

# Objective 1 Land Use Modeling Updates



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# Agriculture input data

- Intermediate image segments
- CDL 2017, 2018, and 2019 combined
  - Simplified to Crop, Pasture, Fallow/Idle, Orchard/Vineyard(“tree crop”)
- CDL 2017 (simplified)
- NLCD 2016: Pasture
  - Simplified to Pasture or Non-Pasture
- Local Land Use or Zoning
- Parcels

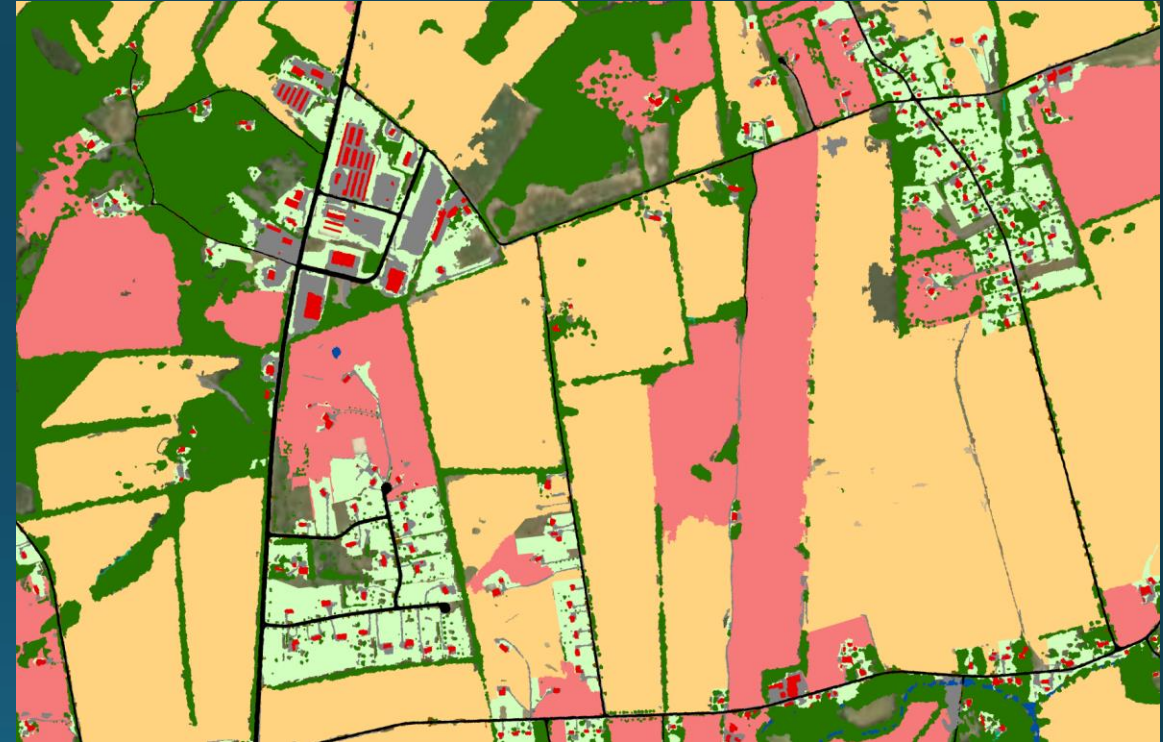
# What are “segments”?

- Shapes derived from imagery
- Group of similar pixels
- Intermediate data product
- To avoid “artificial” borders
- Help identify land uses



