



VIRGINIA ASSOCIATION OF ASSESSING OFFICERS (VAAO)

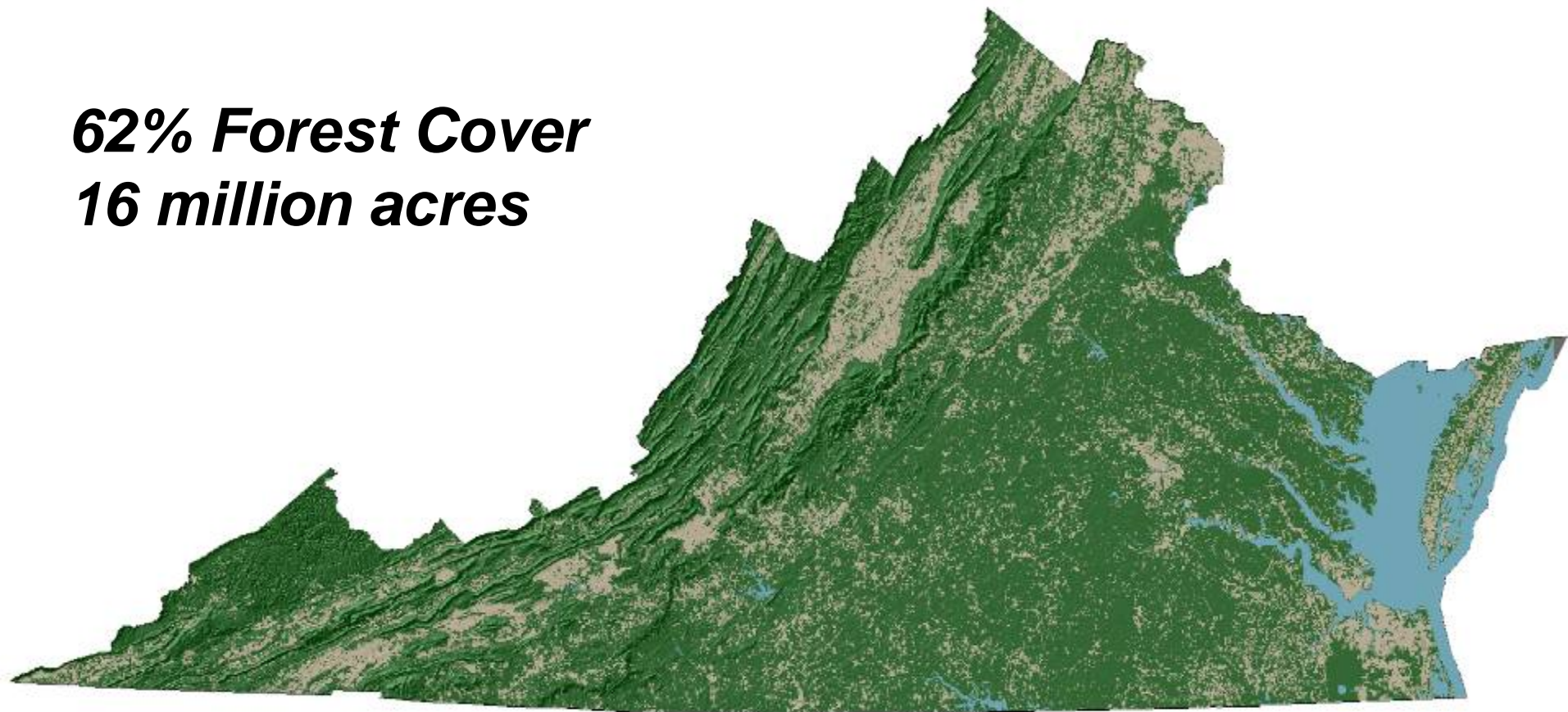
FORESTRY LAND USE Overview and Update

Dean Cumbia
Forest Resource Management Branch
Virginia Department of Forestry



