Mapping the Farm Safety Net: County Average Commodity Payments and Crop Insurance Net Indemnities, 2014–2023

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Title I commodity programs authorized by the farm bill, along with the federal crop insurance program, anchor the U.S. farm safety net, which intends to blunt effects of poor production or weak prices on farm finances.[1] This brief presents average county-level commodity program payments and crop insurance net indemnities from 2014 to 2023 across the contiguous U.S., highlighting geographic variation in support.

Administered by USDA's Farm Service Agency (FSA), Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) are the largest Title I programs and are commonly referred to as "commodity programs." ARC makes payments when actual county revenue falls below a guaranteed level based on historical yields and prices. PLC provides payments when market prices for covered commodities fall below the effective reference price set by farm bill statute. Both programs first issued payments for the 2014 crop year.[2]

In contrast, federal crop insurance covers current-year production. The USDA Risk Management Agency (RMA) administers the program, though policies are sold by private insurance agents. Most producers purchase Revenue Protection insurance policies, which compensate them when revenue falls below a guarantee based on futures prices and farm-level yields. The RMA sets actuarially fair crop insurance premiums, and the federal government pays a share of these premiums.[3]

[1] The Congressional Research Service defines the federal farm safety net as follows: "The federal "farm safety net" provides risk protection and financial support to U.S. farmers. The three components of the farm safety net are (1) farm commodity programs, (2) crop insurance, and (3) disaster assistance programs. The U.S. Department of Agriculture (USDA) administers the farm safety net programs."
[2] Eligible producers must select either ARC or PLC. From 2021, this has been an annual selection.
[3] For more information, see the latest CRS Crop Insurance Primer

The recently passed "One Big Beautiful Bill Act" (OBBBA), passed through the congressional budget reconciliation process, strengthens the federal farm safety net by adjusting ARC, PLC, and crop insurance programs. These changes generally increase support for ARC and PLC and reduce certain crop insurance costs for producers. While this brief focuses on historical county-level payouts, the patterns presented here also offer insight into how these programs may operate going forward, assuming similar production and market conditions.

Data and Methodology

Per acre, we estimate county-level average (1) ARC and PLC payouts, (2) net crop insurance indemnities (payouts), and (3) the combined total for the 2014-to-2023 period. Across the country, county size and acres farmed vary widely; therefore, per-acre values offer a clearer picture of how these programs affect producers. We report payouts relative to three crop acreage measures.

- **Base acres**: County-level base acreage for 2014, 2015 and 2019 to 2023 are available from the FSA website. Base acres for 2016 to 2018 were estimated as the average of 2015 and 2019 values. ARC and PLC payments are only made to farms with base acres, or historic production of eligible commodities. [4]
- **Planted acres**: Estimates are based on publicly available data producers report to FSA data. This measure includes planted and prevented plant acres by crop and administrative county for all acres planted to crops eligible for ARC and PLC payouts.
- **Insured acres:** Crop insurance acres reported in the RMA summary of business were counted if they were enrolled in a crop insurance policy, including Revenue Protection and Yield Protection, for an ARC and PLC-eligible crop. Companion acres or endorsements were not included.

ARC and PLC Payouts

ARC and PLC payouts are sourced from FSA individual payment data and include all actual ARC and PLC payments made between 2014 and 2023. Both ARC-County and ARC-Individual are included in the total payment estimates. Payments are assigned to the year in which the payment was triggered (i.e., the "accounting program year"), not the year in which the payment was made. ARC and PLC payments are typically paid out late fall in the year after they are triggered; payments reported two or more years after being triggered are rare (1.8% of payments from 2014-21). Therefore, for this analysis, only a small proportion of payments from 2023 and earlier years may not be captured.

[4] Base acres are "units of production" (land/acreage) that are based on historic production and establish eligibility for ARC and PLC payments. See this CRS report for more information.

Crop Insurance Net Indemnities

Net indemnities are calculated as total indemnities minus producer-paid premiums. County-level data were sourced from the RMA summary of business and the county-level dataset's accuracy was confirmed by summing county totals to the state level by crop and cross-checked with select published state-level tabulations. Data for counties grouped in RMA's "all other counties" category were excluded from the averages displayed on the maps.

ARC and PLC Payments

Per-base-acre ARC and PLC payments varied widely across the U.S. The highest payments concentrated in southern and central Texas, eastern Arkansas, northern Mississippi, parts of Louisiana, and select southwestern Georgia counties (map 1) — areas known for producing PLC-dominated crops such as rice, seed cotton, and peanuts that tend to receive higher average payments. In contrast, payments per base acre were more moderate in states such as Kansas and Nebraska that more frequently experience yield shortfalls. They were generally lower across states such as Iowa, Illinois, Indiana, and Ohio where ARC coverage for corn and soybeans was more prevalent and average payments were smaller.

