2020 STATEWIDE LAND USE MAP UPDATE
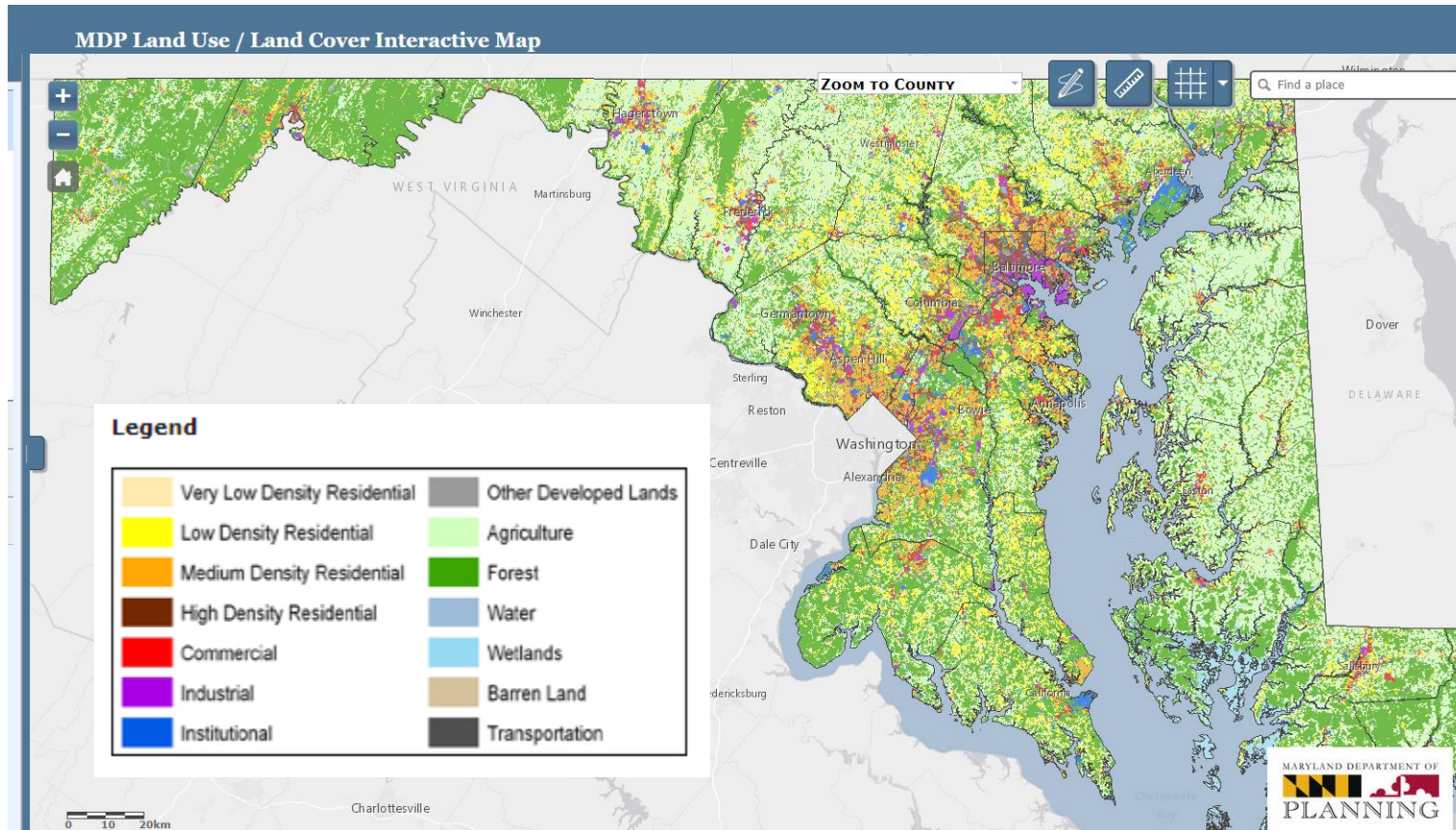
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2010 LAND USE LAND COVER PRODUCT

Webpage: https://planning.maryland.gov/Pages/OurWork/landuse.aspx
Data Download: https://planning.maryland.gov/Pages/OurProducts/DownloadFiles.aspx

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HISTORICAL USES OF THE LULC MAP

