

# Quantifying Impervious Surface classified by Land Use Category within Cities and Counties of the Northern Virginia study area

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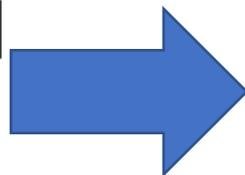
# METHODS

<b>Classification Name</b>	<b>Included Land Use</b>
<b>Residential</b>	<b>Single family dwellings, multiple family dwellings</b>
<b>Special Dev Area</b>	<b>Local and Federal government property</b>
<b>Transportation</b>	<b>Interstate, Primary and Secondary roads</b>
<b>Commercial/Industrial</b>	<b>Commercial/Industrial property</b>
<b>Mixed Use</b>	<b>Any combination of residential and commercial/industrial/agricultural</b>
<b>Open Space/Parks</b>	<b>Open spaces, parks</b>
<b>Unclassified</b>	<b>Any land not classified by parcel coverage from city/county government</b>

# METHODS



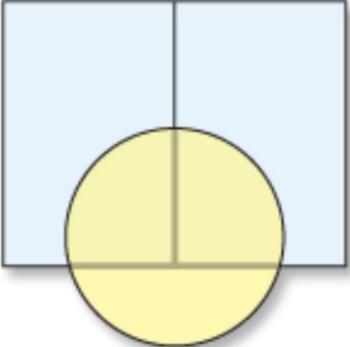
Impervious Surface



Buildings Footprint Erased

# METHODS

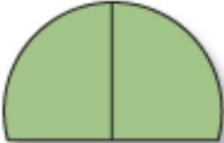
LAND USE CATEGORY



IMPERVIOUS SURFACE



OUTPUT

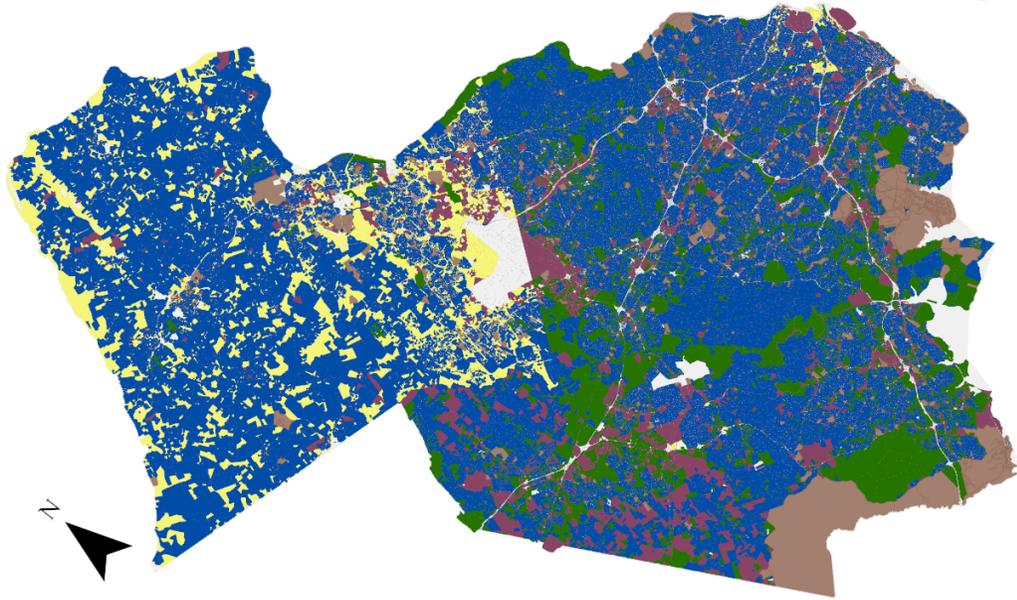


Acres of Impervious Surface

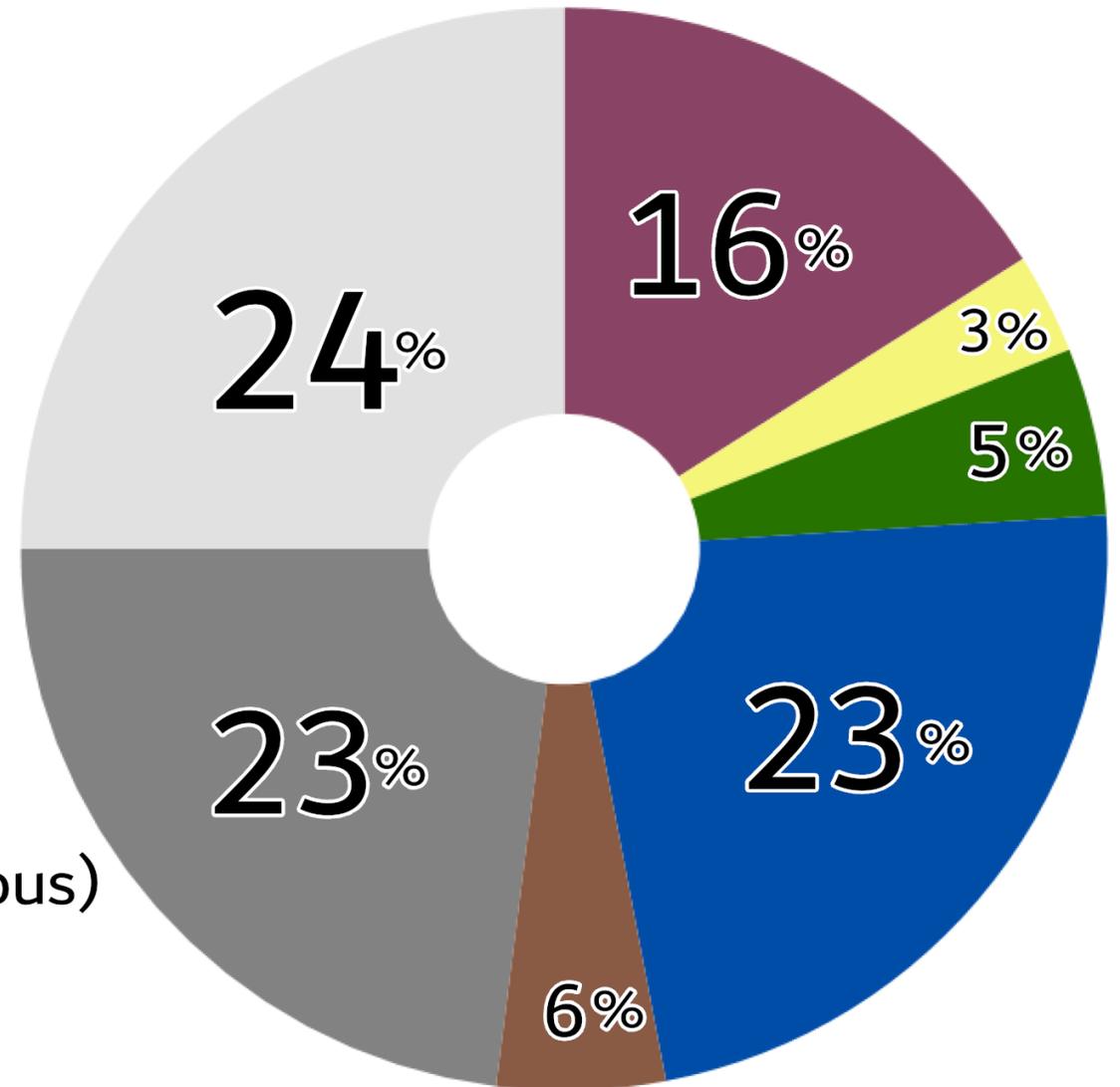
% of this Land Use Cat covered by Impervious Surface

OBJECTID	Land Use Cat	AREA	PERCENTAGE
1	Commercial/Industrial	719.713943	38.873743
2	Mixed Use	15.083295	17.826701
3	Open Space/Parks	139.892076	18.301158
4	Residential	841.967831	20.469224
5	Special Development Area	171.165508	27.065673
6	Transportation	786.06183	98.811279

