

# FARMLAND CONVERSION IN TENNESSEE

June 2024

Charley Martinez

# 20 Years (1997-2017) Ag and Forestry Land Loss

1.1 Million Acres  
Equivalent to 4 Counties

55,601 acres/year  
152 acres/day  
6.3 acres/hour

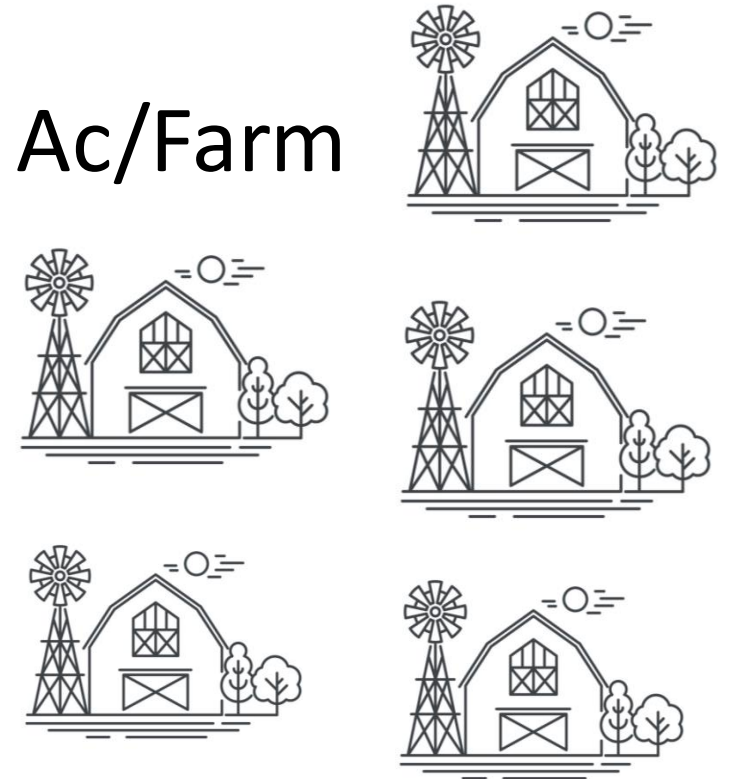


# 1997-2017

130.9 Ac/Farm



155.3 Ac/Farm



1.1 Million Acres  
Converted Out of  
Farmland

# USDA National Agricultural Services

## CropScape Data Layer

- Provides annual estimates of agricultural and forest land cover at a county and state level.
- Pasture, hay, forest, and row crop (corn, soybeans, cotton, wheat, tobacco, and sorghum) acres for Tennessee from 2017 to 2022
- Developed-Residential

