



US Corn Production: Driving Carbon Intensity Reduction

December 2025

Collin Watters, Director of Exports and Logistics

Illinois Corn Marketing Board
Illinois Corn Growers Association



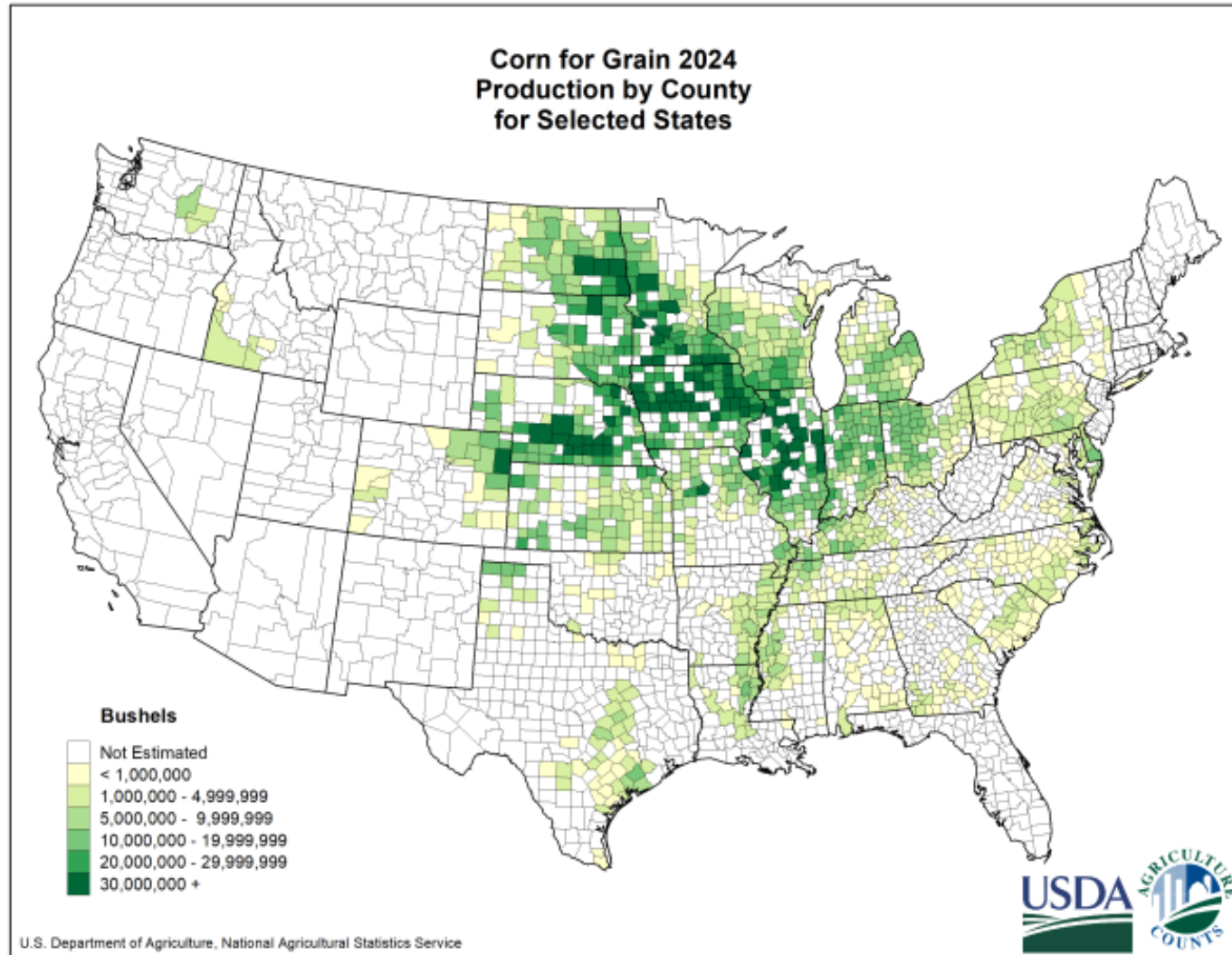
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Illinois Corn

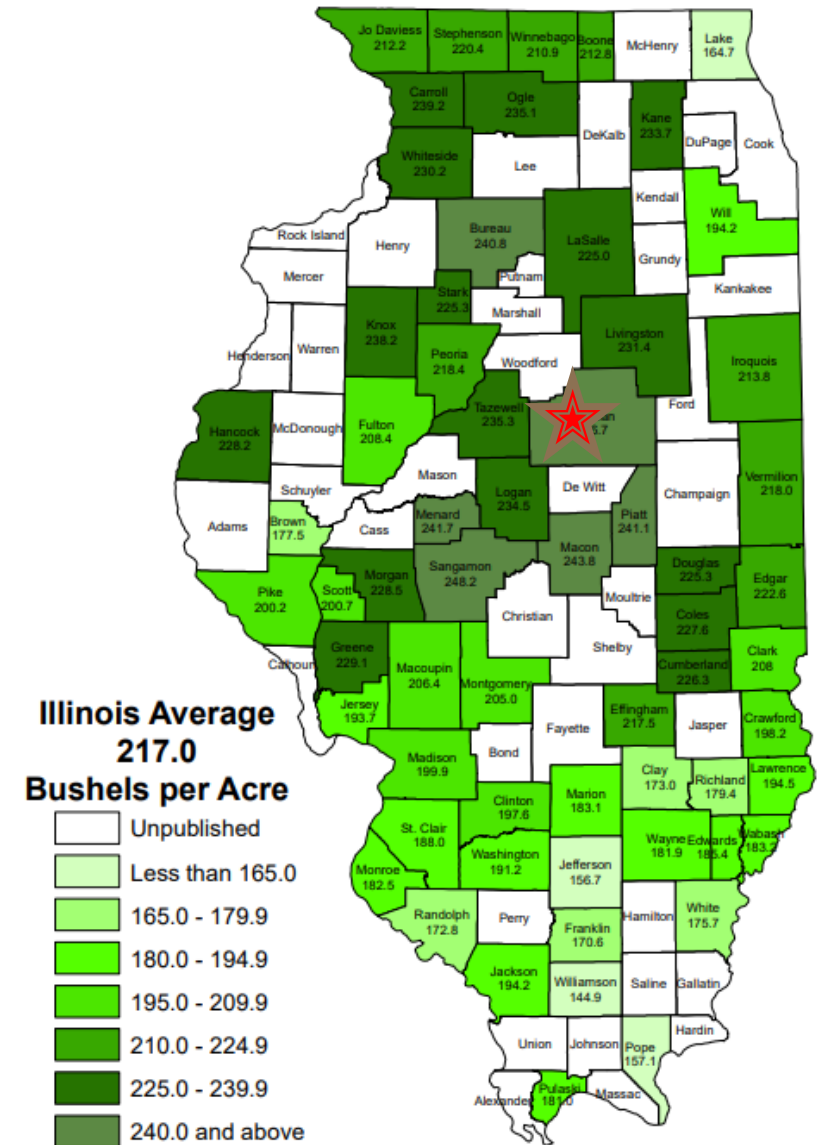
- Illinois Corn Marketing Board
 - 15 District Directors, must be actively engaged in farming
 - Administers the Illinois Corn Checkoff Program
 - Market Development, Education and Research
 - Current rate: \$.00875/bushel or \$.35/tonne
- Illinois Corn Growers Association
 - 15 District Directors, 2 At-Large Directors
 - Advocacy, Policy Development and Research



