

Urban Tree Canopy

What is it Good For?

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Urban Tree Canopy

- What is Urban/Community Tree Canopy
- Why Do an Assessment?
- Benefits of Tree Canopy
- Setting a Goal to Increase Canopy



Trees are capital assets

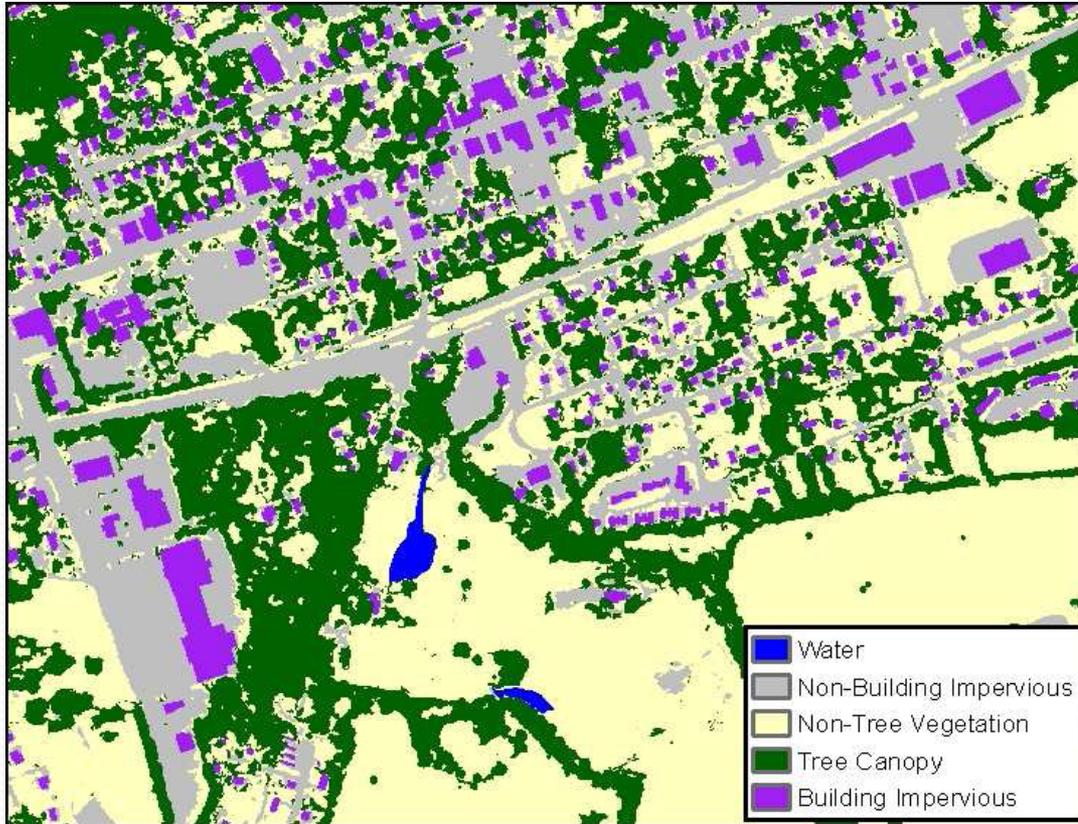




The Assessment

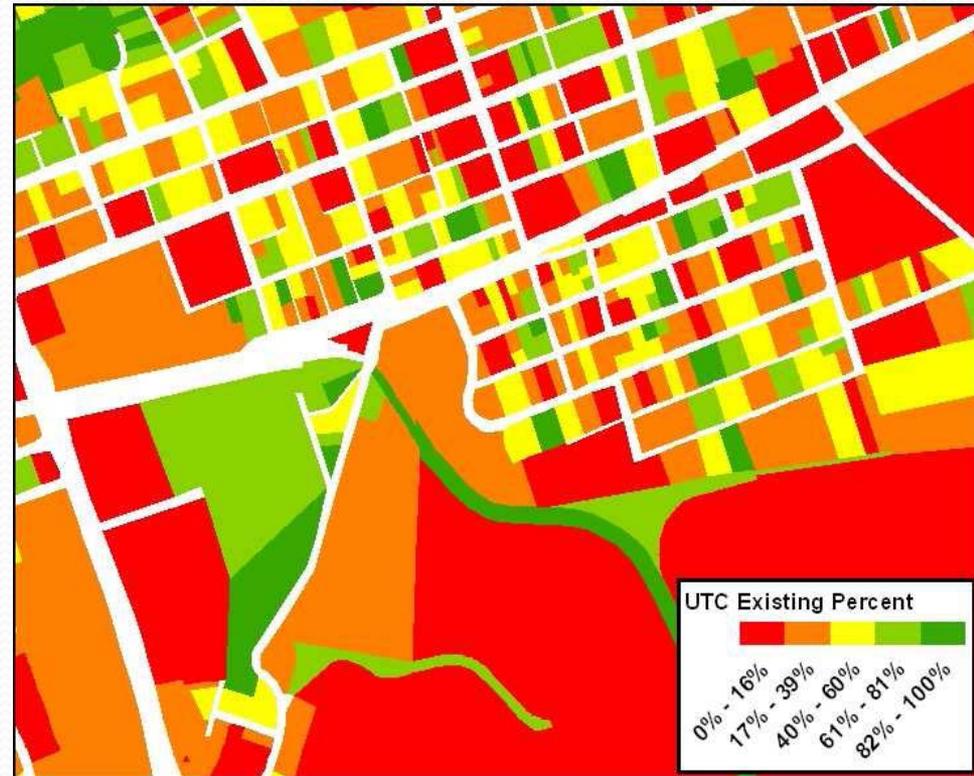


UTC Assessment



The aim is to increase a communities understanding of their urban forest resources, particularly as it relates