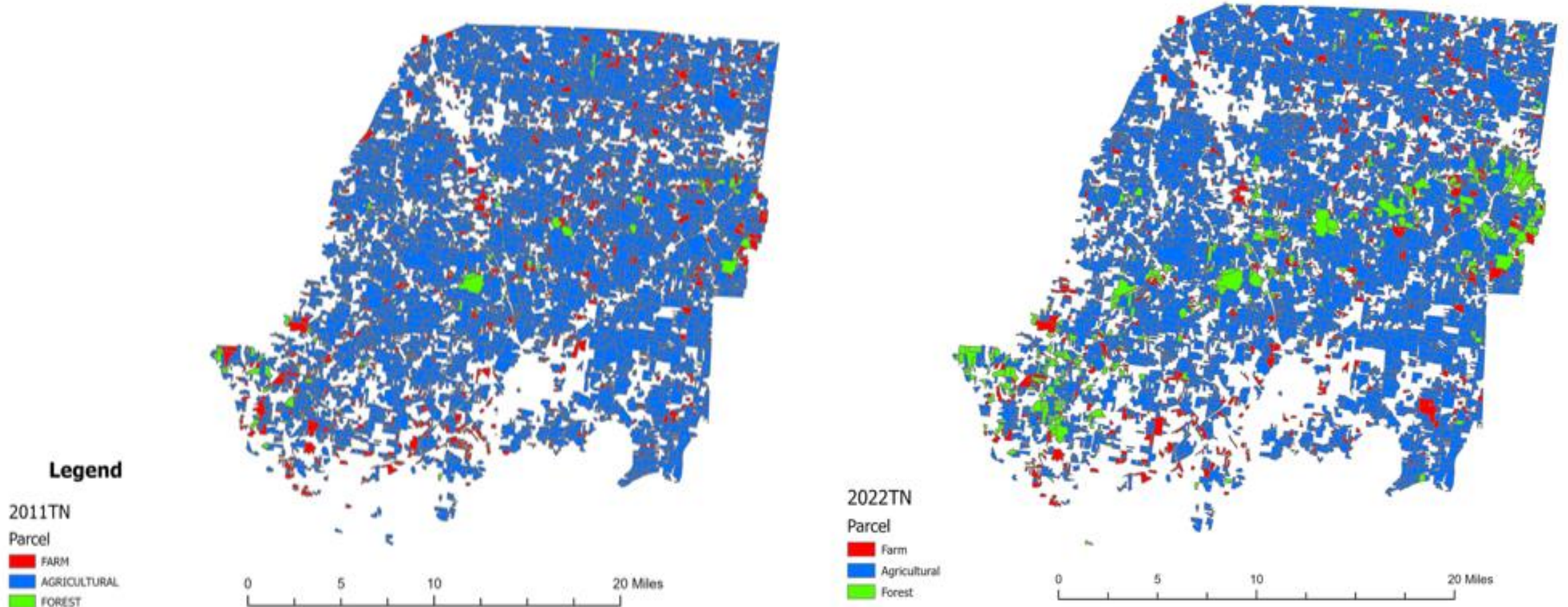
# Total Acre Change

- Developed acres increased by 317,684 acres for an average of 63,537 acres per year.
- USDA NASS CDL data show a total loss of 432,941 acres and 86,588 acres per year since 2017
  - Double the acreage county

# Can we do more?

- CTAS
  - Property Assessors Data
    - Parcel data (GIS Shapefiles)

# Example

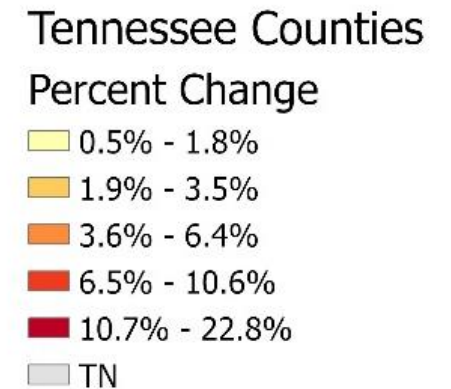
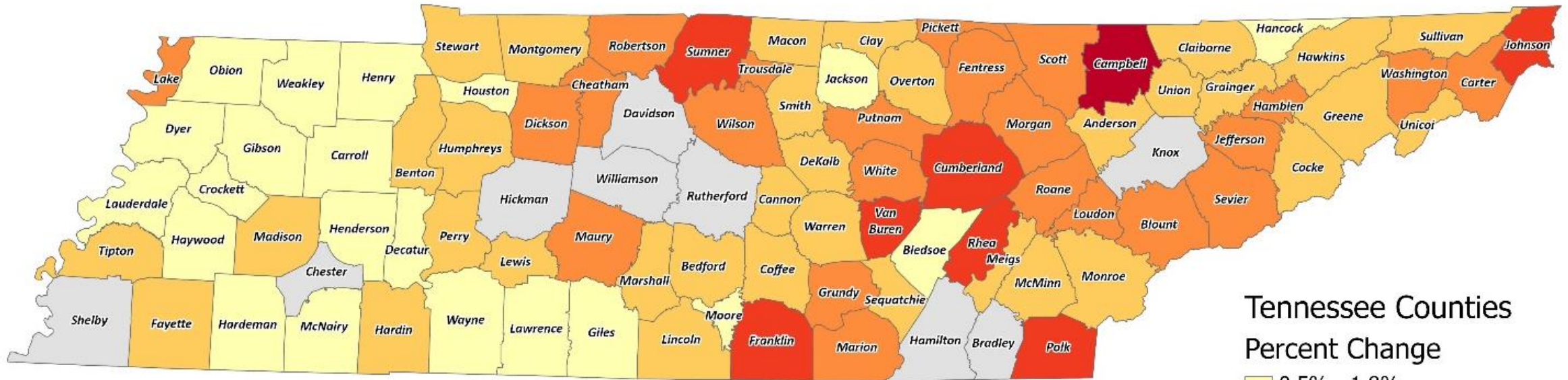