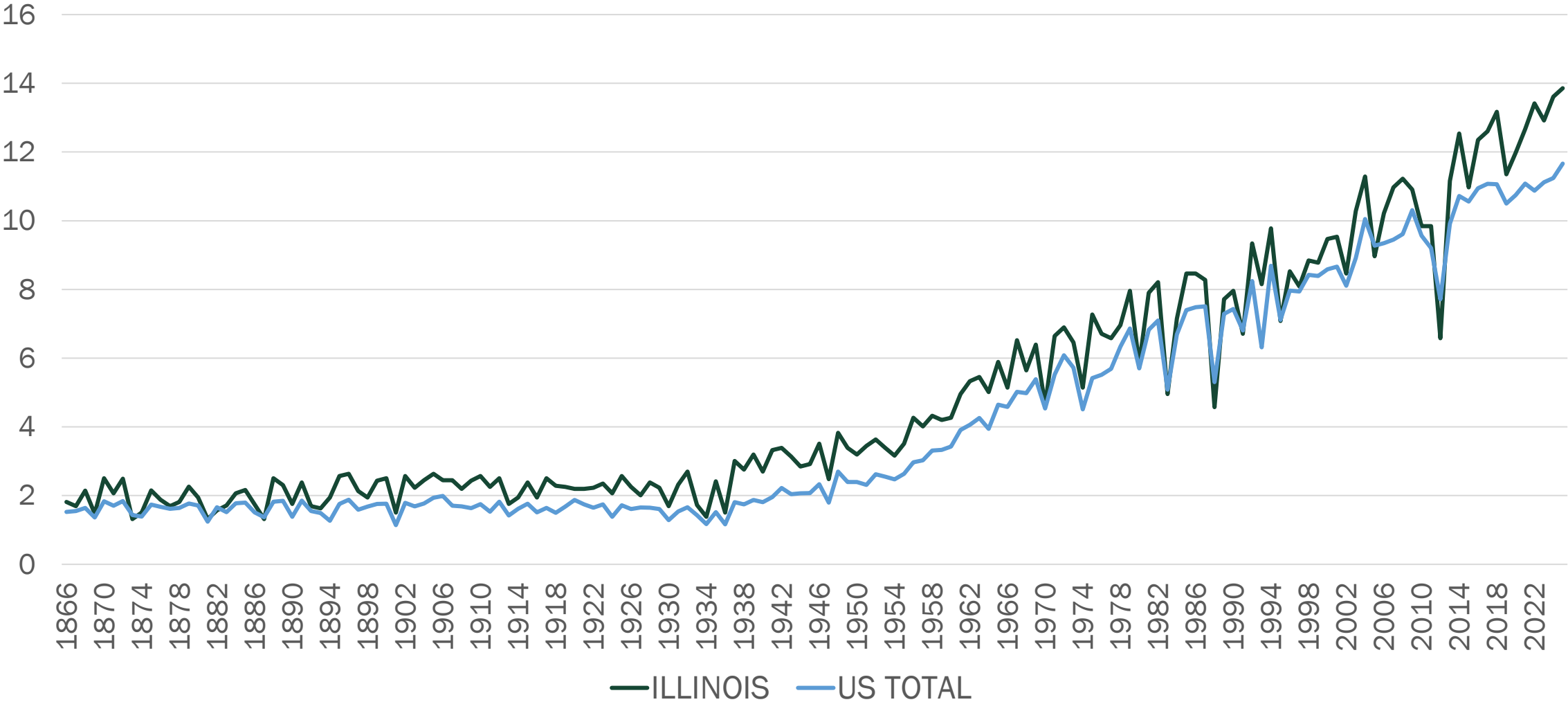
US Corn Production



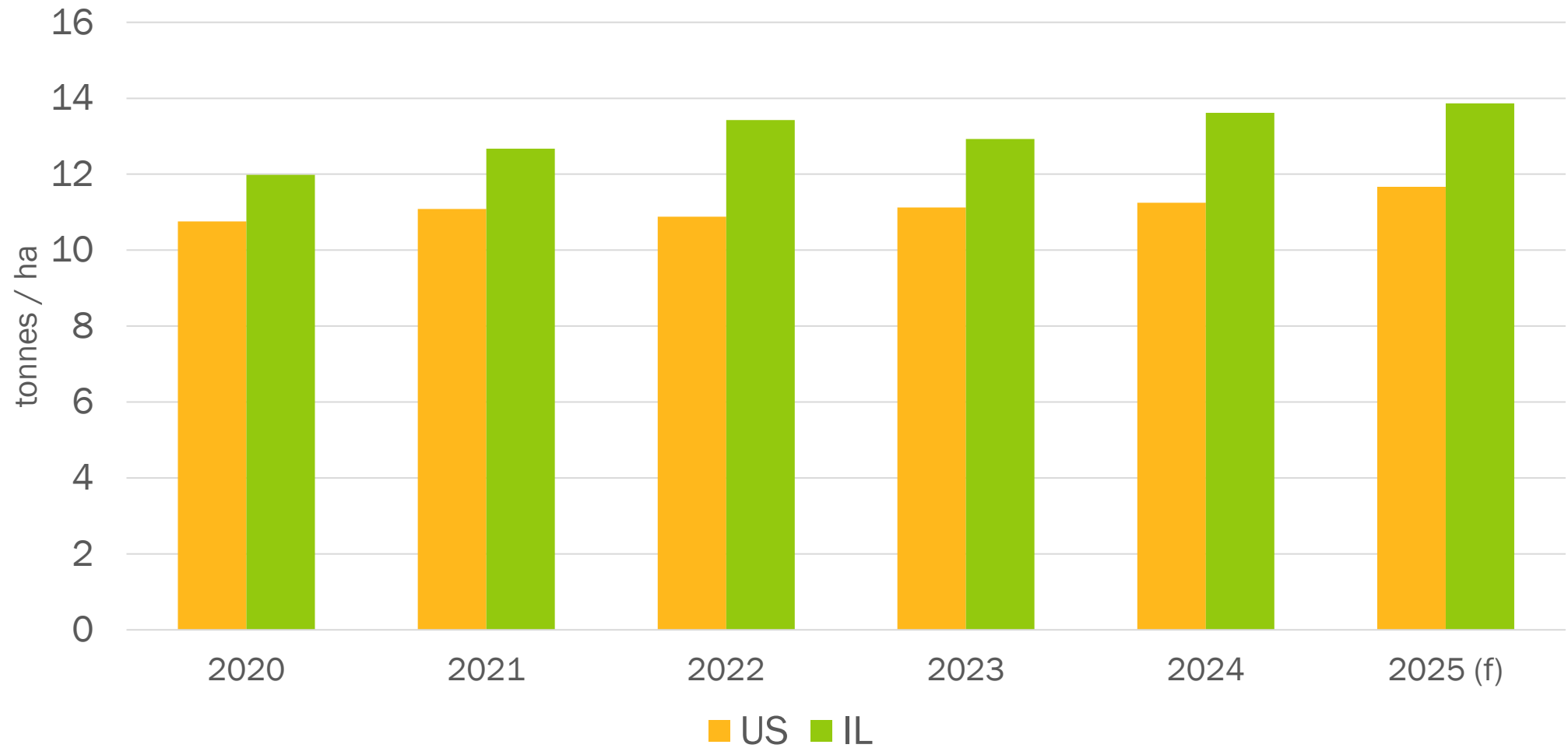
2024 Illinois Corn Yield Estimates



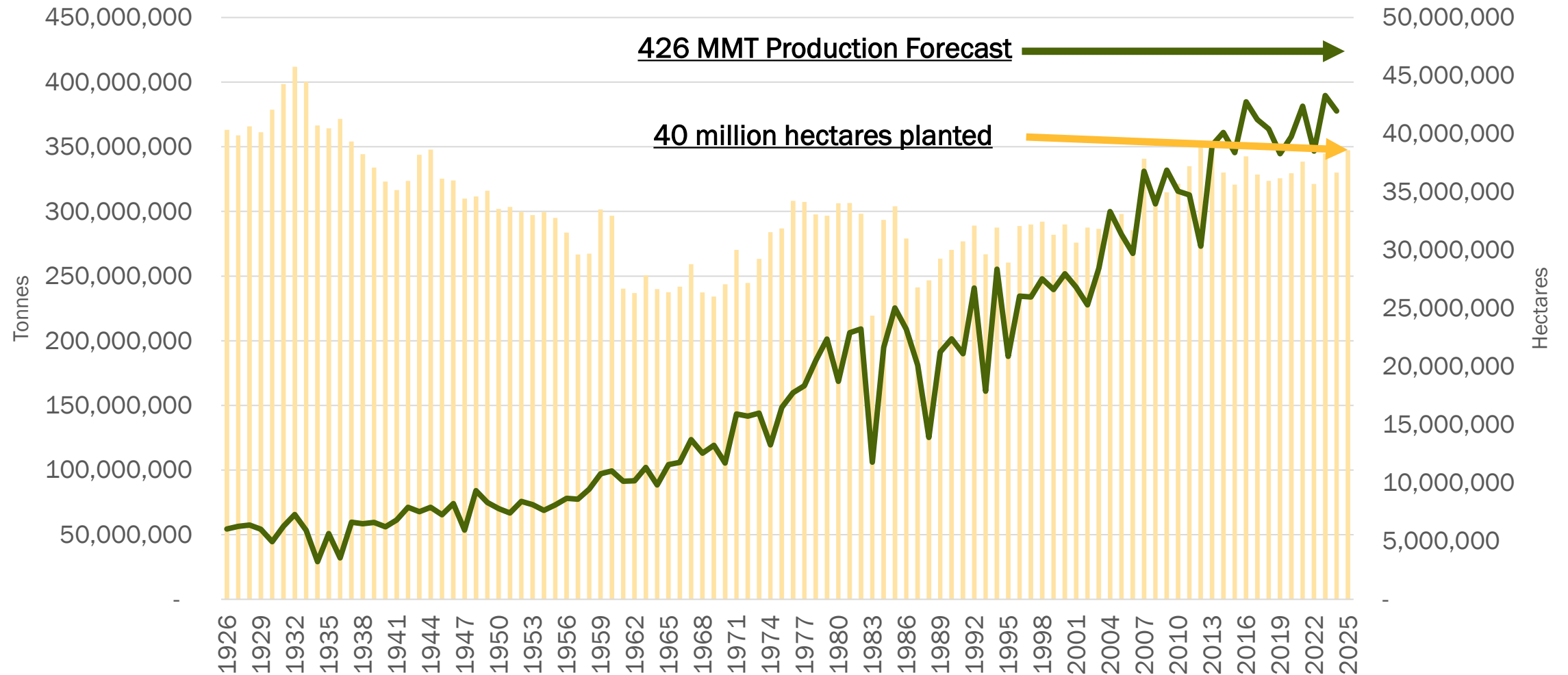
Corn Yield (tonnes per hectare)



