to show consideration for no road frontage.
- Run the excess land rate. Parcel A would have 1st one-acre at homesite rate. Over 1 acre at the excess rate. Hard to
 apply the proper size adjustment in our system but can be done. There would be a discount per acre to arrive at FMV.
- Market-based adjustments for access, visibility, and other characteristics that have impact on value.
- It would depend upon access. If there is access to a home site on either B or C, then the prevailing off road home site, taking into account for view shed, would be applied, then a prevailing residual value would be applied to the remainder.25% for B 50% for C.
- % of Parcel A
- Downward adjustment from parcel A Both would be of lesser value than A, and depending on size, utility, of C, it
 would probably carry same value as B.

SITE SPECIFIC ADJUSTMENTS: ACCESS



EXAMPLE: ACCESS



NOTES:

- One owner purchased five parcels in one deed. Parcels had been part of the same farm since at least the early 1900's.
- Other adjustments include Wetlands and Topography. Topography applied to some of the subject parcels because the wetlands divide some of the useable acreage.
- All adjustments made from the Base Value.
- Adjusted value in this example is 13% higher by valuing the individual parcels when compared to valuing the "Larger Parcel" (one administratively merged parcel).

PARCEL	Α	В	С	D	Ε	TOTAL	1 Parcel
Size	48.9554	50	53	13	6	170.955	170.955
ACCESS ADJ	0%	-35%	-35%	-55%	-55%		
BASE VALUE	185,900	176,200	182,500	82,500	55,600	682,700	346,400
-OTHER ADJ	(18,600)	(54,600)	(20,000)	(20,600)	(13,900)	(127,700)	(34,700)
-ACCESS	<u>0</u>	<u>(61,600)</u>	(63,900)	<u>(45,400)</u>	(30,600)	(201,500)	<u>0</u>
ADJ VALUE	167,300	60,000	98,600	16,500	11,100	353,500	311,700
	DIFFERENCE				13.	4%	

CLOSING NOTES:

This situation is VERY rare in Prince George County. Most parcels with Access adjustments have deeded, developed access easements. This specific situation only affects +/-42 Tax Parcels (out of 13,777) and +/-16 property owners (out of 10,940).

OPEN versus TIMBER PARCELS

SCENARIO:

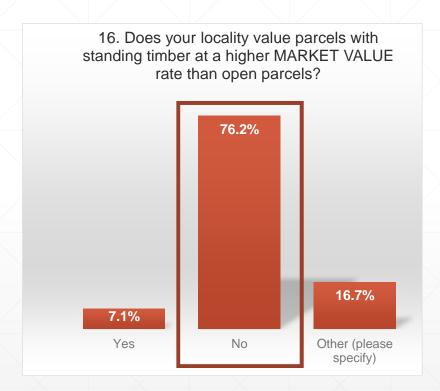
In a rural area, there are two 50-acre parcels that have similar site characteristics, soil productivity, and highest and best use.

Both parcels would qualify for the Land Use Program, if applicable. The only difference between the two parcels is that one parcel is open and the second parcel is completely covered in timber.



Other and/or Comments

- In my locality wooded parcels generally sell for a little less that pasture. However, I know there are some localities where timber parcels sell for more based on the type of timber being produced on the parcel.
- The parcels would be valued at FMV individually but the land use rate per acre would be applied based on use.
- Possibly on a 50 acre parcel the timber parcel might be valued slightly less per acre.
- In our area open land and crop land sale higher then wooded land.
- We don't make any adjustment between wooded and cleared land.
- A little less for timber



Other and/or Comments

- In some localities we work good standing timber with good paved road-front very well could be as high as open pasture.
- Depends on the location in the county. Some open land is valued higher based on it's location and sales data.
- Depends on where. Timber parcels are higher value than open farm - but land available for development in proper zoning would be different.
- I thought state law or attorney general opinion or something says we are not to value timber.
- On an average, parcels with timber is similar in value as open, cleared land if the timber is viable (not scrub timber). The wooded acreage is valued, and timber value is added, this combo value typically is similar in value to cleared open land values on same parcel.