ARC and PLC payments per planted acre (map 2) had more geographic variation than payments per base acre (map 1). Across broad regions such as southern Texas, eastern Oklahoma, and southeastern Arkansas, payments per planted acre were higher than those per base acre. This reflects cases where ARC and PLC payments are distributed over fewer planted acres than base acres — often due to fallowing base acres or planting nonprogram crops. In contrast, parts of eastern Iowa and central Illinois exhibited lower payments per planted acre relative to base acres. These differences reflect mismatches between expansive crop planting and historical base acreage allocations — in particular, where widespread soybean planting occurs on under-based land. In the central Great Plains and parts of the Southeast, per-planted-acre payments were generally similar to or slightly higher than per-base-acre payments, placing them in the mid-tier payment range. This contrasts with the Corn Belt, where planted-acre payments tended to be lower than base-acre values.

Relative to payments per base acre (map 1), per-insured-acre ARC and PLC payments (map 3) were highest in south-central and west Texas and parts of eastern Arkansas. In these areas, county ARC and PLC payments are distributed over a moderate number of insured acres, resulting in relatively high per-acre values. In contrast, many counties in the Southeast — including areas of southern Georgia, Mississippi, and Alabama — had lower per-insured-acre payments than per-base-acre payments. Although these areas have substantial base acreage, they have even greater insured acreage, often due

to broad insurance participation. This lowers payments per insured acre. Meanwhile, in parts of western Kansas and eastern Colorado, where insured acres more closely align with program crop base acreage, per-insured-acre payments tend to track more closely with or even exceed payments per base acre.

Net Indemnities

Net crop insurance indemnities per insured acre were highest in regions with higher yield variability: Texas and Oklahoma panhandles, eastern Colorado, parts of western Kansas, south-central South Dakota, and eastern North Dakota (map 4). Meanwhile, many counties in Iowa, Illinois, Indiana, and Ohio had low or even negative net indemnities, indicating limited claim activity relative to premiums paid. Including data for 2012, a major drought year, when calculating net indemnities would cause would lead to positive net indemnities in many areas that experienced negative average net indemnities from 2014-23, but the overall regional patterns observed from 2013-2024 would hold. Crop insurance payouts spiked in 2012 due to widespread yield losses.

Comparing net indemnities per insured acre with net indemnities per planted acre (map 5) offers insight into where planted acreage differs from insured acreage. Areas with relatively more acres planted than insured acres would have lower net indemnities per planted acre than per insured acre.[5] In drought-prone areas such as western Kansas, eastern Colorado, the Texas Panhandle, and parts of northern Oklahoma, net indemnities per planted acre are elevated, reflecting a high level of insured planted acres. In contrast, some Midwest counties have nonzero net indemnities, but they are divided over a slightly larger number of planted acres — some of which may not be insured. This results in net indemnities per planted acre that are very similar to but slightly lower than net indemnities per insured acre; payments are only tied to the insured portion but averaged across all planted land. For example, in Clarke County, Iowa, net indemnities per insured acre averaged $18.44 compared with $15.67 per planted acre. In Monroe County, Illinois, the difference being smaller — $6.38 per insured acre and $5.17 per planted acre — reflects a modest gap between insured and planted acreage.

Despite major shifts in cropping patterns over time, indemnities per base acre (map 6) tend to be lower than those per insured acre in regions with legacy base acres no longer fully planted to program crops or covered by insurance (i.e., payment distributions still reflect historical base acre allocations from the early 1980s). This pattern is especially visible in southern states, such as Mississippi, Alabama, and Georgia, that continue to have cotton and peanut base acres despite declines in actual program crop

[5]The inverse typically would not occur, except in the case of widespread prevent plant for crop insurance or underreported planted acres.

production and insurance enrollment. As a result, insurance payouts are distributed over a larger number of base acres, which reduces the payments per base acre relative to insured acre.

Combined Payments

When combining ARC and PLC payments and crop insurance net indemnities, the highest per-acre values consistently emerge in south and central Texas, eastern Arkansas, and southern Georgia. These regions have substantial base acreage for crops with higher historical PLC payouts and strong crop insurance participation. Plus, higher net indemnities tie to drought-prone areas such as Texas.

The overall geographic pattern for payments per acre shows similarities across base (map 7), planted (map 8), and insured acreage (map 9). However, key differences reflect denominator effects (i.e., number of acres over which payments are averaged). For example, per-planted-acre values are especially high in areas where fewer program crops are planted relative to base acreage (e.g., parts of south Texas, eastern Oklahoma, and southeastern Arkansas), and per-insured-acre values drop in counties where insured acres exceed base acreage (e.g., parts of southern Mississippi and southern Alabama), which dilutes payments per insured acre relative to base acre. In contrast, despite expansive planting and insurance activity, much of the Midwestern Corn Belt had relatively modest combined payments across all acre types — driven by lower ARC and PLC payouts for corn and soybeans and fewer severe insurance losses from 2014 to 2023.

Conclusion

This national-level analysis of ARC, PLC, and crop insurance payouts per acre reveals clear regional differences in per-acre federal support. Regardless of the acreage measure used, payments tend to be higher in the Southern Plains, Mississippi Delta, and southeastern states due in part to these contributing forces:

- Continued influence of historical base acre allocations,
- Higher historic PLC payouts for cotton, peanuts, rice, wheat, and sorghum, which are more prevalent in these areas than the Corn Belt, and
- Higher ARC payouts and net indemnities in several areas with more frequent yield shortfalls.