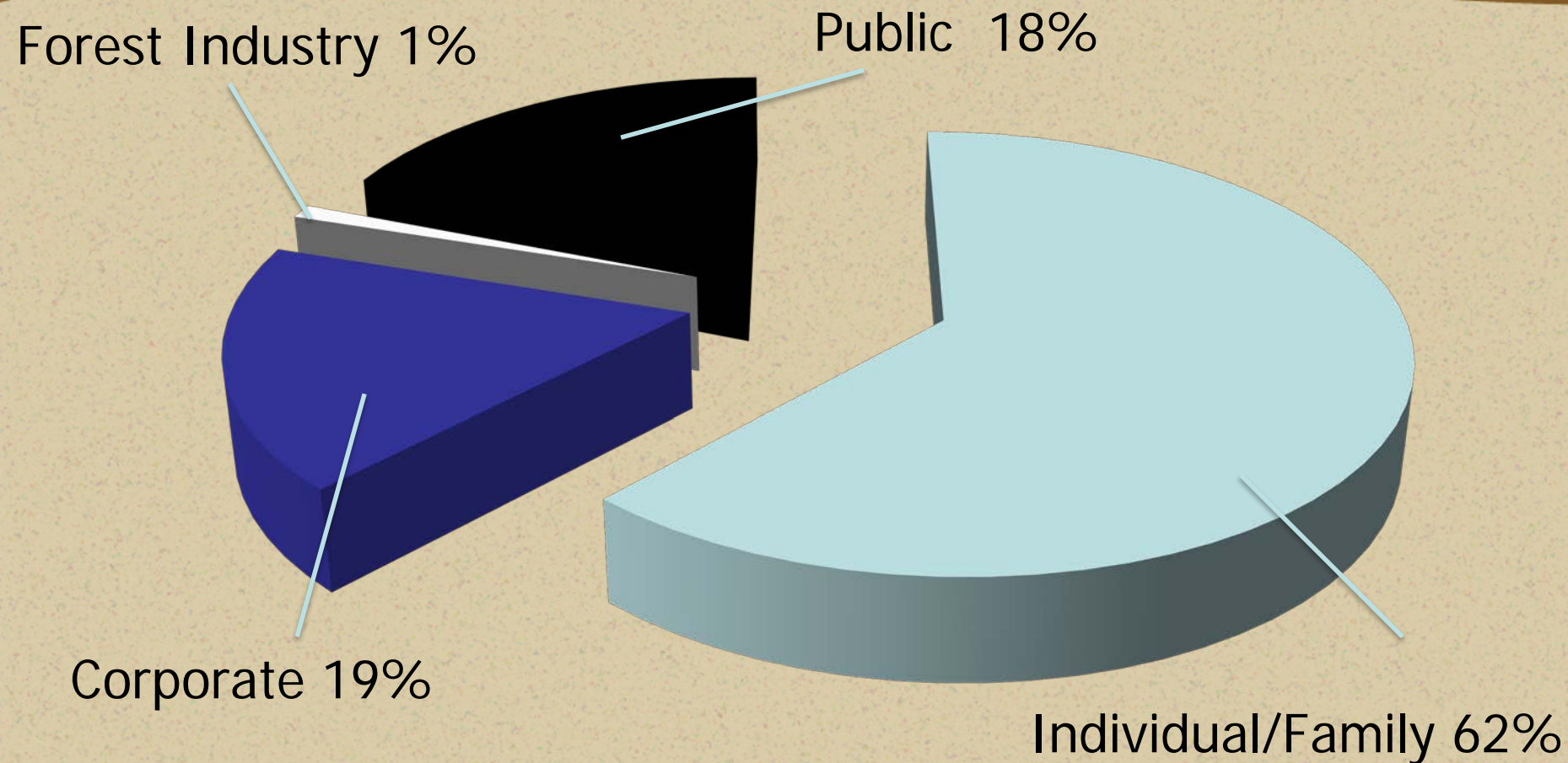
Virginia Forest Cover

62% Forest Cover
16 million acres



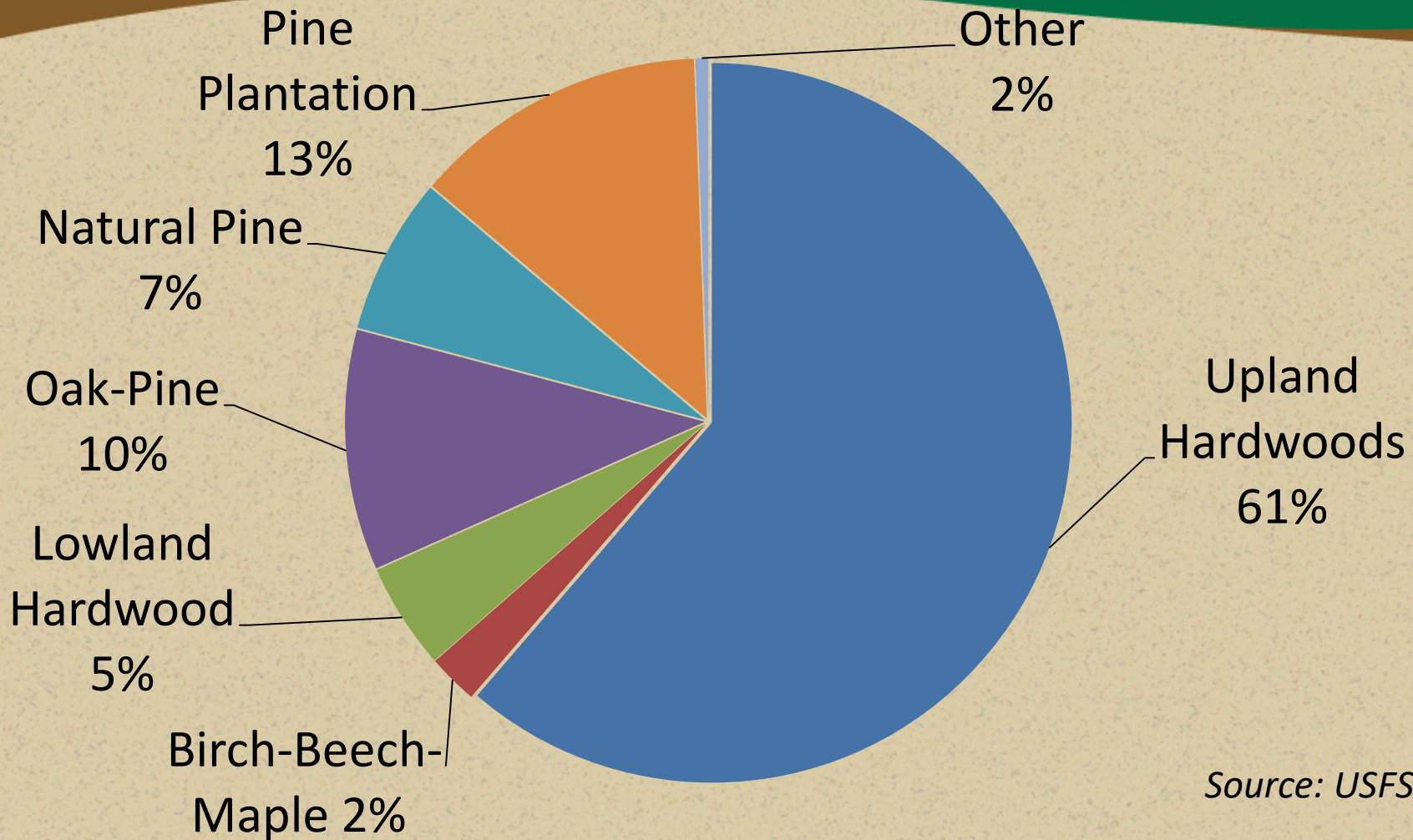


Forest Owners - 373,000+