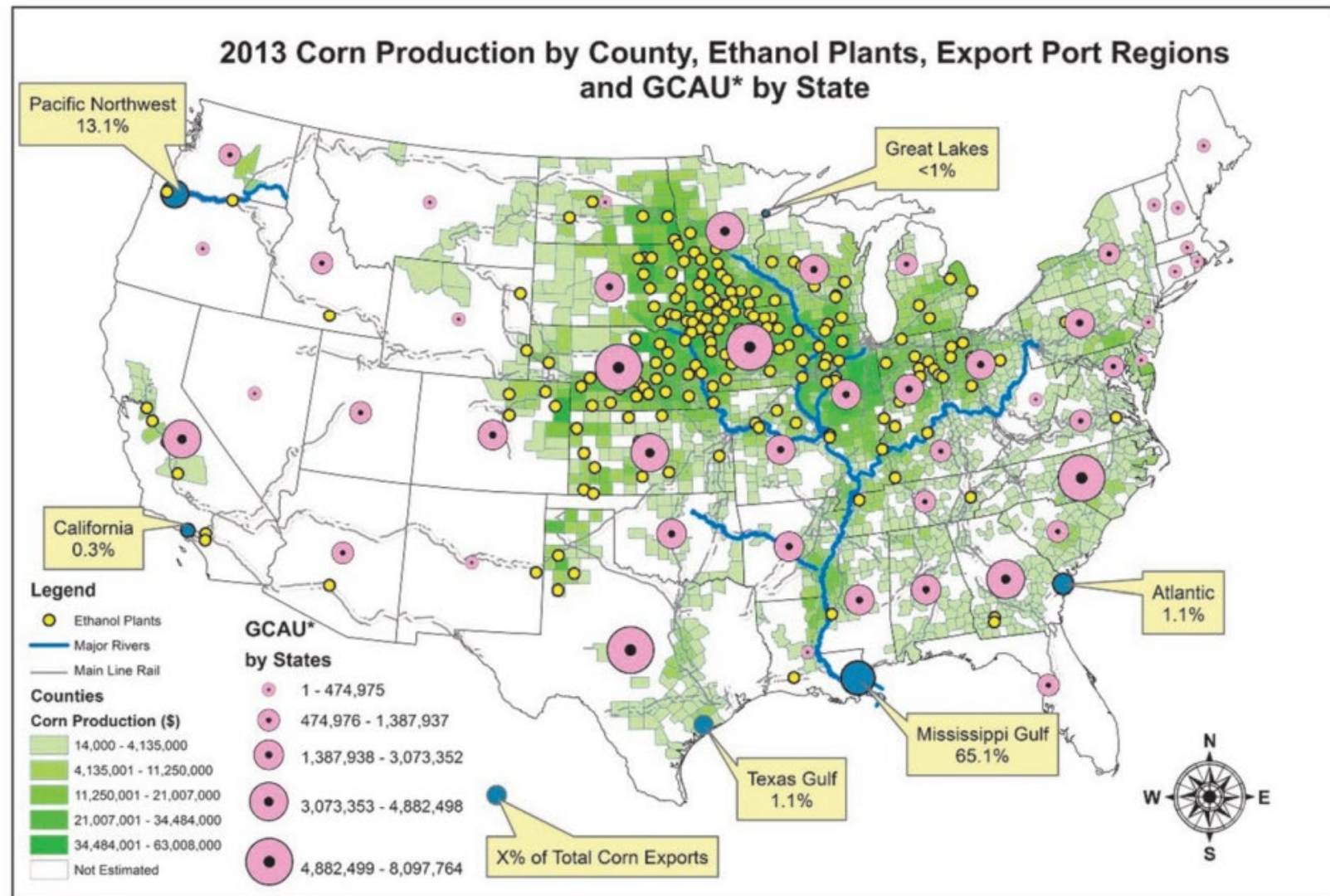
Corn Yields



US Corn Production and Planted Area



US Corn Production and Utilization

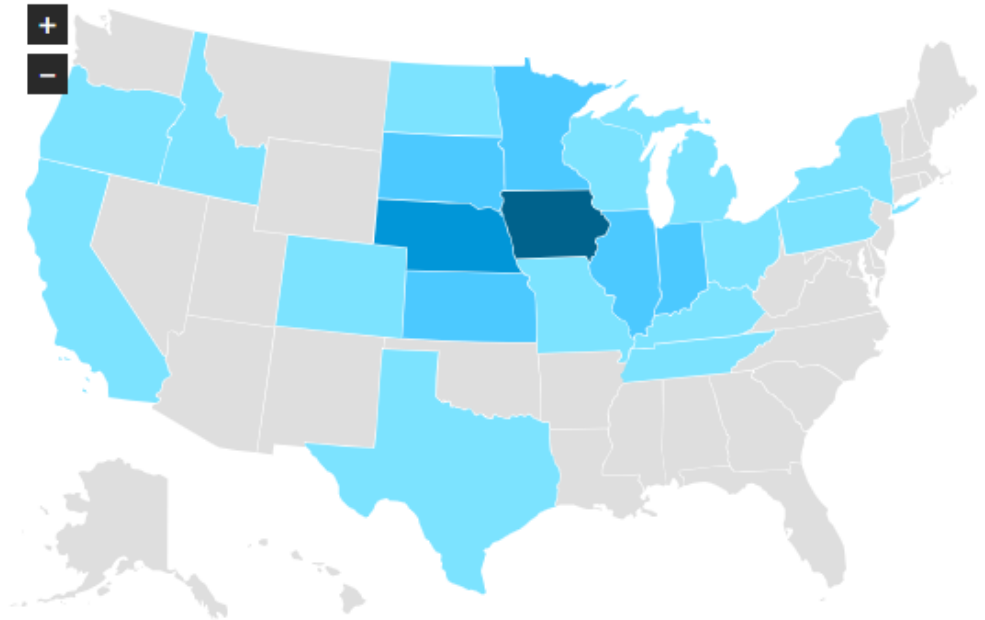


Source: USDA Agricultural Marketing Service analysis of data from USDA National Agricultural Statistics Service State and county level statistics 2013, and Federal Grain Inspection Service port inspection data, 2013.

*Grain Consuming Animal Units

US Ethanol Production

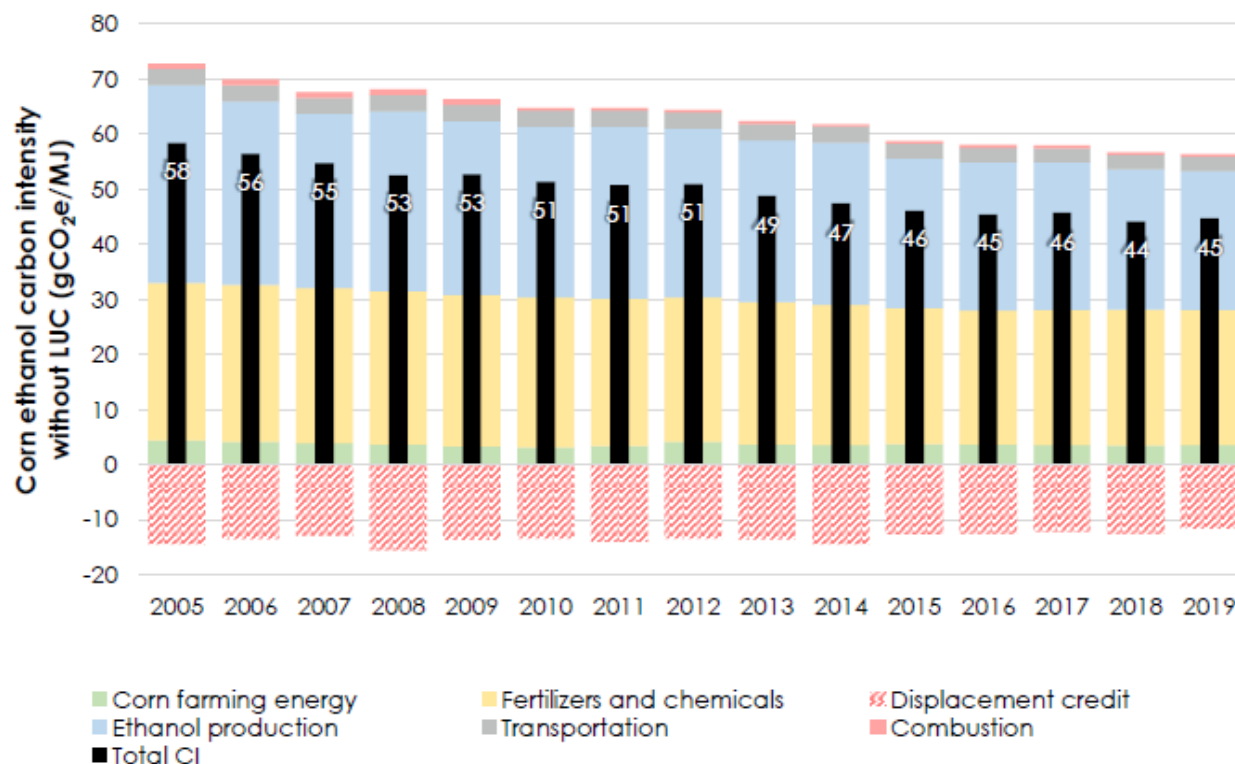
U.S. fuel ethanol plant count by state, 2025



State	Capacity (Million Liters per Year)
Iowa	18,281
Nebraska	8,875
Illinois	6,995
South Dakota	5,481
Minnesota	5,367
Indiana	4,987
Kansas	2,383

US Ethanol Feedstock Production: Continuously Decreasing CI of Ethanol

- Corn ethanol CIs have decreased over the last 15 years by 23%
- Ethanol production-related emissions have decreased 30%
- Corn farming shows reductions in GHG, 15%