Planning Activity	Use
Comprehensive planning	Existing land use distribution Land use change
Pollutant loading analyses	Loading by land use
Development capacity, land preservation targeting, and land stability analyses	Where does development capacity or pressure exist?
Transportation planning	Trip generation/distribution NEPA Indirect and Cumulative Effects Analyses

METHODOLOGY UPDATES

Inputs:

- Vector parcels and tax assessment data (2018)
- High-resolution CC/UVM LU/LC
- County/municipal data, 2010 LULC map, and ancillary data

Methodology Updates:

- Create base land use map (developed uses only)
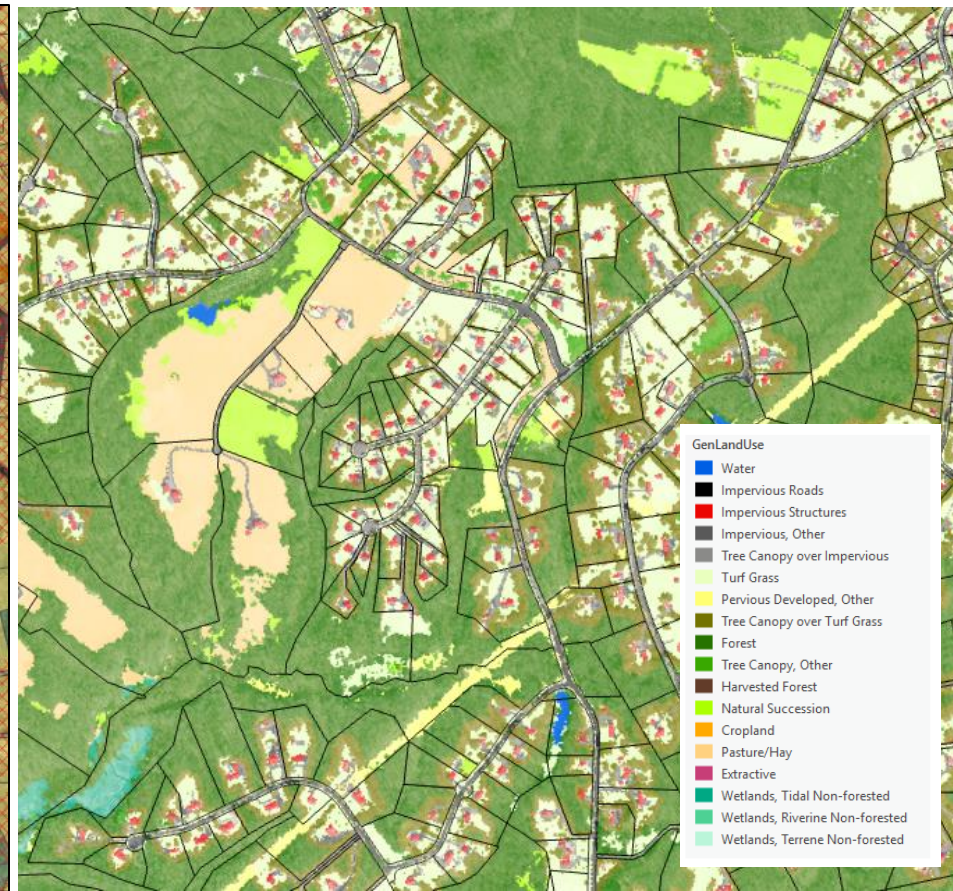- Map entire roadway network as transportation
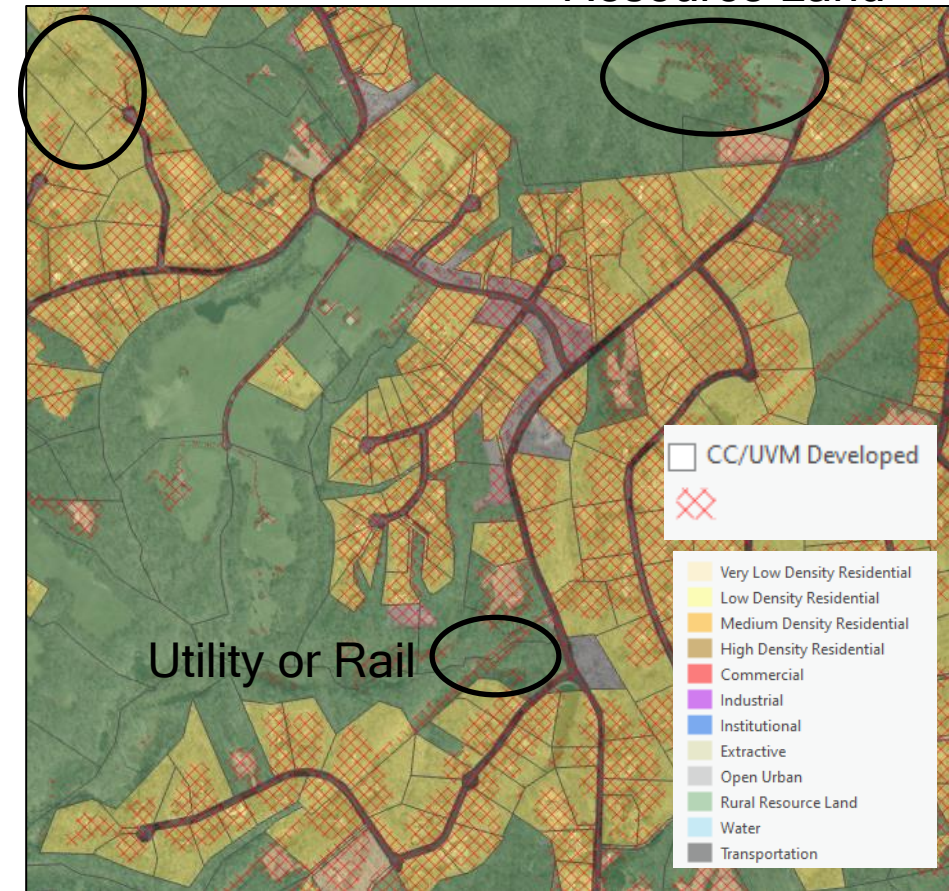- Not comparable to 2010 LULC