Forest Type Groups, Virginia

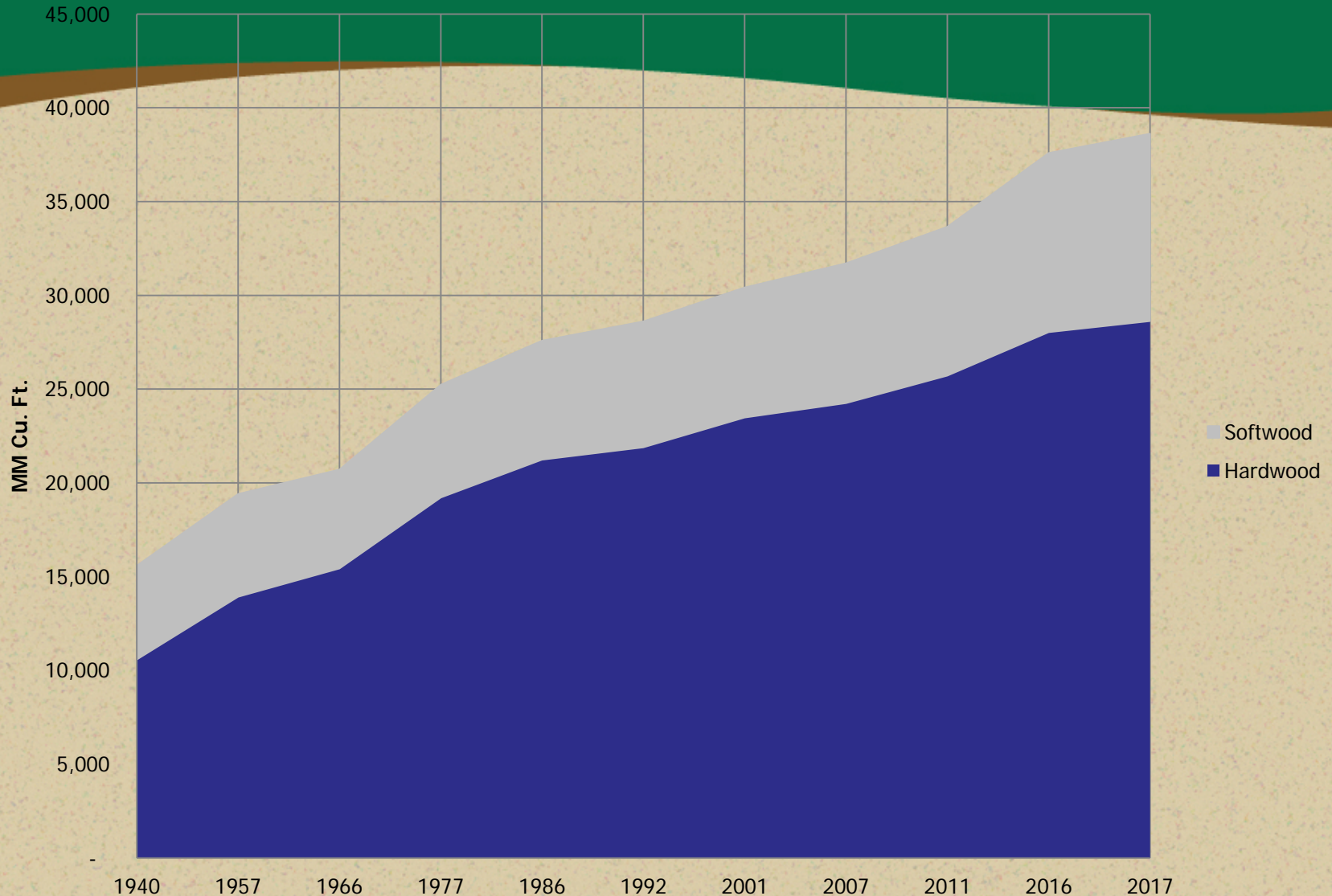


Source: USFS-FIA



Volume of Timber in Virginia 1940 - 2017

Volume of Softwood & Hardwood on Timberland in VA, 1940-2017





Virginia Forestland Provides

- Economic Benefit:
\$21 Billion/year
- Jobs – 108,000
- Lumber
- Paper
- Wood for Energy
- Recreation
- Wildlife habitat
- Clean water
- Clean air
- Improved quality of life