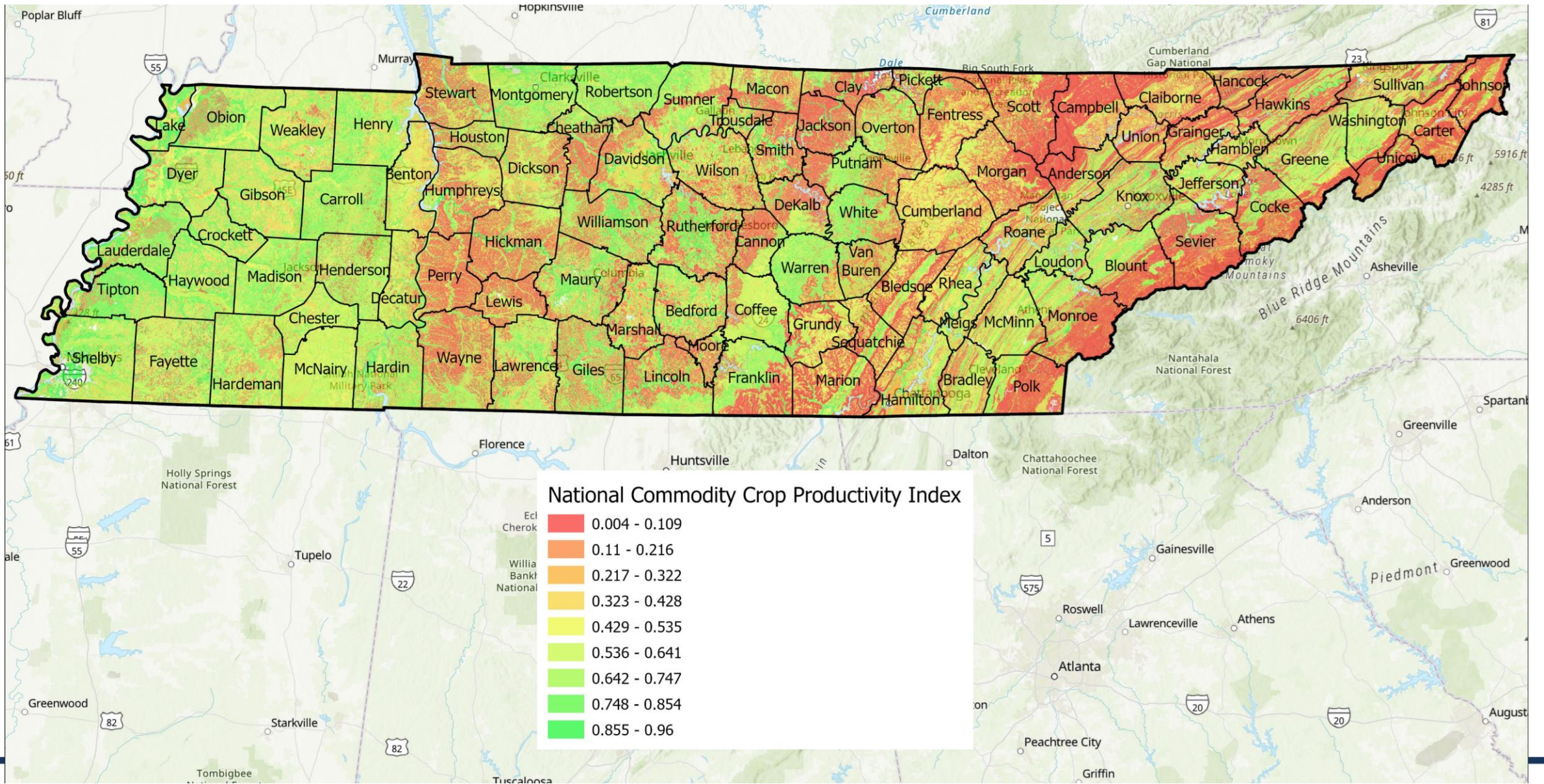
# Dataset

- Only dataset with all 95 Counties
- Overlay with roads/streets and Web Soil Survey