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STATEWIDE LAND USE CLASSIFICATIONS

Urban (Developed) Land Uses	Remaining "Rural Resource" Land
Very Low Density Residential (< 0.2 du/ac) • Primarily Agriculture • Primarily Forest	Agriculture Forest Water Wetland Barren
Low Density Residential (0.2-2 du/ac)	
Medium Density Residential (2-8 du/ac)	
High Density Residential (8+ du/ac)	
Commercial	
Industrial	
Institutional	
Other Developed Lands • Transportation • Extractive • Open urban land	

Remove rural/undeveloped subclassifications

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MDP LU vs. CC/UVM LU/LC

Forested Residential

Improved Rural Resource Land

Utility or Rail

CC/UVM Developed

Very Low Density Residential
Low Density Residential
Medium Density Residential
High Density Residential
Commercial
Industrial
Institutional
Extractive
Open Urban
Rural Resource Land
Water
Transportation

Draft Land Use (MDP)

GenLandUse
Water
Impervious Roads
Impervious Structures
Impervious, Other
Tree Canopy over Impervious
Turf Grass
Pervious Developed, Other
Tree Canopy over Turf Grass
Forest
Tree Canopy, Other
Harvested Forest
Natural Succession
Cropland
Pasture/Hay
Extractive
Wetlands, Tidal Non-forested
Wetlands, Riverine Non-forested
Wetlands, Terrene Non-forested