to the amount of canopy that currently exists and the amount of canopy that could exist.

Existing Tree Canopy



Summarization of the amount of UTC present within parcel boundaries.

Canopy over impervious surface

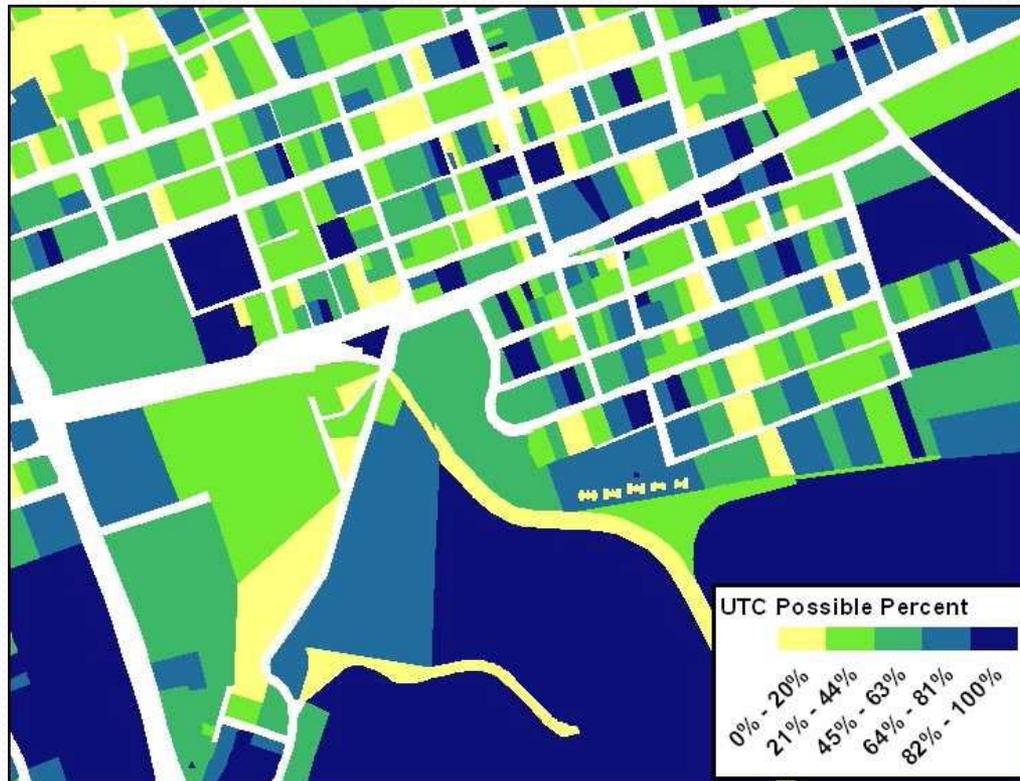


Urban Tree Canopy



This tree would be assessed as canopy. The land cover below does not matter

Possible Tree Canopy



The percent of land that is theoretically available for the establishment of tree canopy when viewed from above