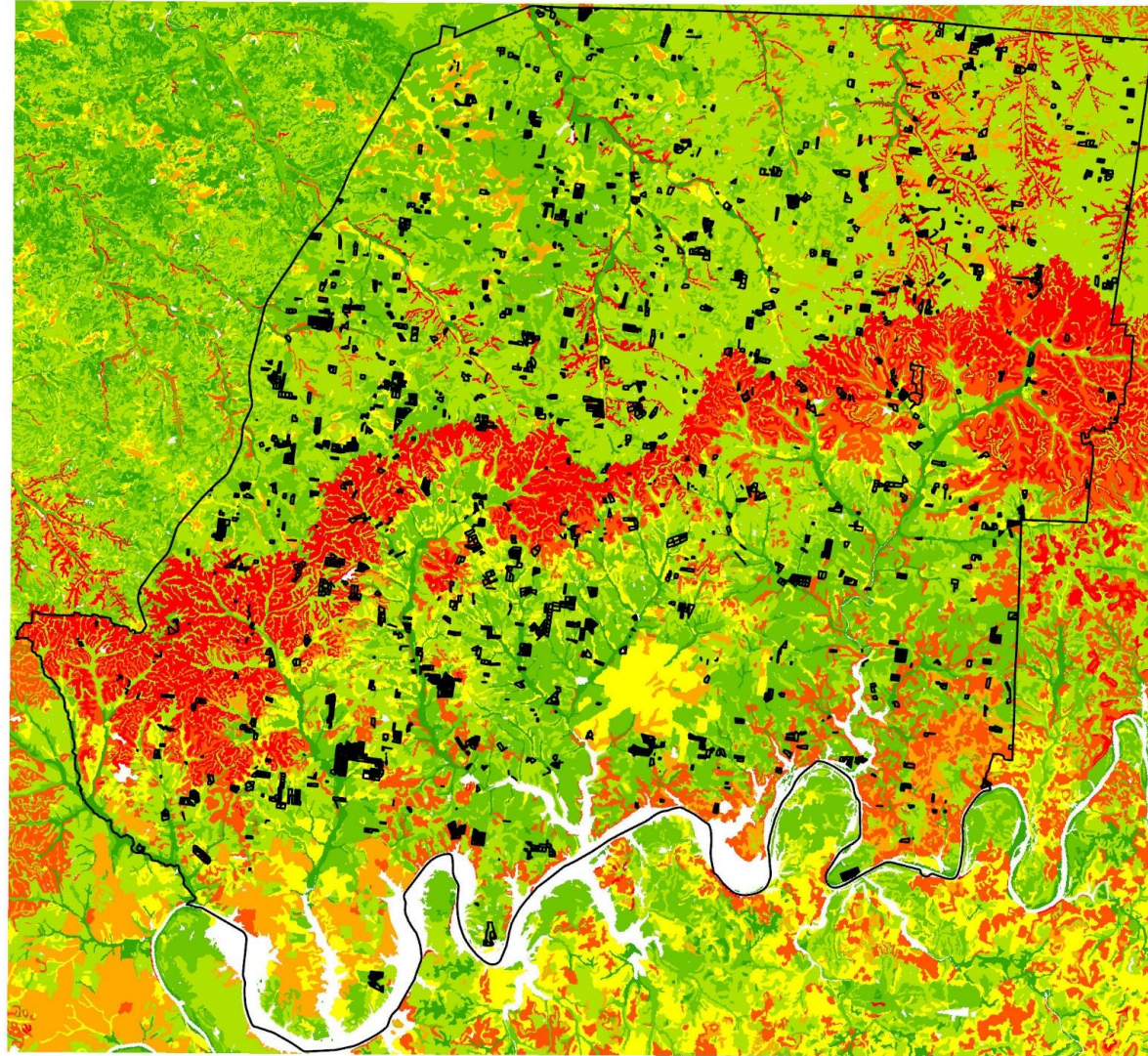
# Percent Change in Farm, Agricultural, and Forest Land by County

