

# Phase 6 Land Use Database version 2

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Modeling Workgroup Quaterly  
Annapolis, Maryland

# P6 Land Use Development and Review Schedule

May 2015	Complete regional land use dataset using nationally available data: Phase 6 Land Use Database v1 (P6LU_v1).
Aug - Sep 2015	Rolling jurisdictional <u>proof-of-concept</u> review of how CBP is using their data.
Sep 1, 2015	Deadline to incorporate local land use/cover data. Submit P6LU_v2 to CBP Modeling Team.
Sep 15 – May 16	Incorporate additional local data and high-res land cover into P6 Land Use Database (P6LU_v3).
Jan – Jul 2016	Rolling jurisdictional review of P6LU_v3 and CBPO response to comments.
Aug 2016	Finalization of P6LU_v3 database (1985 – 2014)
Sep 1, 2016	Submit P6LU_v3 database to CBP Modeling Team

# P6 Land Use Database Versions

## Version 1 (July 2015)

- Based exclusively on national/regional data

## Version 2 (October 2015)


- Incorporates local land use/cover data
- Includes multiple wetland classes
- Marginally reviewed by local governments and federal agencies

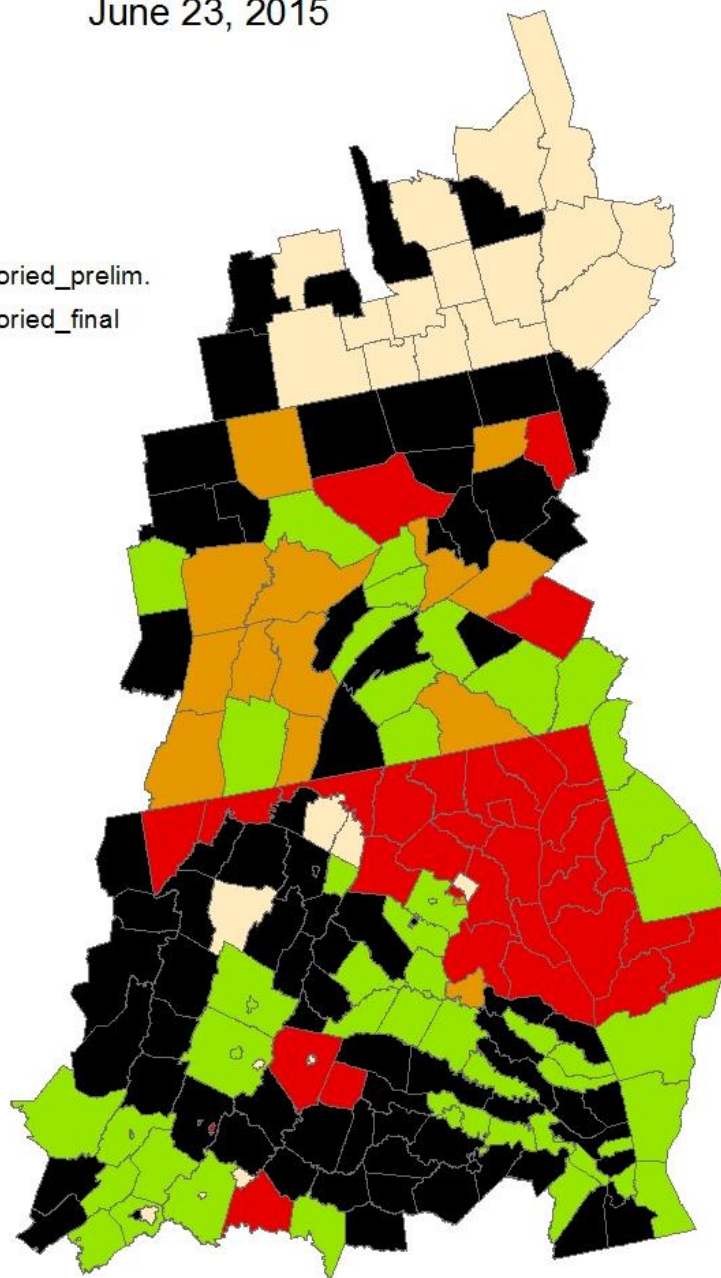
## Version 3 (August 2016)