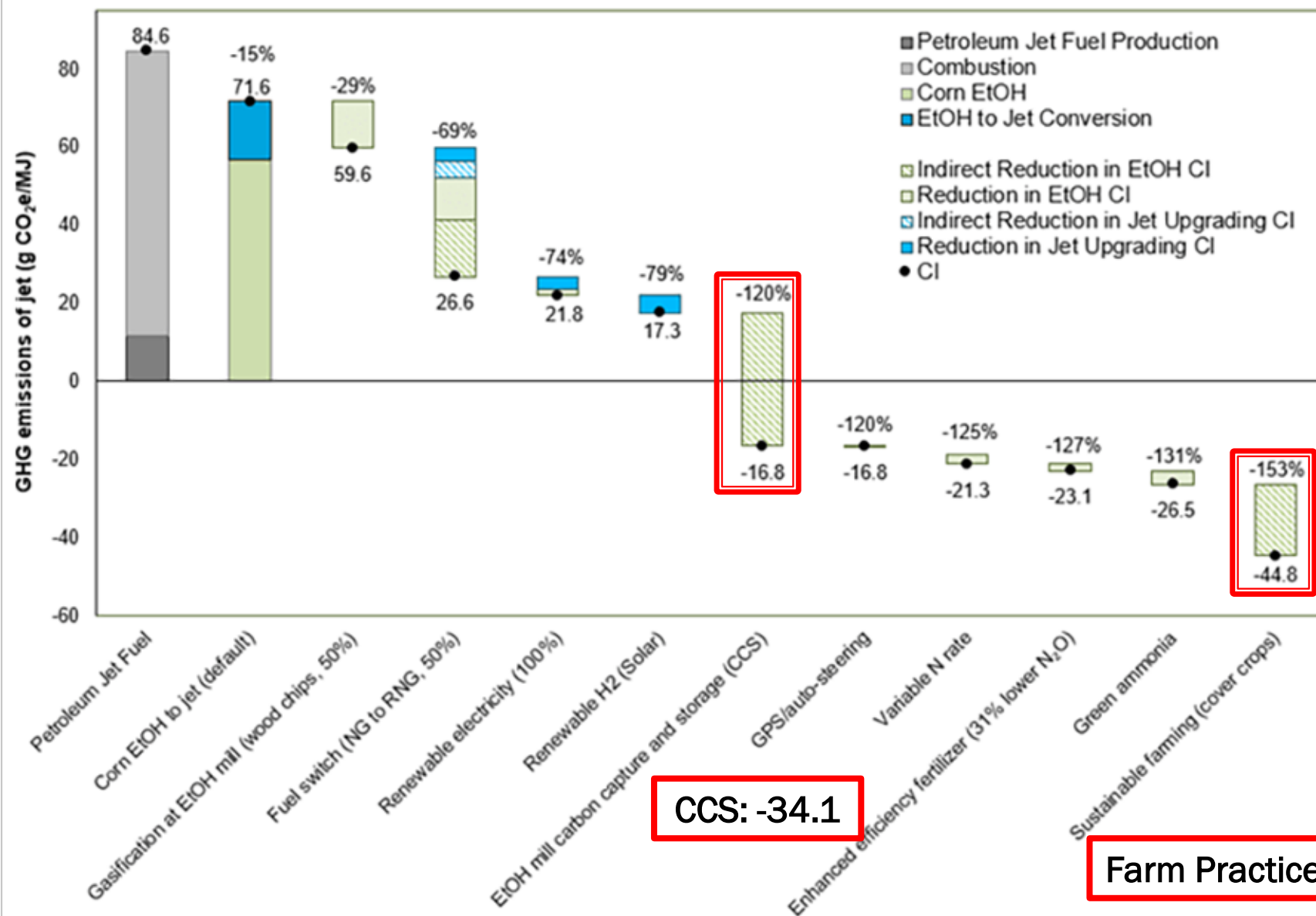
Modeling and Analysis



Retrospective analysis of the U.S. corn ethanol industry for 2005–2019: implications for greenhouse gas emission reductions

Uisung Lee, Hoyoung Kwon, May Wu, Michael Wang, Systems Assessment Center, Energy Systems Division, Argonne National Laboratory, Lemont, IL, USA

Figure 2. Carbon Intensity Reductions for Corn-Ethanol SAF



Source: (Spaeth, 2021; Wang et al., 2021).