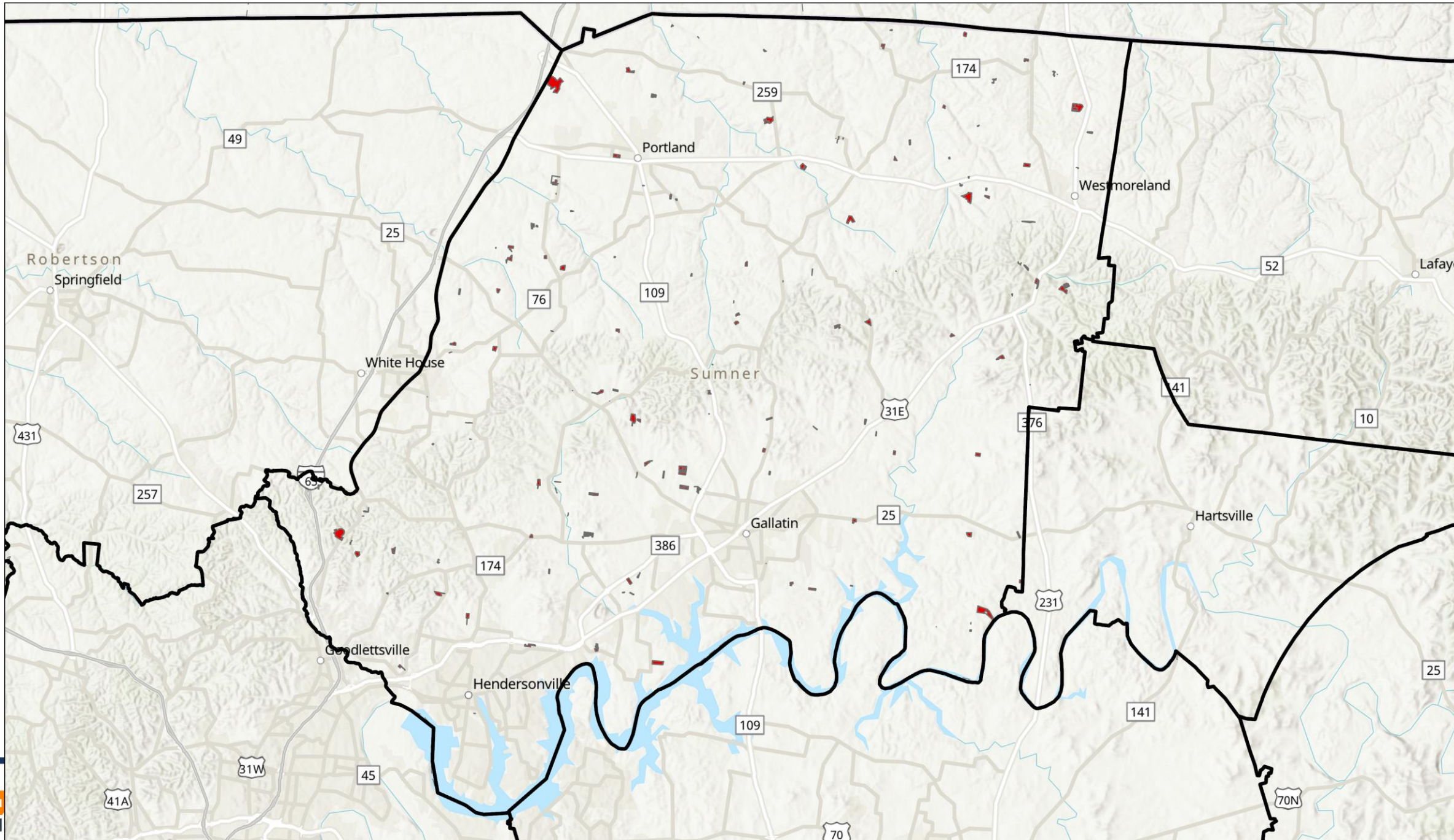




# Sumner Co. Ag Land (2011) that Changed to Residential Land (2022)

7,657 Ag parcels  
(2011) changed to  
Residential parcels  
(2022)