# Northern Virginia Study Area

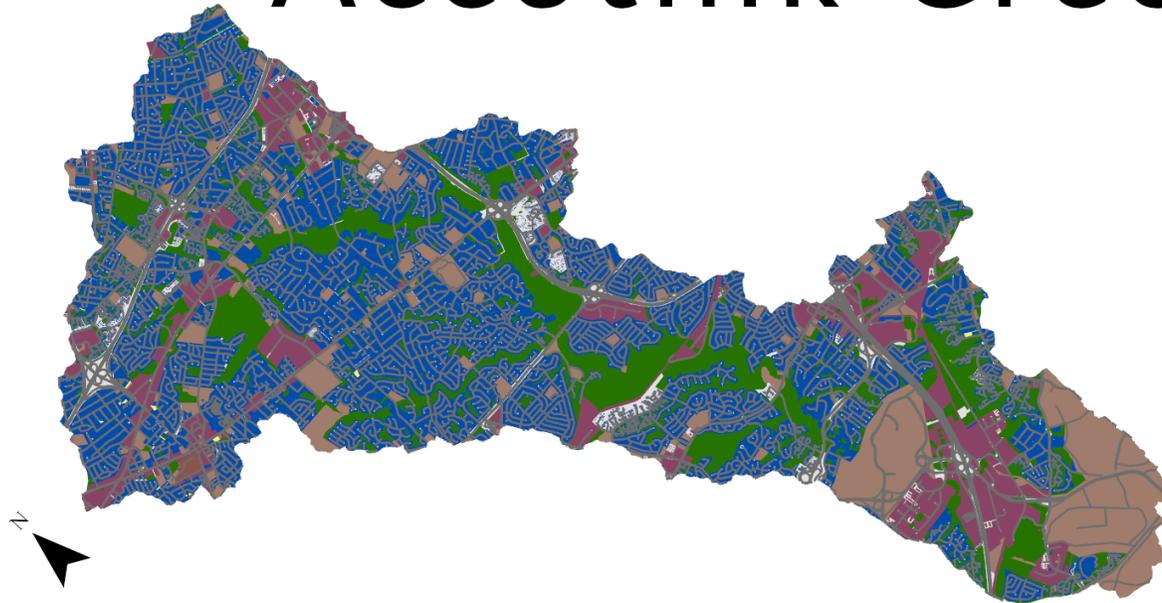


- Residential (is 6% impervious)
- Special Dev Area (is 10% impervious)
- Transportation (is 95% impervious)
- Commercial/Industrial (is 21% impervious)
- Mixed Use (is 3% impervious)
- Open Space/Parks (is 4% impervious)
- Unclassified (is 38% impervious)