Carbon Intensity
Score Compared to
National Average
Based on RMA
Yield Data

G CO₂e/MJ of grain
production

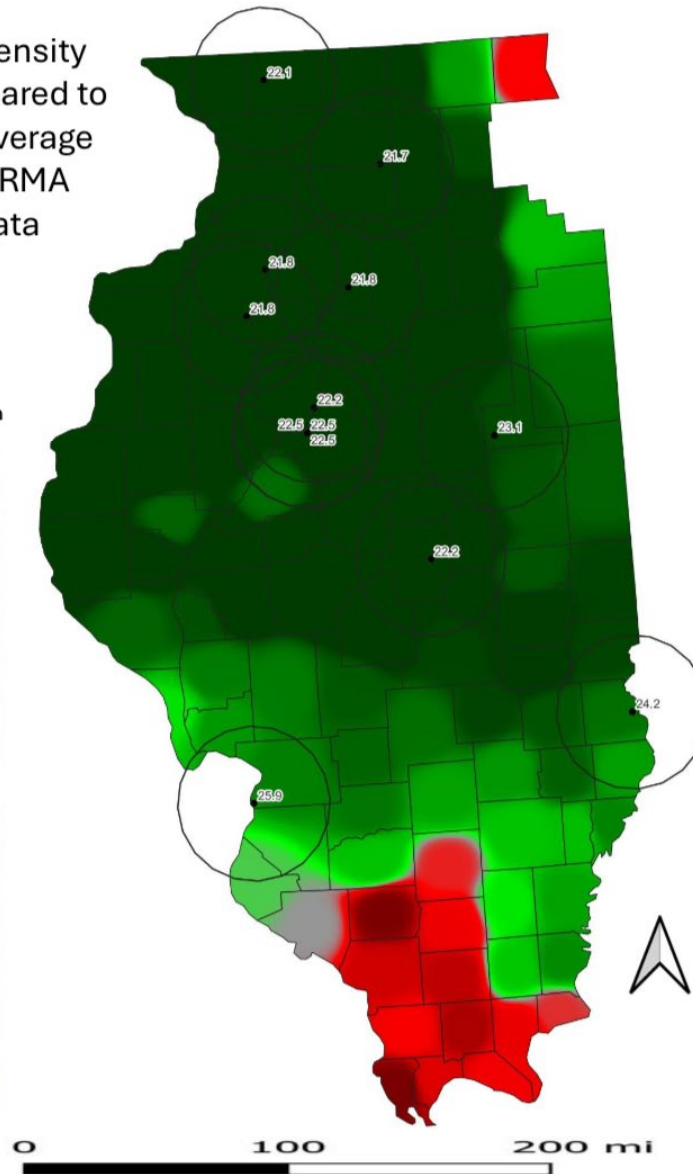


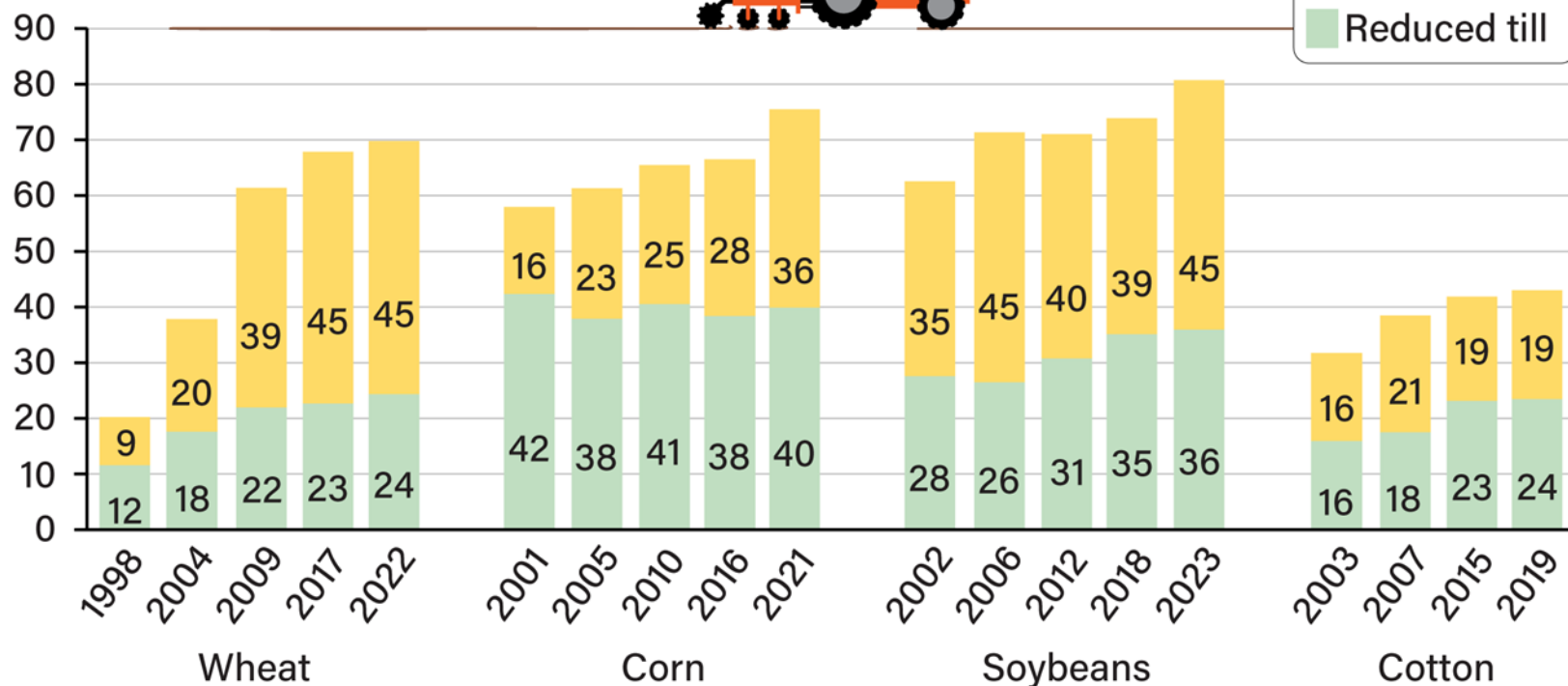
Figure 13 – Illinois County level CI Score as a % change compared to the national average based on USDA-RMA County Level Yield data. Dots represent locations of ethanol facilities within Illinois, and circles represent 35-mile radius around the ethanol facility, and the numbers represent the average CI score within the area surrounding the ethanol facilities in g CO₂e/MJ of grain production. Average CI score based on RMA data across all 11 ethanol plants within IL is 22.7 g CO₂e/MJ, 18% lower than the national average score.