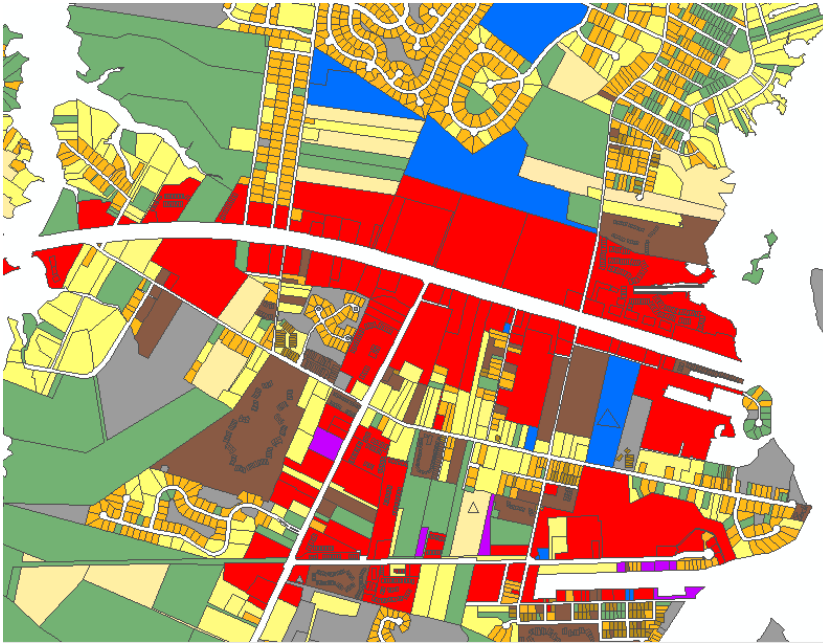CC/UVM 2017/18 LU/LC

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Images show hypothetical example. Actual land uses may differ.
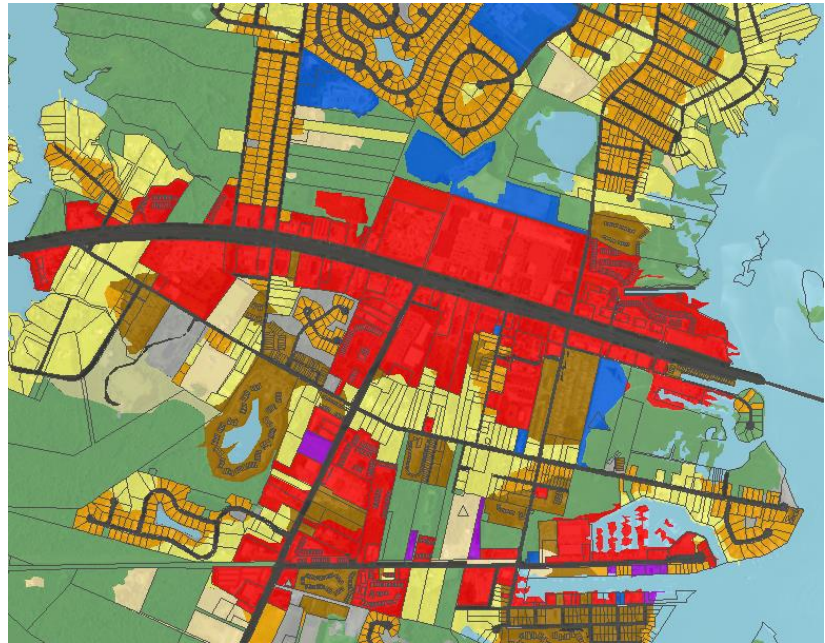
STATE/LOCAL DATA

- Tax assessment data
    - Land use codes and building descriptions
    - Agricultural use assessment
- County/municipal data
- Open urban land – Cemeteries, golf courses, fairgrounds
- Extractive uses

2020 METHODOLOGY STEPS

Step 1: Semi-automated parcel classification

Step 2: Statewide modeling

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Images show hypothetical example. Actual land uses may differ.

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STEP 1: PARCEL CLASSIFICATION (DRAFT METHOD)

Developed parcel contains one of the following:

1. Residential* or commercial/industrial improvements based on tax assessment data
2. Other parcels** meeting structures/impervious thresholds and developed per local and/or 2010 LULC datasets
3. Open urban (e.g. cemetery, park, fairground, golf course), right-of-way, or extractive land
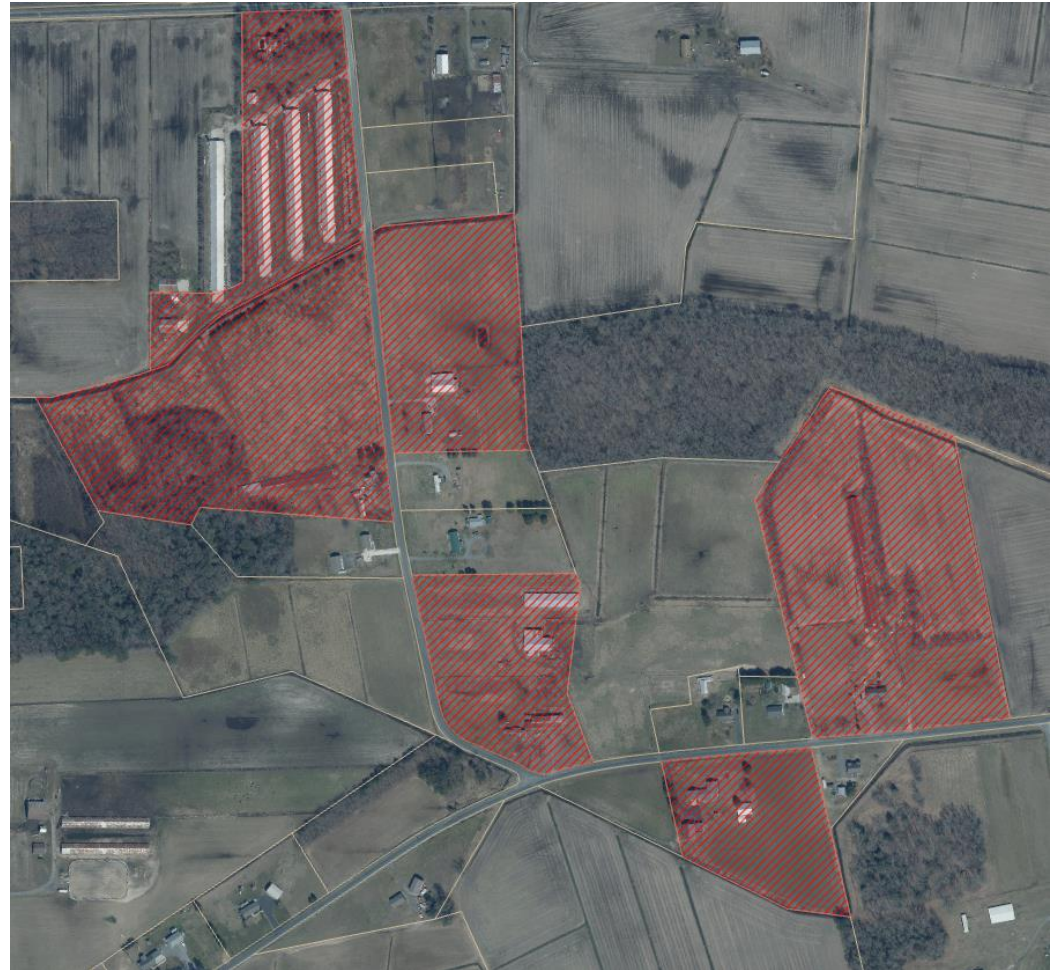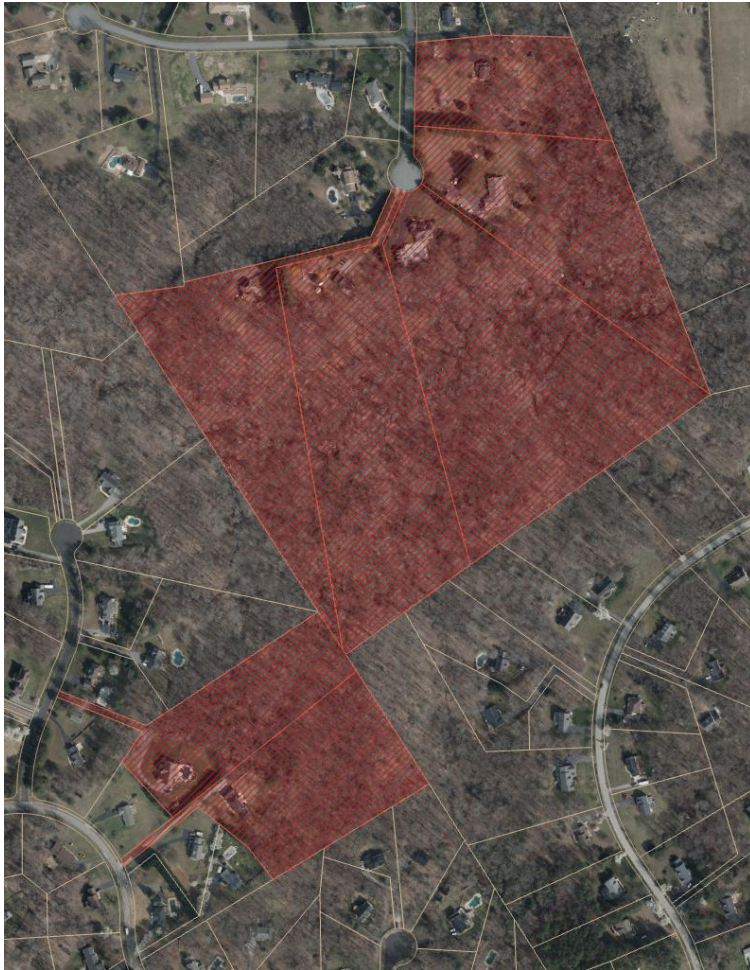
Developed classification based on tax assessment data, local and/or 2010 LULC data, and manual review