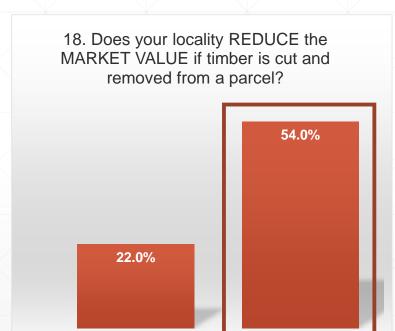
17. Does your locality ADD MARKET VALUE for the standing timber on a parcel? If so, could you share your additional rate per acre.

90.7%

9.3%

Yes

No



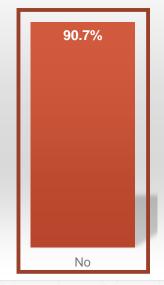
No

Yes

17. Does your locality ADD MARKET VALUE for the standing timber on a parcel? If so, could you share your additional rate per acre.

9.3%

Yes





19. If you answered YES to Question 18, what procedure do you use to reduce the MARKET VALUE? If this is a rate per acre, could you provide that?

- \$1,000 to \$1,500 per acre
- Once the clearing is reported to me, I search for comparable size and type parcels that general reassessment valued and use that per acre value. Our values range from \$1,200 to \$1,800 per acre for cutover property.
- Based on %.
- 20% cutover adjustment for clear cut only.
- 25% reduction per class.
- We must be notified in writing and make a site visit to verify \$800.
- Range for cutover land is \$600+/- to \$1,600+/- per acre depending on location, utility, etc.

20. If you answered YES to Question 18, how long does your locality carry this timbered parcel at a reduced the MARKET VALUE?

- Next reassessment.
- Until the next reassessment. However, since we have gone to a 6 year cycle, this may have to change.
- Max 3 years.
- Until marketable timber is on the property.
- About 10 years.
- The parcel is carried that way until changed during a reassessment.
- 10-15 years.

OPEN versus TIMBER: PRINCE GEORGE

- Market Value is generally the SAME for OPEN or FOREST parcels.
- Market Value is NOT ADDED for TIMBER PARCELS.
- Parcels that have been TIMBERED MAY HAVE A TRANSITIONAL TIMBERED ADJUSTMENT – up to 25% for 3-years.
 - We must be informed that the parcel has been timbered.
 - There must be a Managed Timber Plan similar to the requirement by the Code of Virginia in to qualify as Forest Class under the Land Use Program.
- Soil Capacity (soil type quality) can influence MARKET VALUE.

OPEN versus TIMBER: PRINCE GEORGE

TIMBERED IN 2015

Just Prior to Sale





Prior to Timbering \$84,300 Clear-Cut Adjustment -25% Revised Value \$63,200 Sales Price \$64,000 5/11/2016 TIMBERED IN 2012
No Timber Adjustment