Possible



Possible Tree Canopy



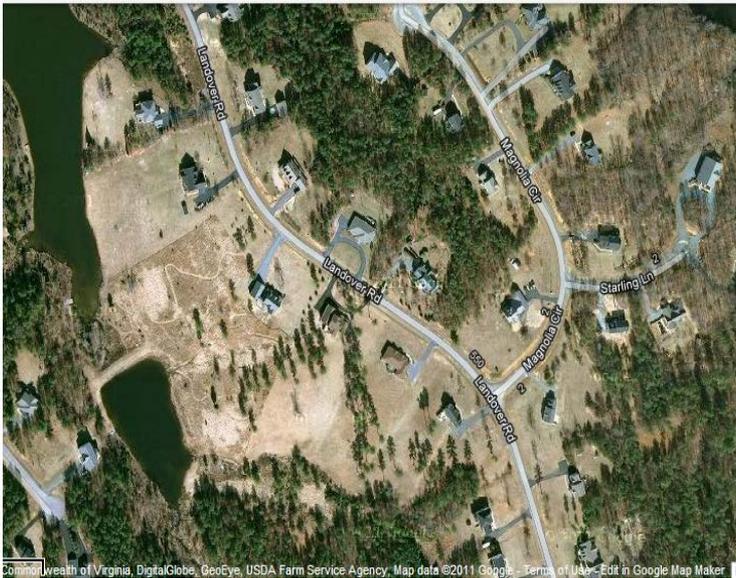
Potential

Preferable

Potential vs. Preferable

Potential

Preferable or not?



Benefits of Urban Tree Canopy



The Next
Community
Park

Trees Improve Water Quality



**Where
can we
put the
Trees?**

Economic Benefits

Studies show that people will stay longer and spend more in shopping areas with tree lined streets,



People Prefer Trees

Air Quality

Air Quality Benefits of Urban Forests, Washington, D.C.

Emissions Filtered	Urban Forest Removes Pollution Equivalent to the Emissions of	
	Automobiles	Single Family Homes
Particulate Matter (10 microns)	315,200	30,400
Sulfur Dioxide	82,400	1,400
Carbon	9,700	49,000
Nitrogen Dioxide	3,500	2,300
Carbon Monoxide	78	300

Source: Nowak et al. In Review

Recreation ~ Relaxation





How do Communities set UTC Goals?

Assessment of present condition ~ how much canopy do we have?

Determine Existing

Identification of various criteria with which to evaluate the community forest such as, street, parks, schools, residential, commercial, and industrial sites, and the amount of existing UTC by these .



Potential vs. Preferable

Assessment of potential UTC

Financially how much can we spend and where are we likely to plant trees?

Assessment of preferable UTC

Where is it socially desirable to plant trees?



Partners to develop the goal

- City GIS staff
- Planning staff
- Arborist
- Public Works Director
- Tree Board members
- Tree Stewards
- Interested Citizens