*< 20-acre parcel for single-family residential improvement

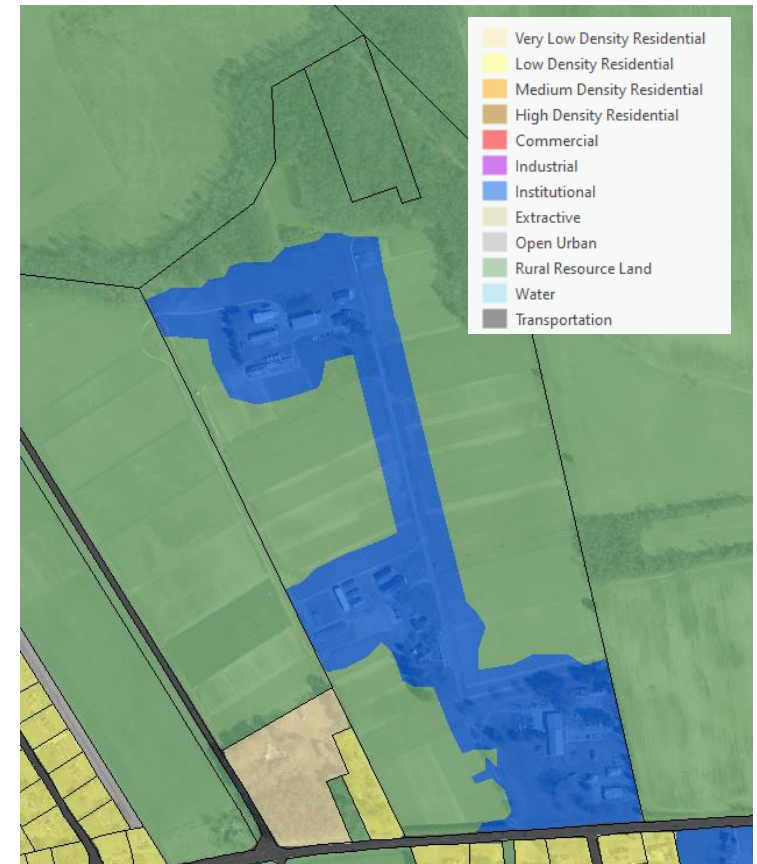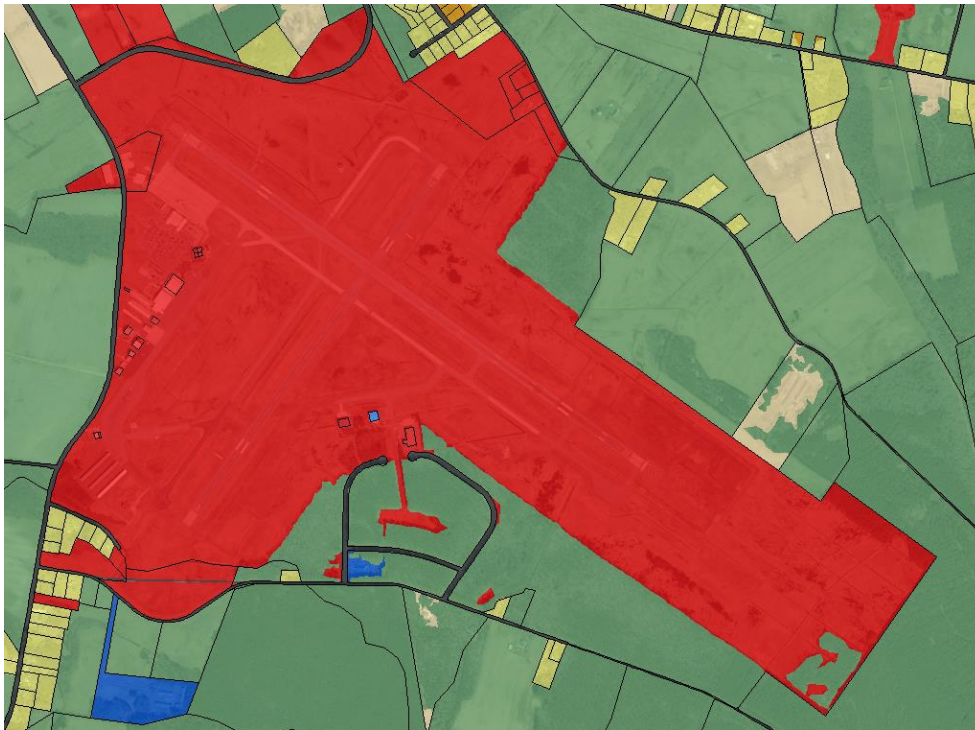**Typically excludes parcels >= 5 acres assessed for agricultural use