Percent of no-till and reduced till acreage for select crops, 1998-2023



Economic Research Service
U.S. DEPARTMENT OF AGRICULTURE

Percent of planted acres



Note: A field is considered to be no-till if the producer reported no tillage operations on the field, and fields are considered to be reduced tillage if the Soil Tillage Intensity Rating (STIR) calculated for the field based on tilling operations is less than 80. STIR values range from 0 to 200. Wheat includes winter, spring, and durum wheat combined.

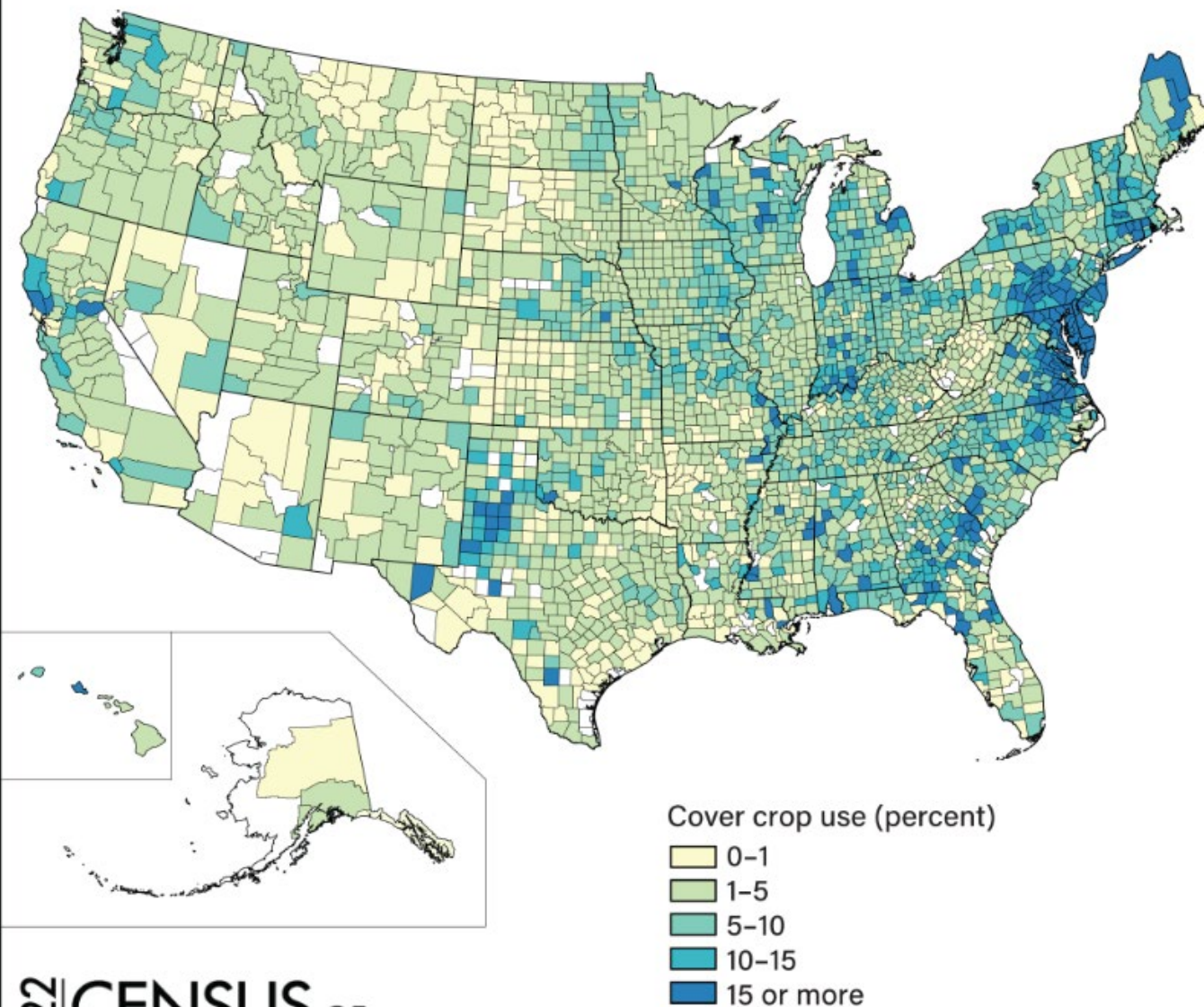
Source: USDA, Economic Research Service (ERS) using USDA, ERS and USDA, National Agricultural Statistics Service Agricultural Resource Management Survey data.