# Dataset

- Only dataset with all 95 Counties
- Overlay with roads/streets and Web Soil Survey
- Allows for:
  - Impact on economy (local and state), Farmland Exiting Analysis, reports, public facing dashboards

## Dickson County, Tennessee Agriculture, Farm, and Forest Land Loss 2014-2023

Conversion of Dickson County, TN agriculture, farm and forest land to alternative uses (2014-2023)

Type of change	Number of parcels converted	Number of acres converted
Agriculture to Residential	6,121	5,184.40
Agriculture to Commercial	97	227.9
Agriculture to *Other	256	516.9
Farm to Residential	2,627	2,068.20
Farm to Commercial	44	27
Farm to Other	86	169.7
Forest to Residential	1,077	791.1
Forest to Commercial	12	18.6
Forest to Other	26	2.2
<b>Totals</b>	<b>10,346</b>	<b>9,006</b>

\*Other includes city, county, state, federal, industrial, religious, educational, science, charity, state assessed, or local utility.  
Data source: Tennessee Comptroller of the Treasury and Dickson County Assessor of Property.



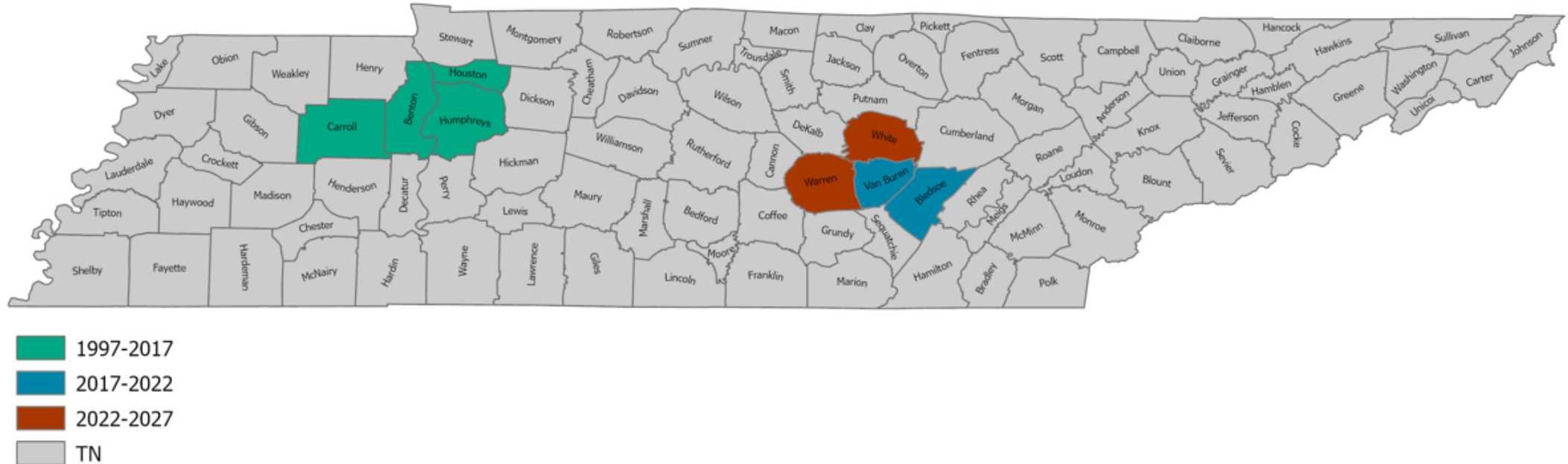


# UT CENTER OF FARM MANAGEMENT

The UT Center of Farm Management facilitates Extension, Teaching, and Research programs on farm financial management in Tennessee, and across

# Ag and Forest Land Loss 1997-2027 Prediction

Equivalent to 8 Counties  
Approximately 2 Million Acres







# Charley Martinez

[cmart113@utk.edu](mailto:cmart113@utk.edu)

---

 [@FarmMgt](https://twitter.com/FarmMgt)