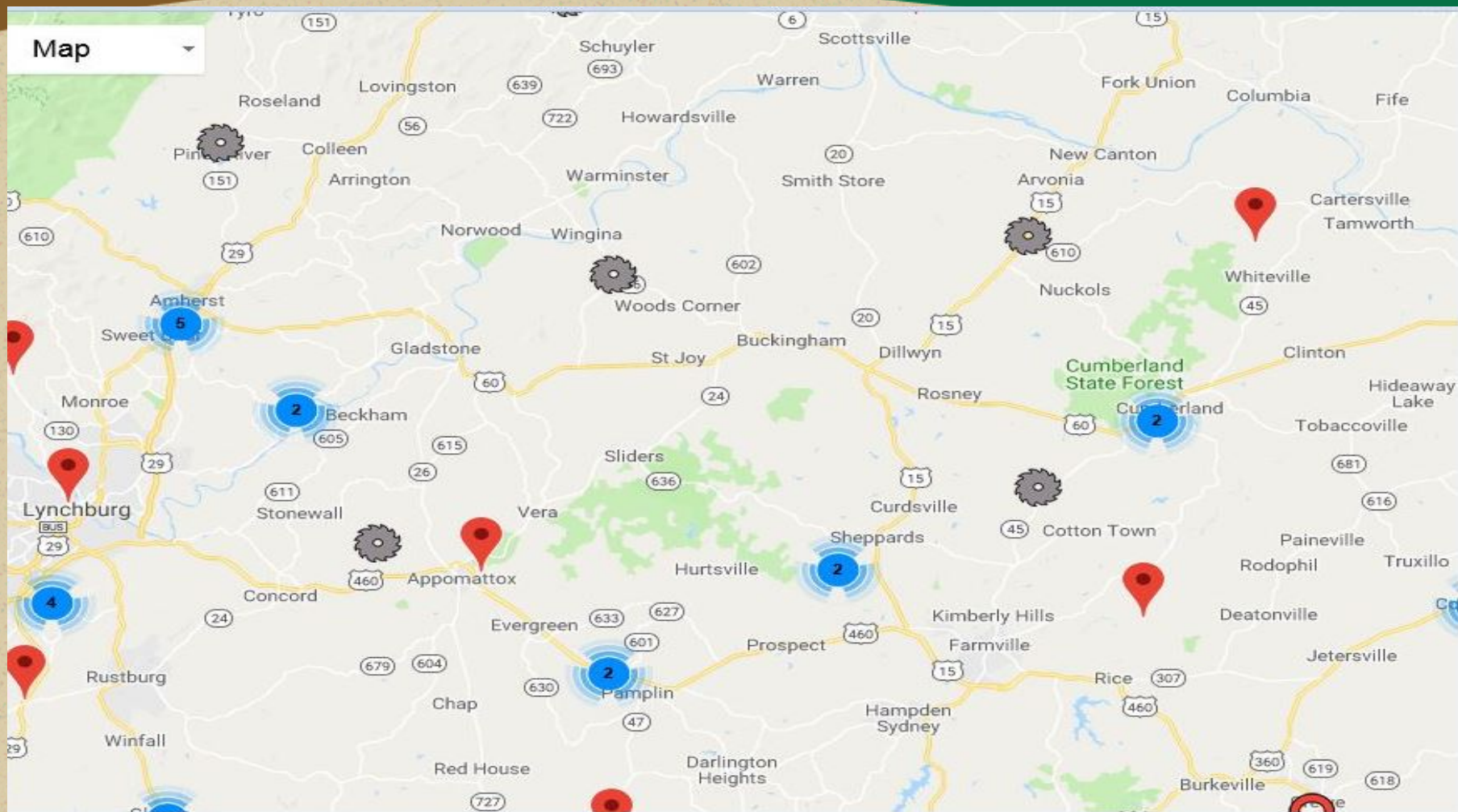


Forests for Timber Products





Forest Products facilities are located throughout Virginia





Forest Products Market Affected by

- **Supply and Demand!**
- Housing crash of 2007, still not full recovery
- China ban on logs and tariffs
- Reduced supply from Canada
- White oak for spirits barrels
- Energy



Forest Benefits

- *Additional economic and public benefits are derived from:*
 - ◆ Protection of soil & water quality
 - ◆ Moderation of air & climate
 - ◆ Provision of wildlife habitat