- Incorporates local land use/cover data
- Incorporates high-resolution land cover, everywhere
- Includes Tree Canopy over Roads and Tree Canopy over Impervious (other)
- Includes new sediment delivery factors
- Includes wetland efficiencies
- Extensively reviewed

Progress Map: From Workplan Folder  
June 23, 2015

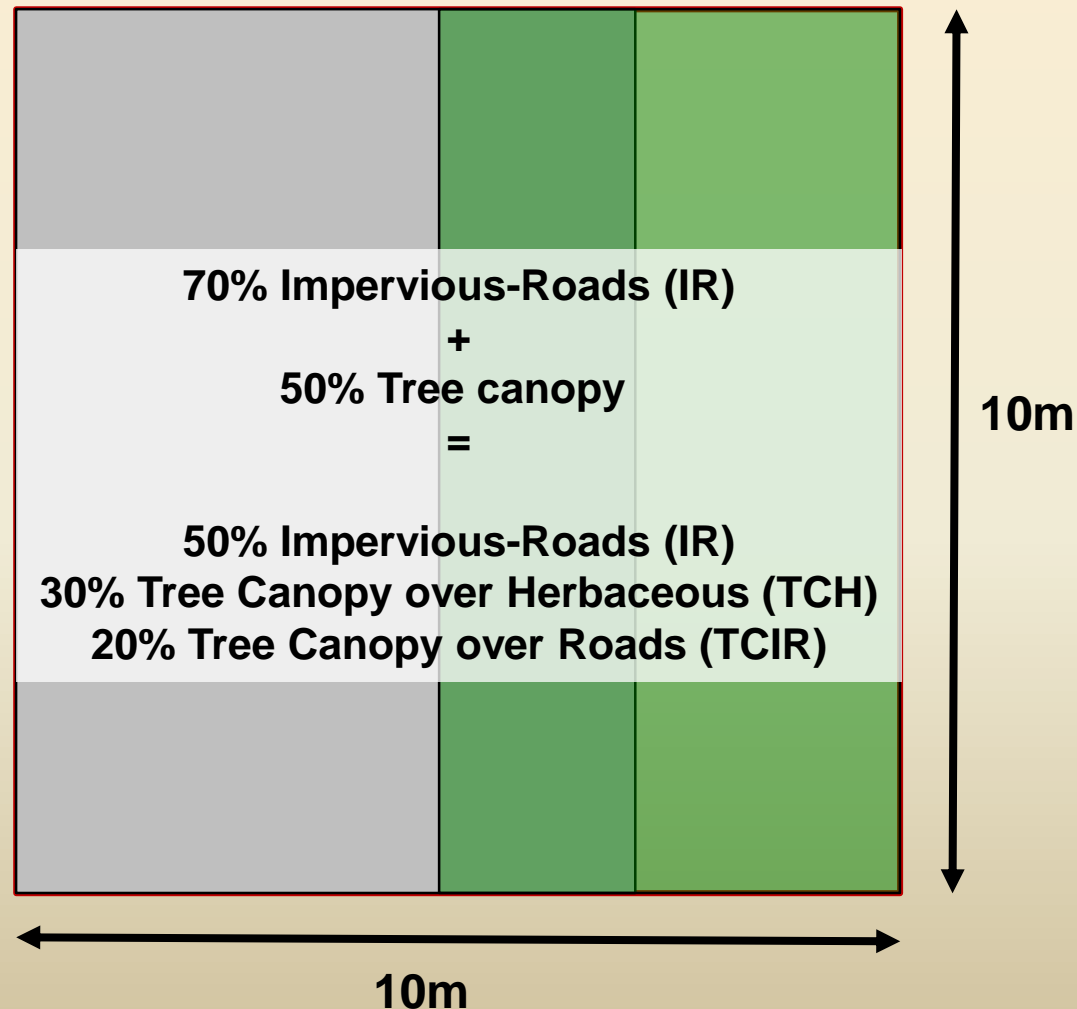
**Status**

-  No Data
-  Data Inventoried\_prelim.
-  Data Inventoried\_final
-  In Process
-  Completed