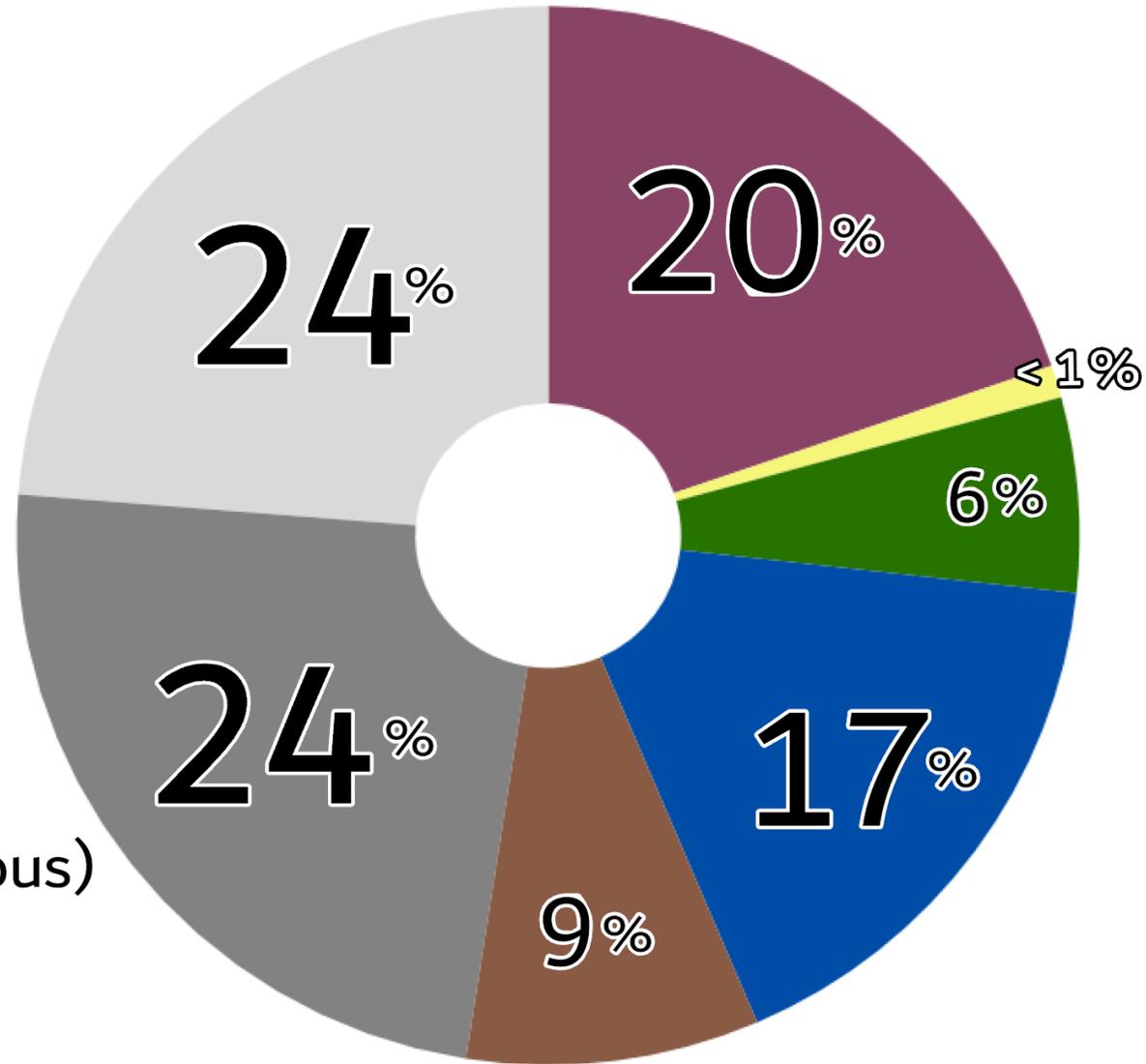


Percentage of Total Imperviousness in Study Area made up by each Land Use Category

# Accotink Creek Watershed

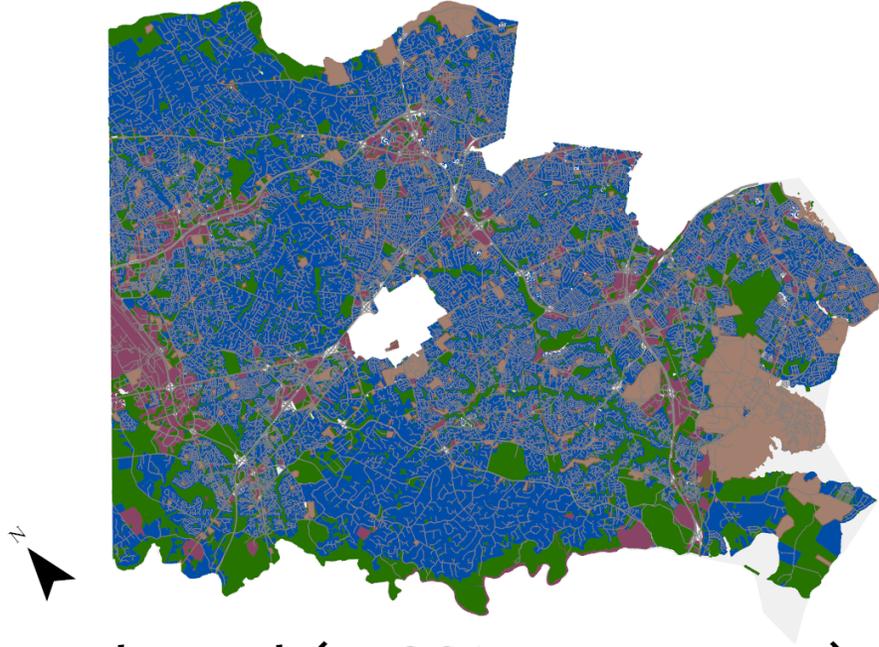


- Residential (is 10% impervious)
- Special Dev Area (is 19% impervious)
- Transportation (is 96% impervious)
- Commercial/Industrial (is 47% impervious)
- Mixed Use (is 6% impervious)
- Open Space/Parks (is 8% impervious)
- Unclassified (is 53% impervious)