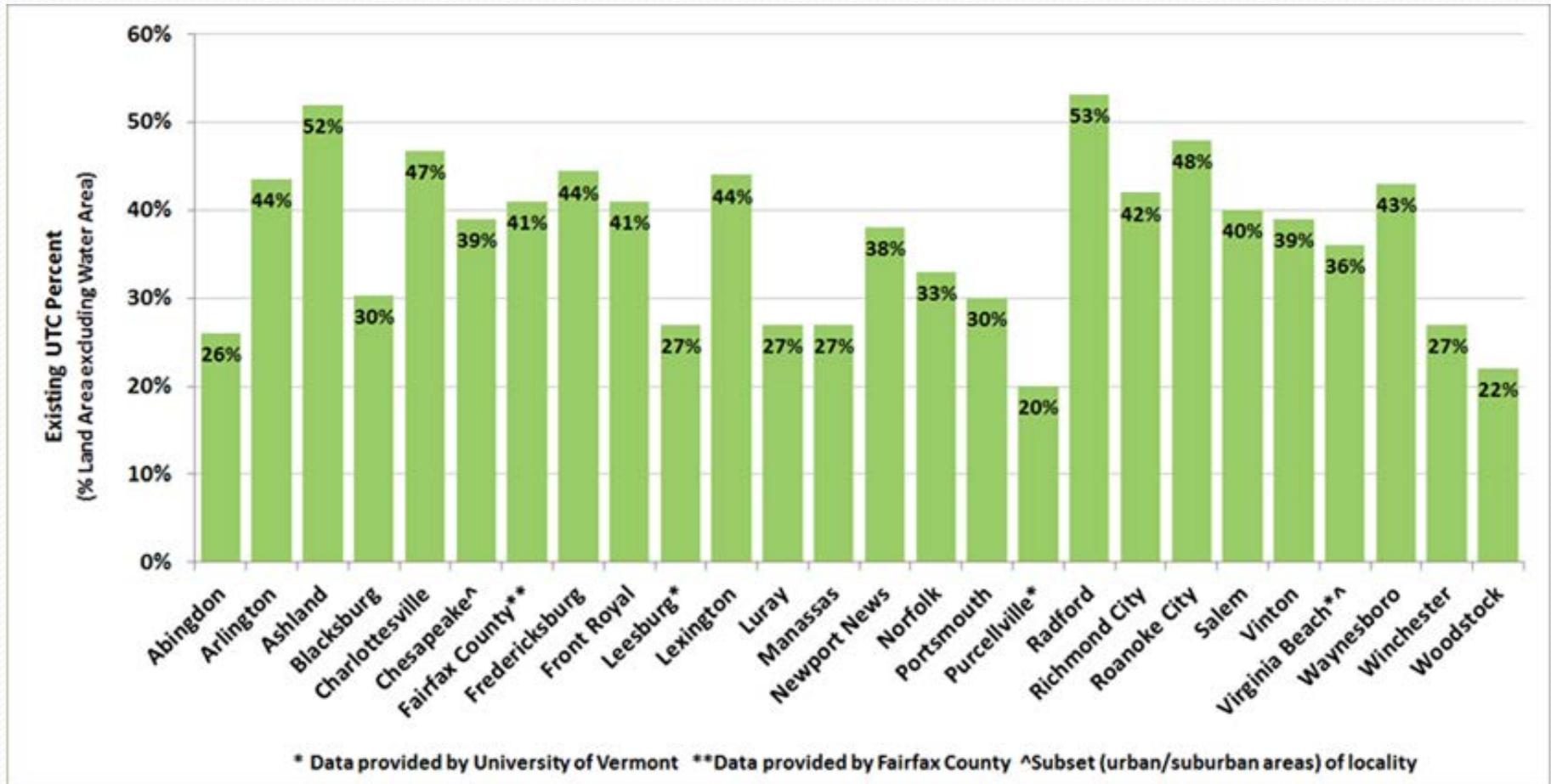
Adoption of the UTC Goal based on the findings of the assessments

Goal setting includes:

- Current UTC - existing
- Identification of new tree planting to increase canopy
- Protection and maintenance of existing trees to realize related canopy growth
- Consideration for the loss from tree mortality and land conversion

It is preferable to formalize the goal in some type of ordinance or master plan for the community

Communities in VA with UTC Assessments



Resources

[VA UTC Program website: http://gcp.frec.vt.edu/va_utc.html](http://gcp.frec.vt.edu/va_utc.html)

USFS Northern Research Station:

<http://nrs.fs.fed.us/urban/utc/>

Urban Natural Resource Institute UTC webcast:

<http://www.unri.org/webcasts/archive/march-2011a/>

Leesburg VA UTC website:

<http://www.leesburgva.gov/index.aspx?page=946>

Time