# Refining Rules

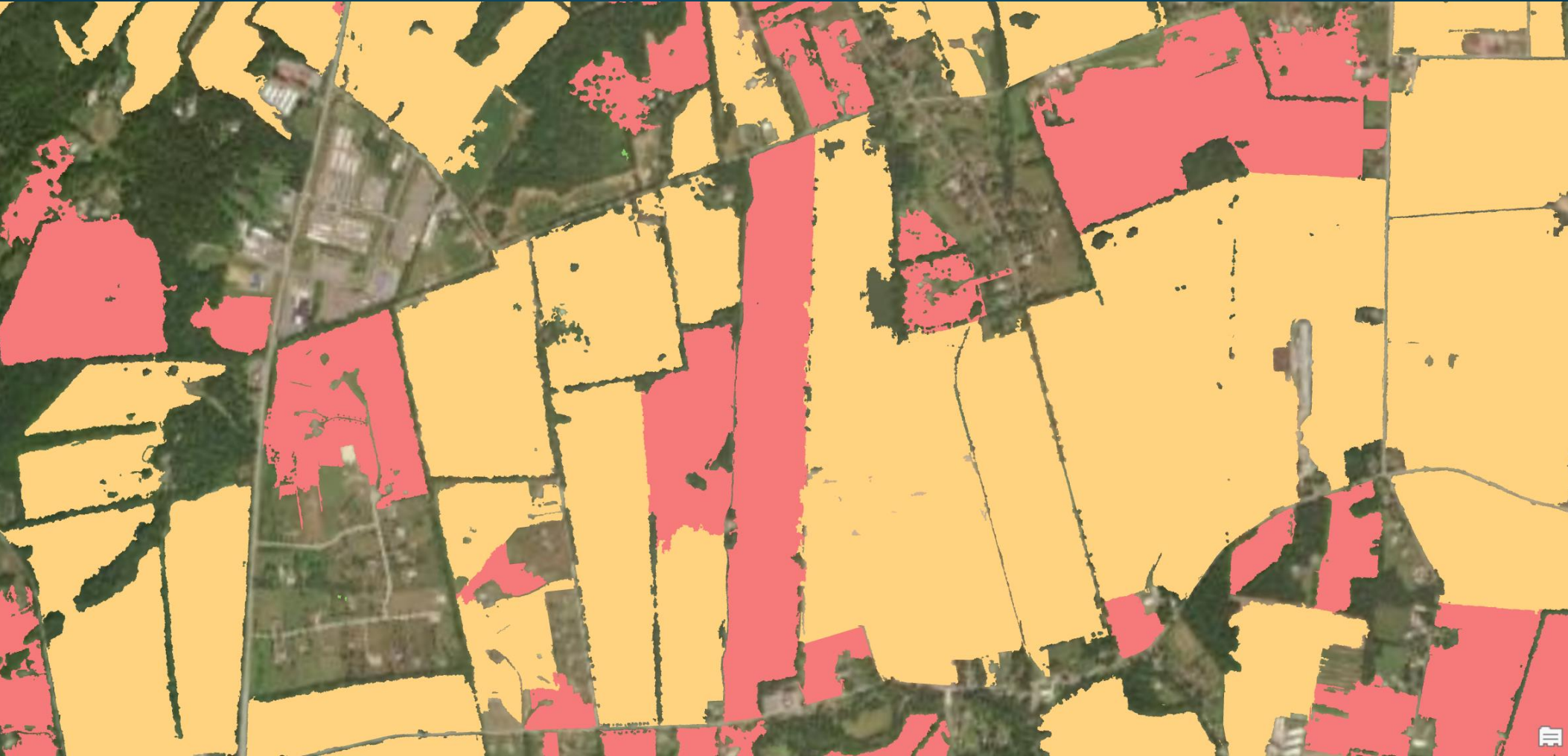
- Leaning towards high confidence and omission while testing
- Tracking every step
- Order of rules/decisions is key
- Reliance on local and ancillary data
- General logic is set
- Thresholds/limits