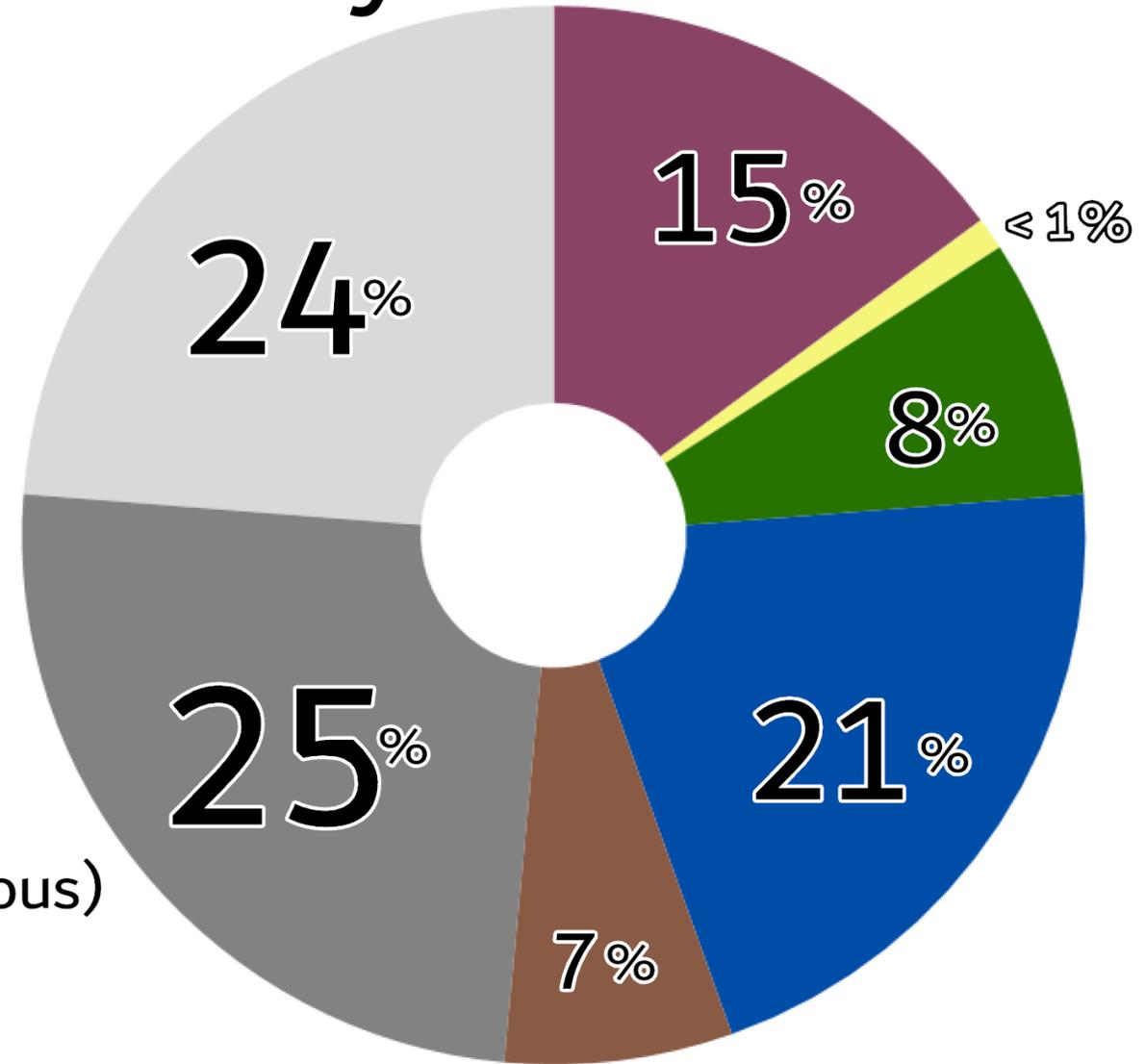


Percentage of Total Imperviousness in the Accotink Creek Watershed made up by each Land Use Category

# Fairfax County



- Residential (is 9% impervious)
- Special Dev Area (is 14% impervious)
- Transportation (is 97% impervious)
- Commercial/Industrial (is 36% impervious)
- Mixed Use (is 24% impervious)
- Open Space/Parks (is 5% impervious)
- Unclassified (is 40% impervious)



Percentage of Total Imperviousness in Fairfax County made up by each Land Use Category

# FINAL REPORTING

## ***City/County:***

Arlington County  
City of Alexandria  
City of Fairfax  
Fairfax County  
City of Falls Church  
Loudoun County  
City of Manassas  
City of Manassas Park\*  
Prince William County

## ***HUC10 Watershed:***

Pohick Creek  
Piney Run\*  
Broad Run (Potomac)\*  
Tuscarora Creek\*  
Difficult Run\*  
Rock Creek\*  
Occoquan River\*  
Cameron Run\*  
Quantico Creek\*  
South Fork Catoctin Creek\*  
Upper Goose Creek\*  
North Fork Goose Creek\*  
Lower Goose Creek\*  
Broad Run\*  
Cedar Run\*  
Bull Run\*

## ***HUC12 Watershed:***

Accotink Creek

*\*In progress*

## ***Questions?***

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