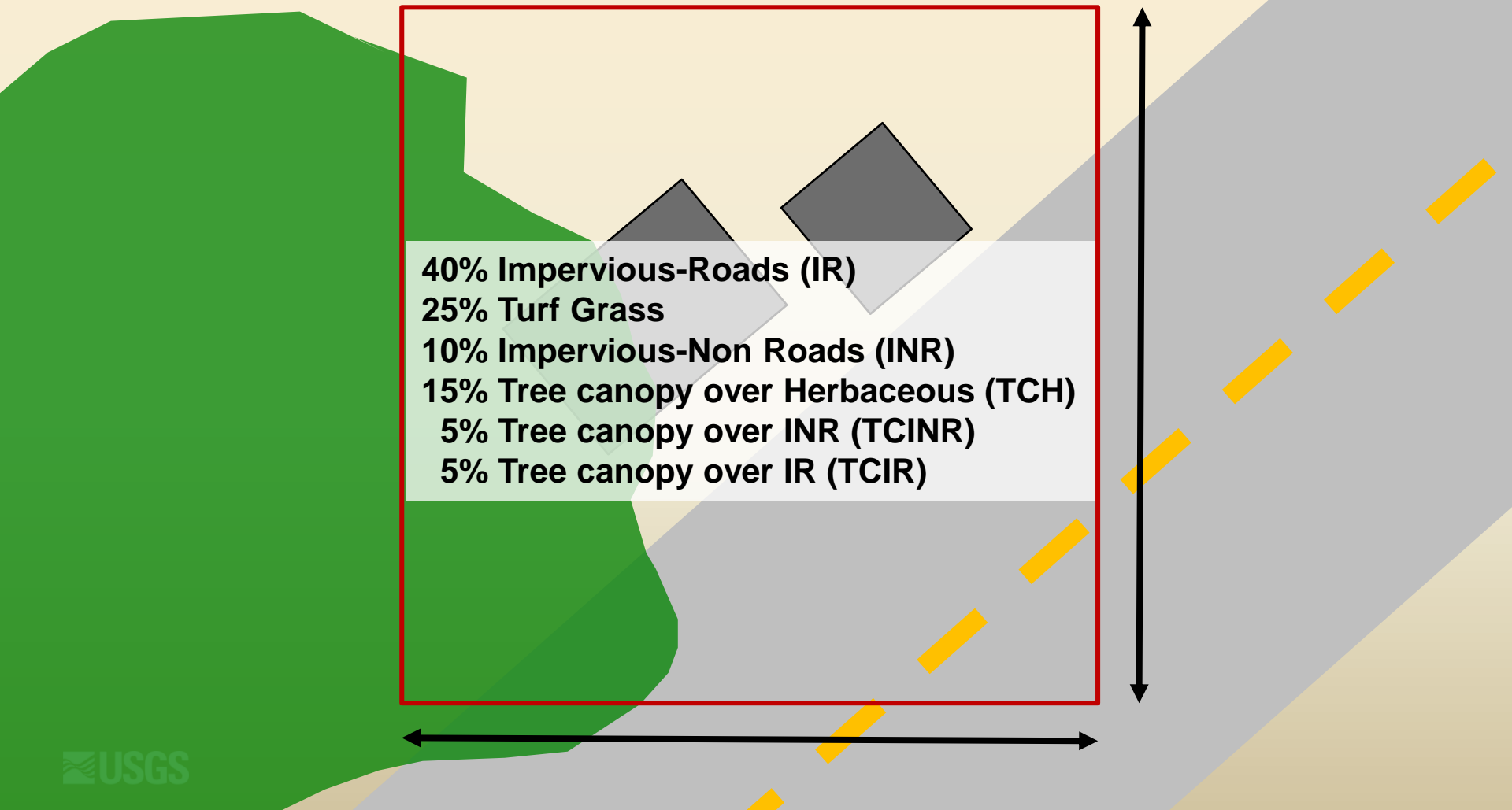
# Phase 6 Land Use Database – from national data

- Assume minimal overlap among tree canopy, turf grass, and impervious surfaces within the same pixel.