The Keys to good forest and land management

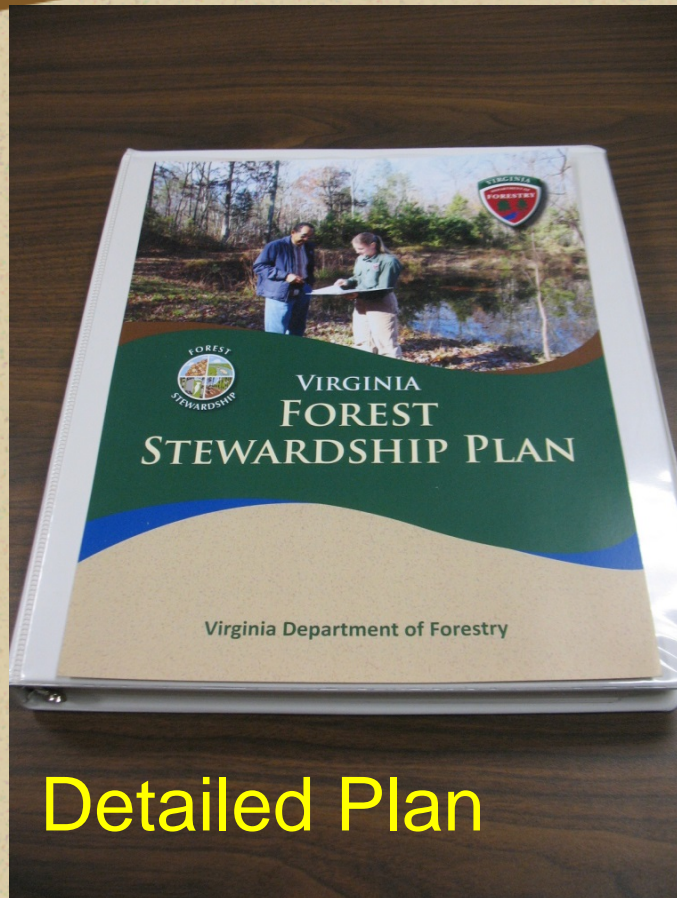
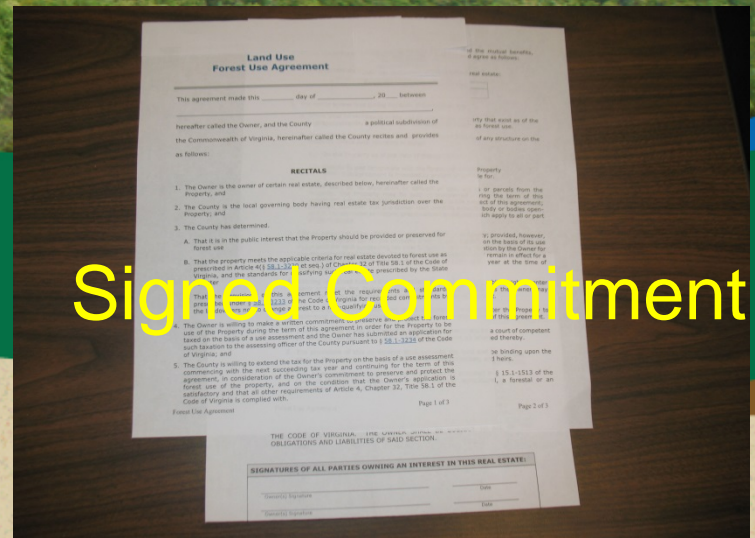
- Learn - Inform, receive information
- Plan – Professional forest management
- Act – Implement plan to meet objectives