CONSERVATION  
INNOVATION  
CENTER  
CHESAPEAKE CONSERVANCY

crop  
orchard/vineyard  
pasture

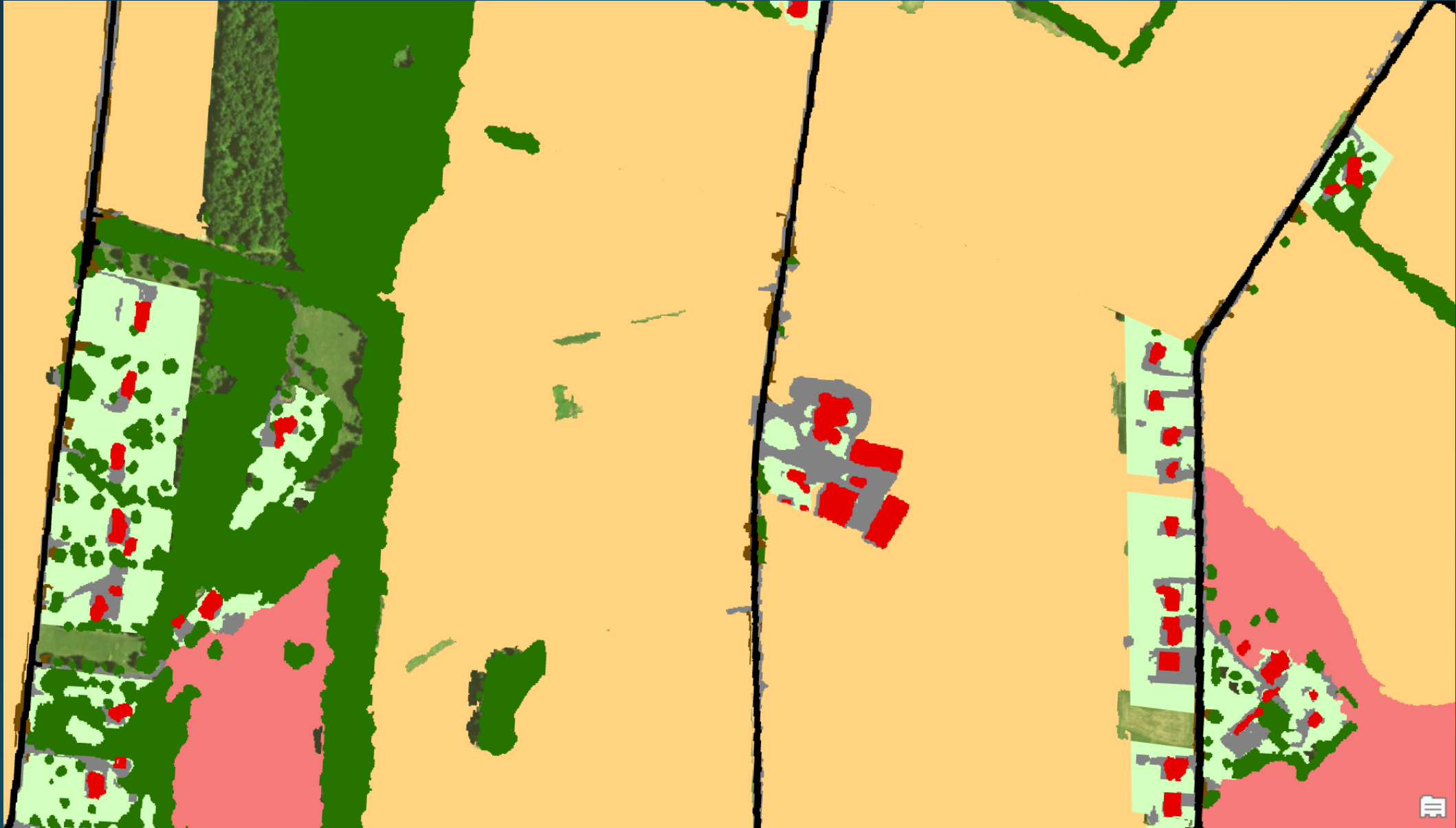






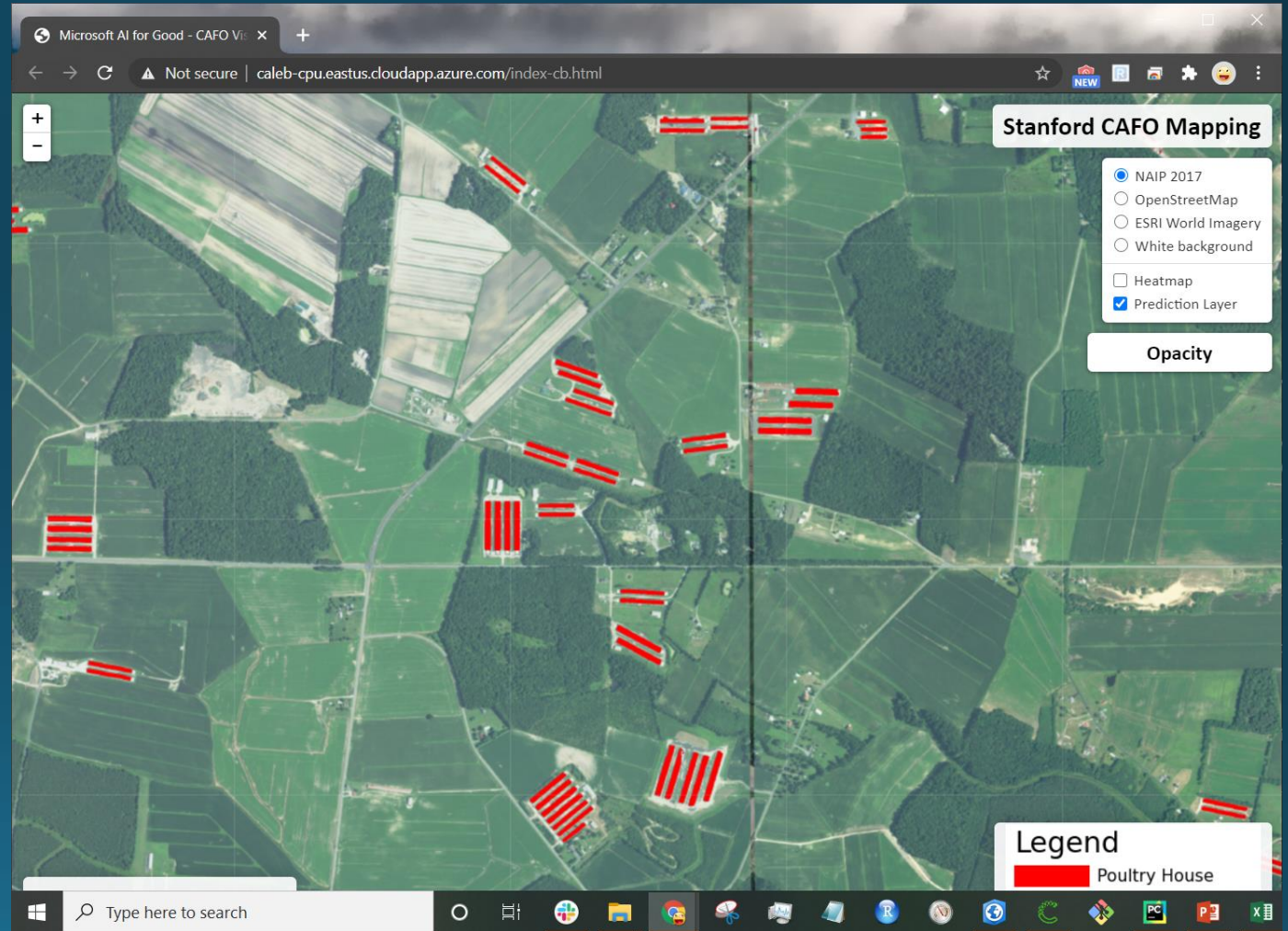






# Automated Chicken House Detection

- Caleb Robinson - Microsoft AI for Good
- [Link to Web App](#)
- Current status
  - Identifies chicken houses in MD, DE and PA
  - Few results in NY
  - Commission errors on roads and urban areas to be fixed with post-processing



# Upcoming

- Full county coverage
- Document of draft rules
- Inclusion of chicken houses
- 14 Test Counties

# Questions?

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