# Phase 6 Land Use Database – from local data

- Fourteen different 10m resolution raster datasets
- Most with fractional and continuous pixel values



# Land Use vs. Land Cover

- Low-density Residential
- Transportation
- Agriculture
- Rural conservation

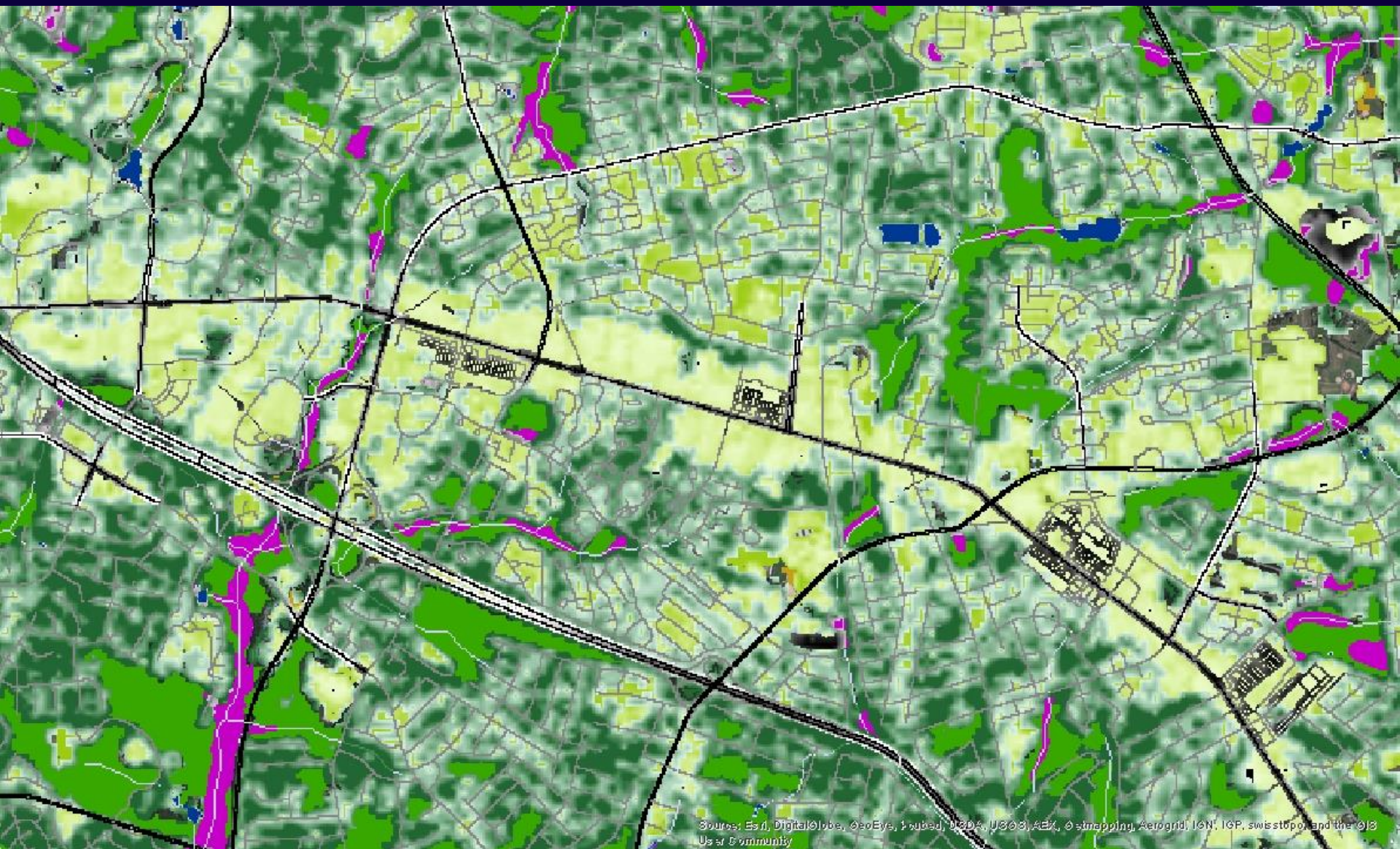
- Impervious surfaces
- Tree canopy
- Herbaceous
- Barren