CHARTS of NOTE

Cover crop use as a percent of total cropland, by county, 2022

USDA Economic Research Service
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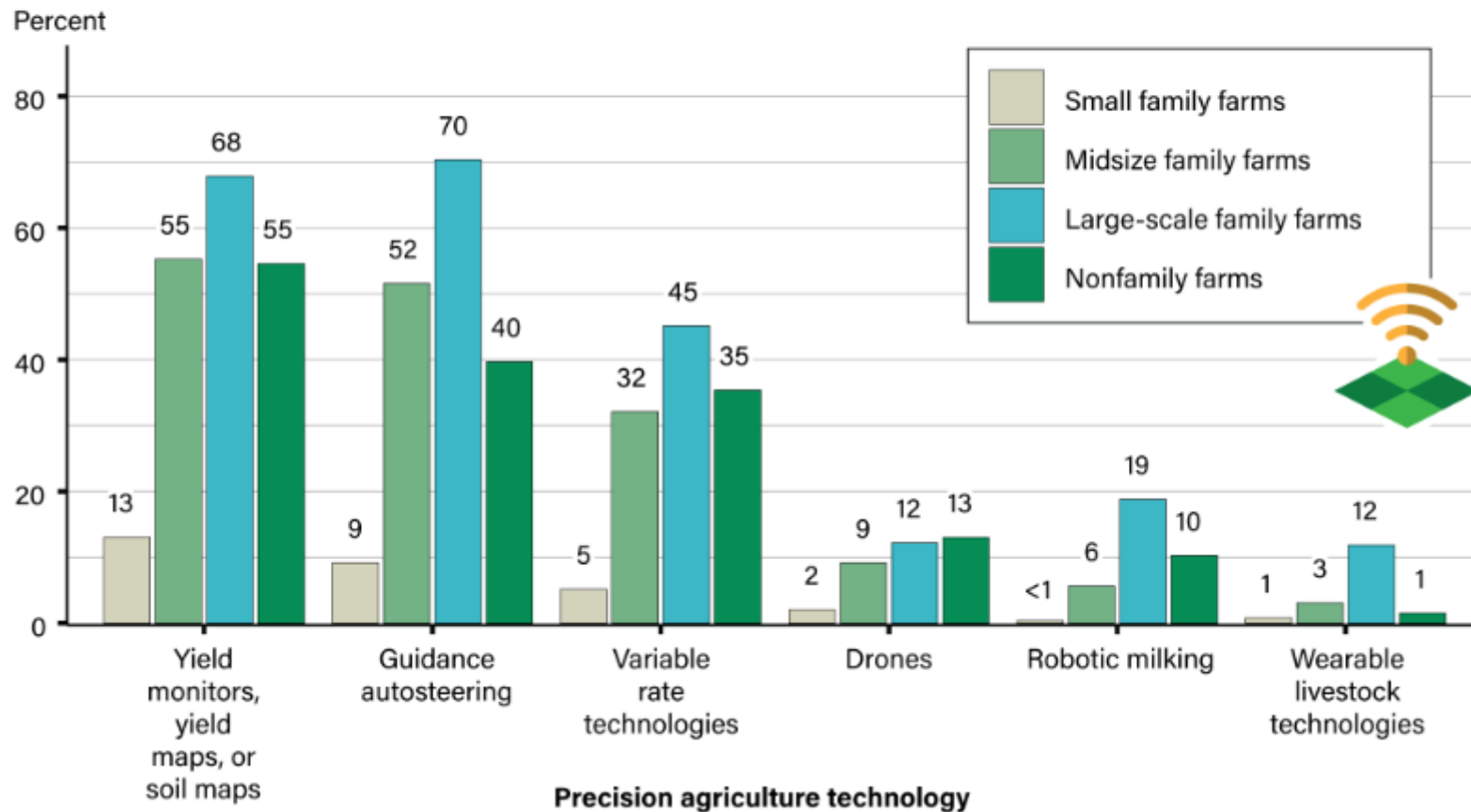


2022 CENSUS OF
AGRICULTURE

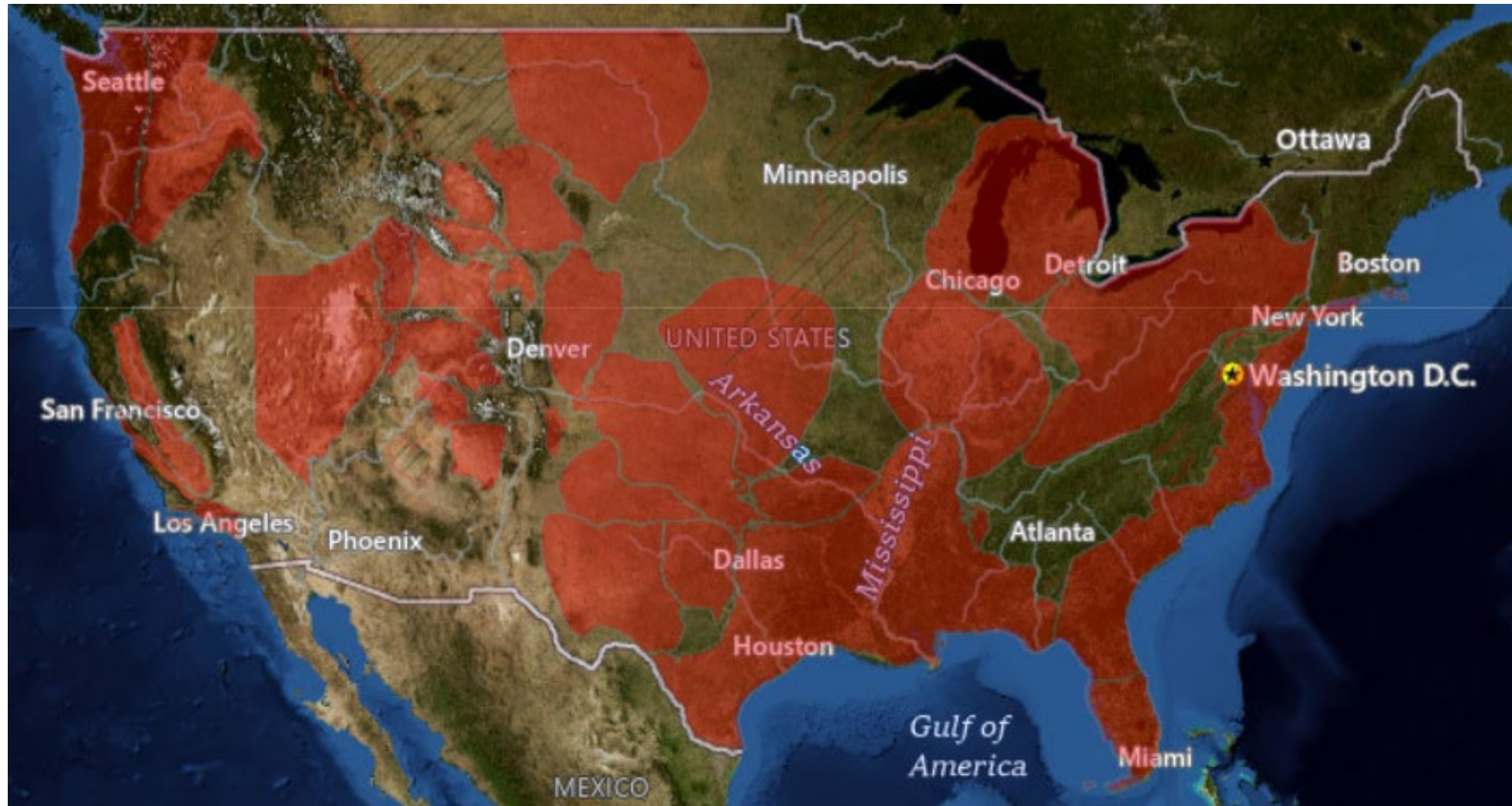
Percent of farms using precision agriculture technologies by technology and farm type, 2023