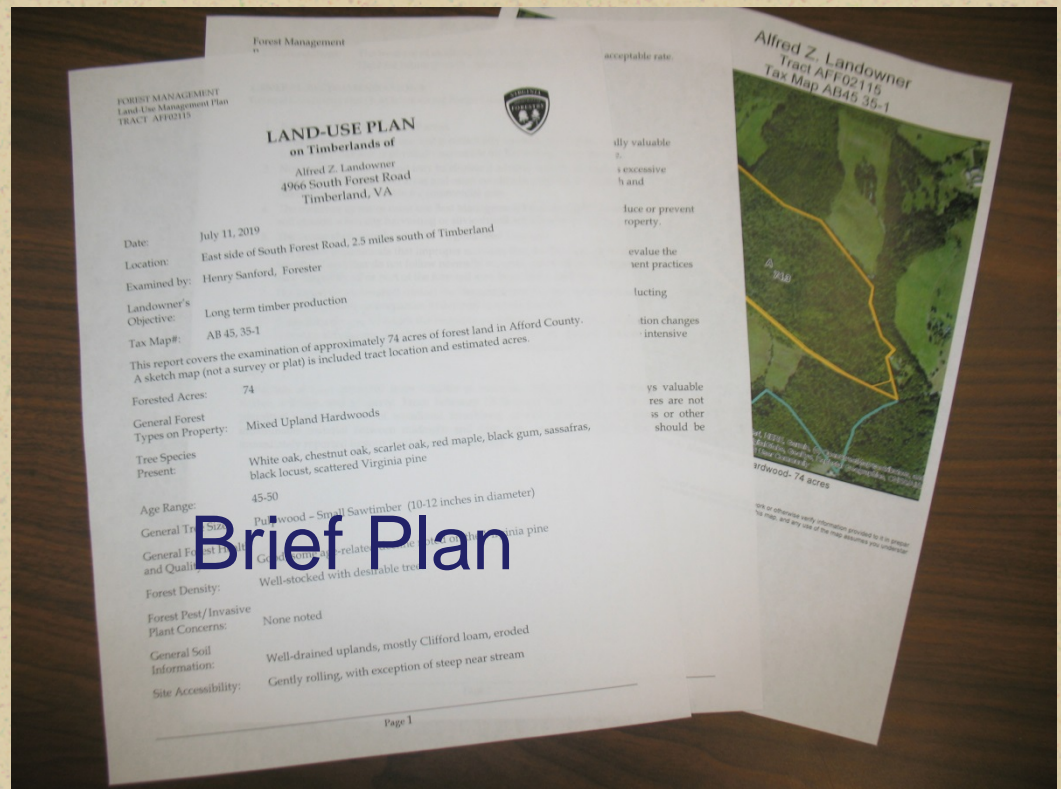


Ways to Certify Intent

Signed Commitment



Detailed Plan



Brief Plan



The Original Purpose of Use Value Taxation in 1971

- **Encourage** preservation, **use**, of land to assure agricultural, horticultural, **forest products**
- **Conserve** natural resources to prevent erosion and protect water
- Promote proper land-use planning
- Promote balanced **economy**, ameliorate land conversion pressure



Role of the State Forester

- Determine and provide a range of suggested forest use values.
- Issue opinions, answer questions regarding standards for forest use.



Land Use Code focuses on Timber Management

- 4VAC10-20-30A... “the real estate is being used in a planned program of **timber management** and soil conservation practices..” that:
 - 1. Enhance the growth of **commercially desirable species**
 - 2. Reduce or prevent soil erosion



Qualifications for Forest Land Use

- 20 acres of Productive forest land
- Well distributed, commercially valuable trees of any size
- Sufficient to compose at least 40% normal stocking
- Recently harvested area being regenerated into a new forest qualify



Forest Land Use Values

- Estimating the **potential** of the site to produce a forest crop, not the present or current crop
- Determine the present value of future timber crops



Forest Value Modeling

Variables:

- Forest type (pine vs. hardwood)
- **Revenues:** Timber value at time of sale (“stumpage price”)
- **Costs** Reforestation, annual or periodic
- **Timing of Costs and Revenues** Forest management/Harvest regimes
- Financial Parameters (Discount, tax, inflation, annual expenses)



Developing a “Composite” Forest

- Determine percentage of acreage by **forest type** – pine or hardwood (based on Forest Inventory Analysis Reports)





Revenue- Timber Value

- ◆ Pulpwood- Smaller wood for paper, composites, energy
- ◆ Saw timber- Larger wood for solid boards





Costs

- Average cost for preparing sites and planting trees
- Annual or periodic land maintenance costs





Time - Harvest Regimes

- Typical management rotation

Pine

(35-year rotation)



Hardwood

(80-year rotation)





Forest Value Modeling

- VDOF uses models to project future timber volume
- A forestry financial analysis tool is used to calculate value, based upon the chosen parameters.
- Projection is run three times based upon three soil quality types – Fair, Good, Excellent



Determining the Value

- The financial model provides a net present value of costs and revenues of the forestry scenario.
- Net present value is annualized
- The annualized value is then capitalized to yield the estimated land use value.



Commonwealth of Virginia 2019 Forest Land Use Values - Land Use Assessment Law

County	2018 Values			2019 Suggested Values			% of Change on Good Site	
	<i>SITE PRODUCTIVITY – Dollars Per Acre</i>							
	<i>Fair</i>	<i>Good</i>	<i>Excellent</i>	<i>Fair</i>	<i>Good</i>	<i>Excellent</i>		
Montgomery	147	218	254	158	235	273	8	
*Nelson (Piedmont)	246	356	404	266	395	434	11	
*Nelson (Mountain)	159	238	261	174	259	284	9	
†New Kent	350	492	592	373	526	633	7	
†Northampton	271	397	538	294	429	580	8	
Northumberland	370	520	625	395	557	670	7	
Orange	243	351	398	265	393	432	12	
Page	160	239	262	176	261	286	9	



Current Forestry Topics

- Hardwood Management Initiative
- Pine Sustainability Work and Success
- Water Quality Emphasis
- Diminished species recovery – longleaf, shortleaf pine, American chestnut
- Forest Health- native, invasive pests
- Forest Protection- Fire-wise

QUESTIONS



Keeping our Forests
Working...and Growing