## Phase 6 Land Uses

- Impervious-Roads
- Forests
- Turf Grass
- Open Space



# Suburbs of Richmond, VA (I-64 W of Dumbarton)





# Sewer vs. Septic

## Same methods used in Phase 5.3.2

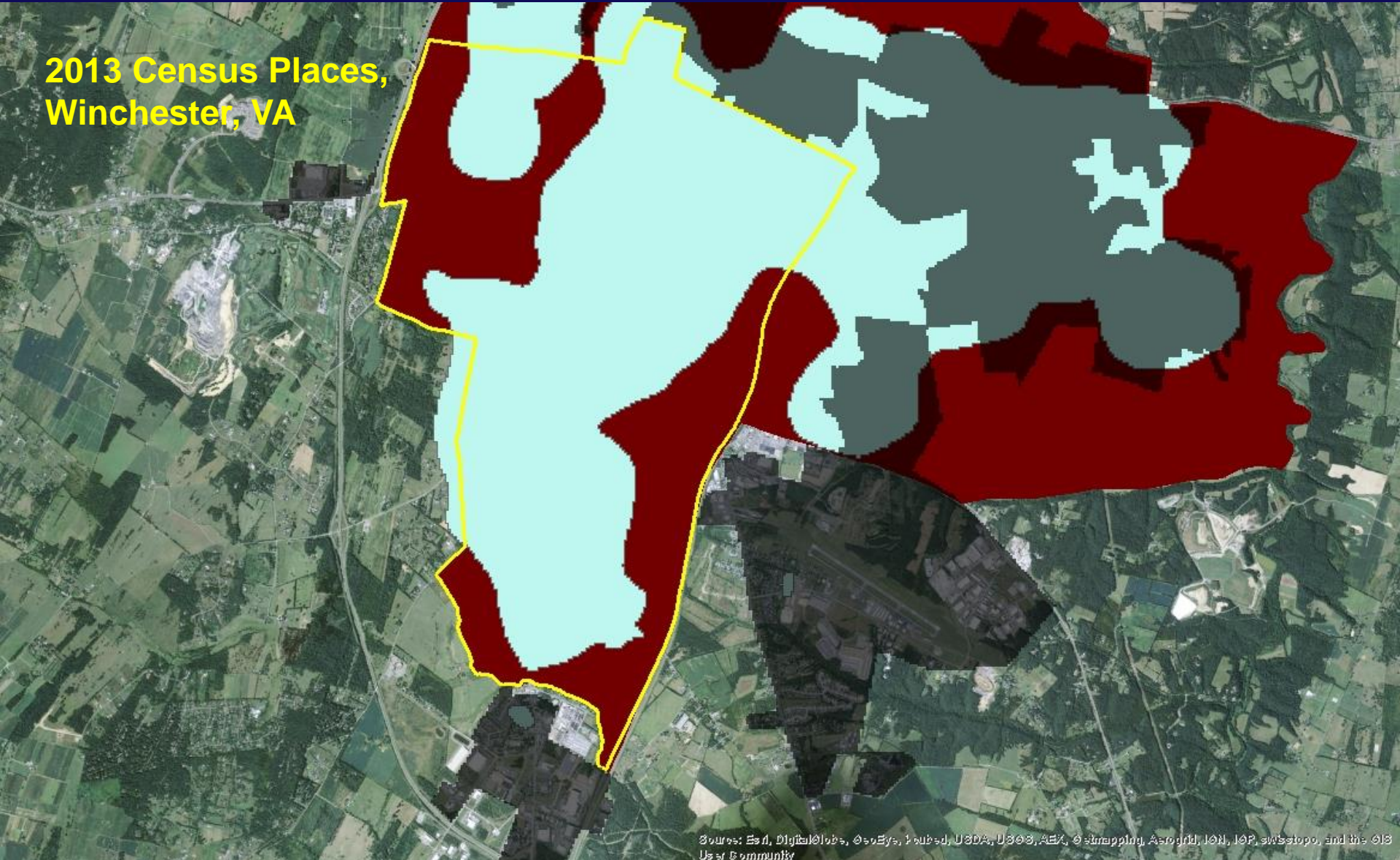
### Updated inputs:

- Sewer service areas expanded based on weight of evidence approach
- % of population growth due to migration  
(was 2000-2010, now 2004-2014)
- Maximum % Growth on Sewer  
(was based on Development from 1984 – 2006, now Development from 2001 – 2011)
- Ratio of Single-detached to total housing units  
(was based on ACS 2008-2012, now based on ACS 2009-2013)

**Note: assume all federal facilities on sewer? Or use overlap to determine if facilities are on sewer?**

# Mapping Sewer Service Areas using Weight-of-Evidence Approach

2013 Census Places,  
Winchester, VA



Sources: Esri, DigitalGlobe, GeoEye, IGN, USDA, USGS, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community