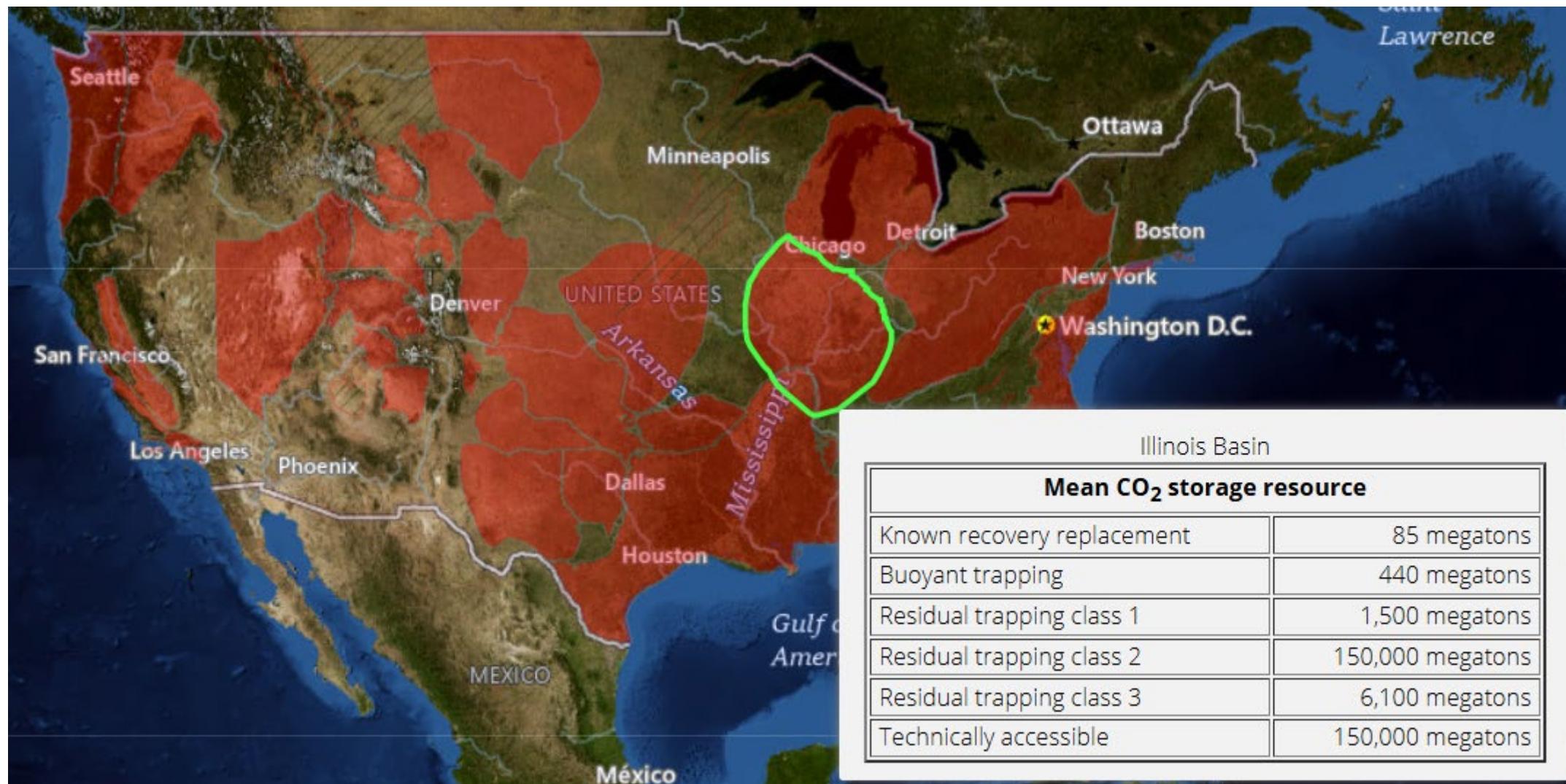


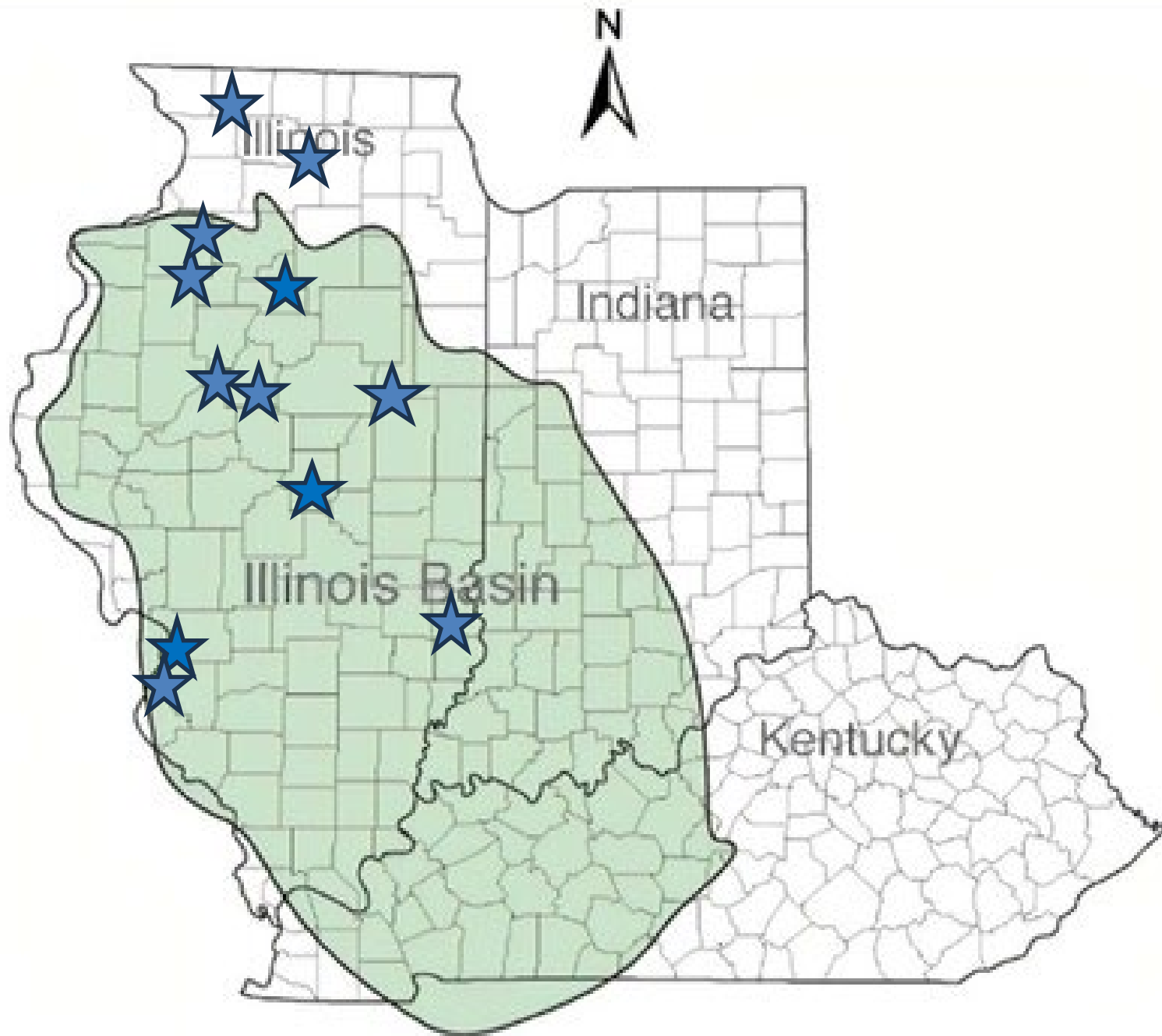
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Thank You!

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