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Step 2: Statewide Rules
Large Lot Residential vs. Agricultural Land

STEP 2: STATEWIDE RULES DEVELOPED EXTENT

Draft rule: Entire parcel if < 5 acres and improved with residential or commercial structure based on tax assessment data

Legend:
- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Industrial
- Institutional
- Extractive
- Open Urban
- Rural Resource Land
- Water
- Transportation

Images show hypothetical example. Actual land uses may differ.

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STEP 2: STATEWIDE RULES
OTHER

- Minimum mapping units/generalization
  - Single-family residential density
  - Entrapped undeveloped land or transitional land
- Road ROW coverage
- Solar

POTENTIAL OUTPUTS

Statewide Land Use (Step 2)

Additional CC/UVM LU/LC Detail

Legend:
- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Industrial
- Institutional
- Extractive
- Open Urban
- Rural Resource Land
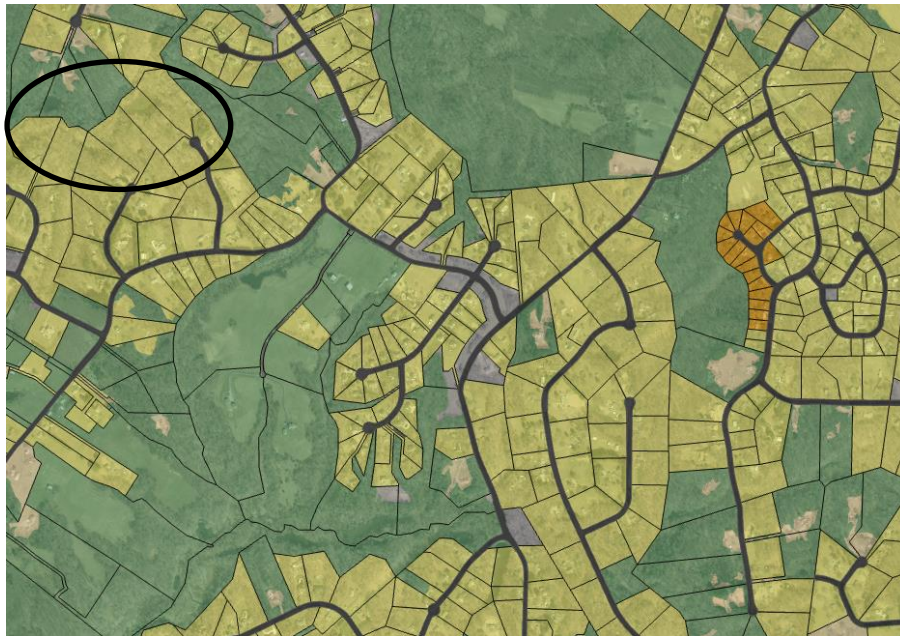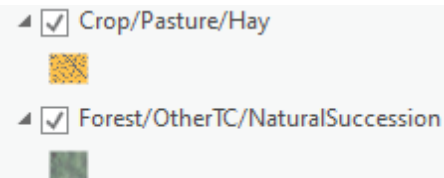- Water
- Transportation

☑ Crop/Pasture/Hay

☑ Forest/OtherTC/NaturalSuccession

Images show hypothetical example. Actual land uses may differ.

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OUTREACH

- Stakeholder kickoff webinar & local data collection (Spring 2020)
- Stakeholder [questionnaire](#) (ongoing)
- Next Steps (expected to begin Summer/Fall 2022)
  - County/municipal parcel classification review
  - Update test county outputs based on high-resolution data (Calvert, Howard, Washington, Wicomico, Worcester) and finalize statewide rules
  - Final outputs generated on a rolling basis

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THANK YOU

- Feedback on methodology?
- Can our process be useful for future LU/LC mapping efforts?
- Lessons learned from other states?

Please contact me at deborah.sward@maryland.gov with any questions or comments.

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