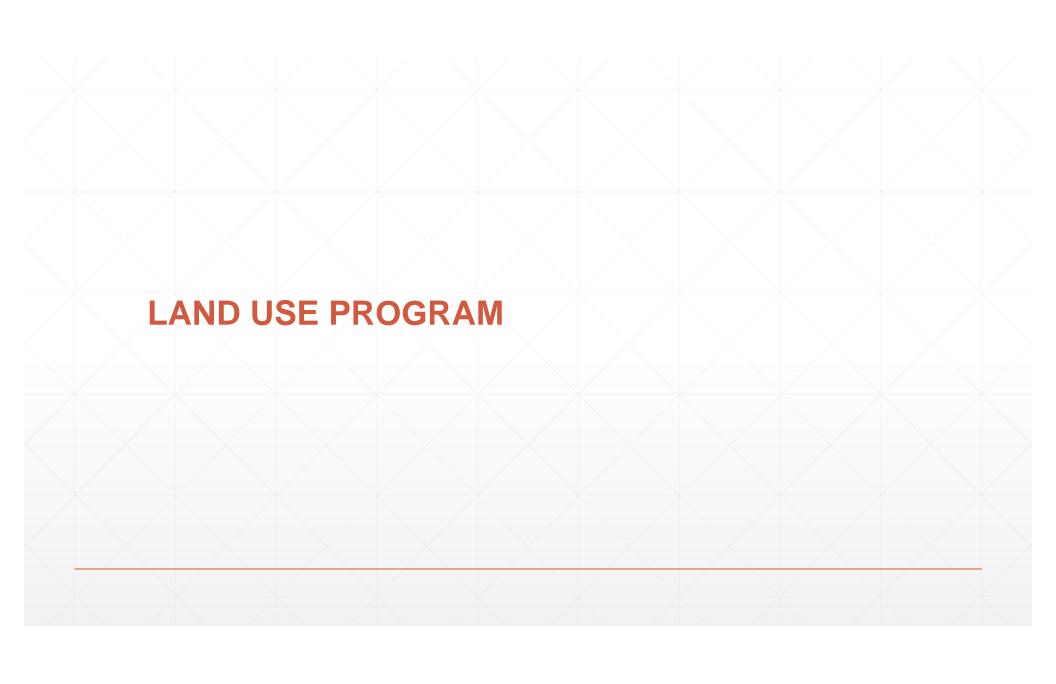
 Prior to Timbering
 \$101,200

 Clear-Cut Adjustment
 0%

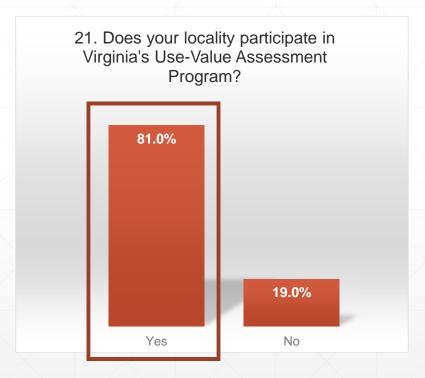
 Revised Value
 \$101,200

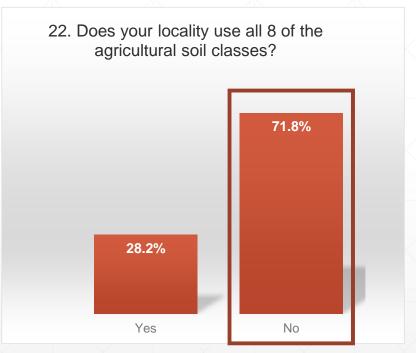
 Sales Price
 \$105,000

 6/1/2016

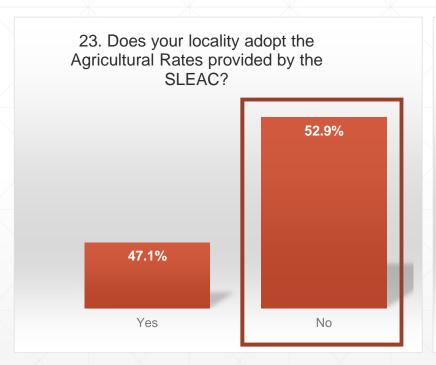


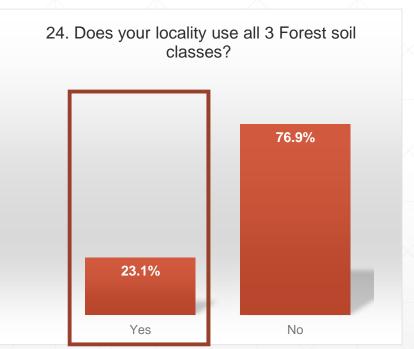
LAND USE PROGRAM:





LAND USE PROGRAM:





LAND USE PROGRAM: PRINCE GEORGE

Prince George County Land Use Rates Proposed Adopted Adopted Adopted 2017 2016 2015 2014 Type Crop Land \$1,630 \$1,490 \$1,210 \$790 Pasture Land \$590 \$540 \$440 \$290 Unproductive \$130 \$120 \$130 \$90 EXCELLENT \$690 \$700 \$730 \$660 GOOD \$560 \$600 \$460 \$575 \$410 \$450 \$310 FAIR \$425 HORTICULTURE 01 \$1,330 \$1,250 \$1,350 \$900 HORTICULTURE 02 \$990 \$930 \$1,000 \$630 OTHER NON-PROD \$100 \$100 \$100 \$100 OPEN SPACE \$1,400 \$1,400 \$1,400 \$1,400

1,397 Parcels totaling 99,205 acres (69 acres per parcel average)

	PROPOSED PRINCE GEORGE COUNTY AGRICULTURAL RATES							
Type	PROPOSED Type 2017		3-Year Moving AVERAGE	SLEAC 2017	SLEAC 2016	SLEAC 2015		
Crop	\$1,630	=	\$1,640+\$1,560+\$1,690 3	\$1,640	\$1,560	\$1,690		
Pasture	\$590	=	\$600+\$570+\$610 3	\$600	\$570	\$610		