Discrepancies between base and planted acreage remain a policy debate, though addition of up to 30 million base acres was authorized by the OBBBA. This change will likely decrease these discrepancies.

Generally, the changes made in the OBBBA appear not likely to support a significant shift in regional patterns in the farm safety net, but further analysis is required.

Note, this analysis does not account for differences in profit or production costs, which may vary regionally and by crop type. Further, other government programs and policies can also have a substantial impact on local farm income outcomes. Trade and labor policies, plus the possibility of favorable biofuel policies, could have a significant impact on farm income.

Sources

Planted acres data retrieved from FSA: https://www.fsa.usda.gov/tools/informational/freedom-information-act-foia/electronic-reading-room/frequently-requested/crop-acreage-data

Base acres data retrieved from FSA: https://www.fsa.usda.gov/resources/programs/arc-plc/program-data

Payments data retrieved from FSA: https://www.fsa.usda.gov/tools/informational/freedom-information-act-foia/electronic-reading-room/frequently-requested/payment-files

Acknowledgements
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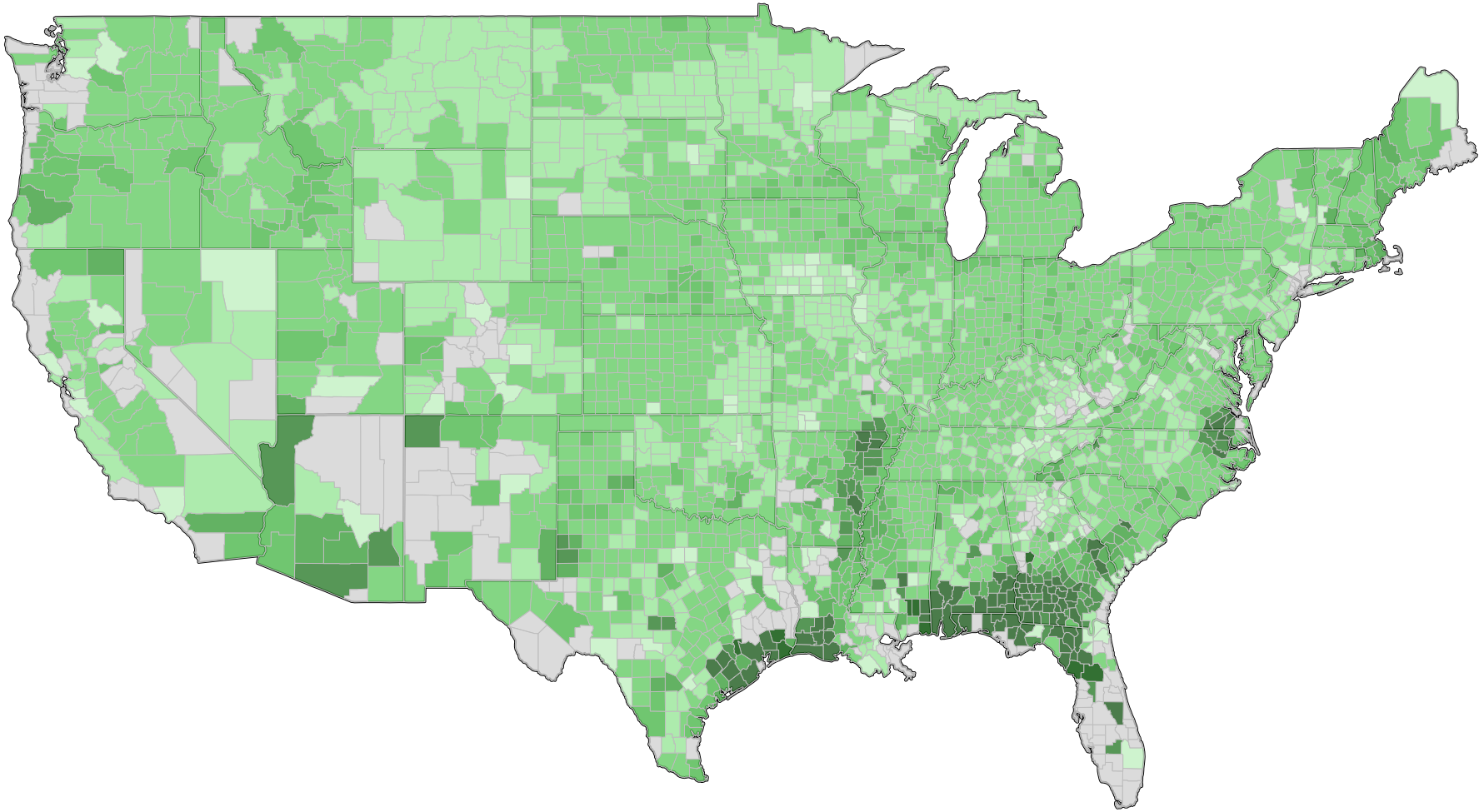
Map 1. Average Annual ARC and PLC Payment per Base Acre ($) (2014–2023)

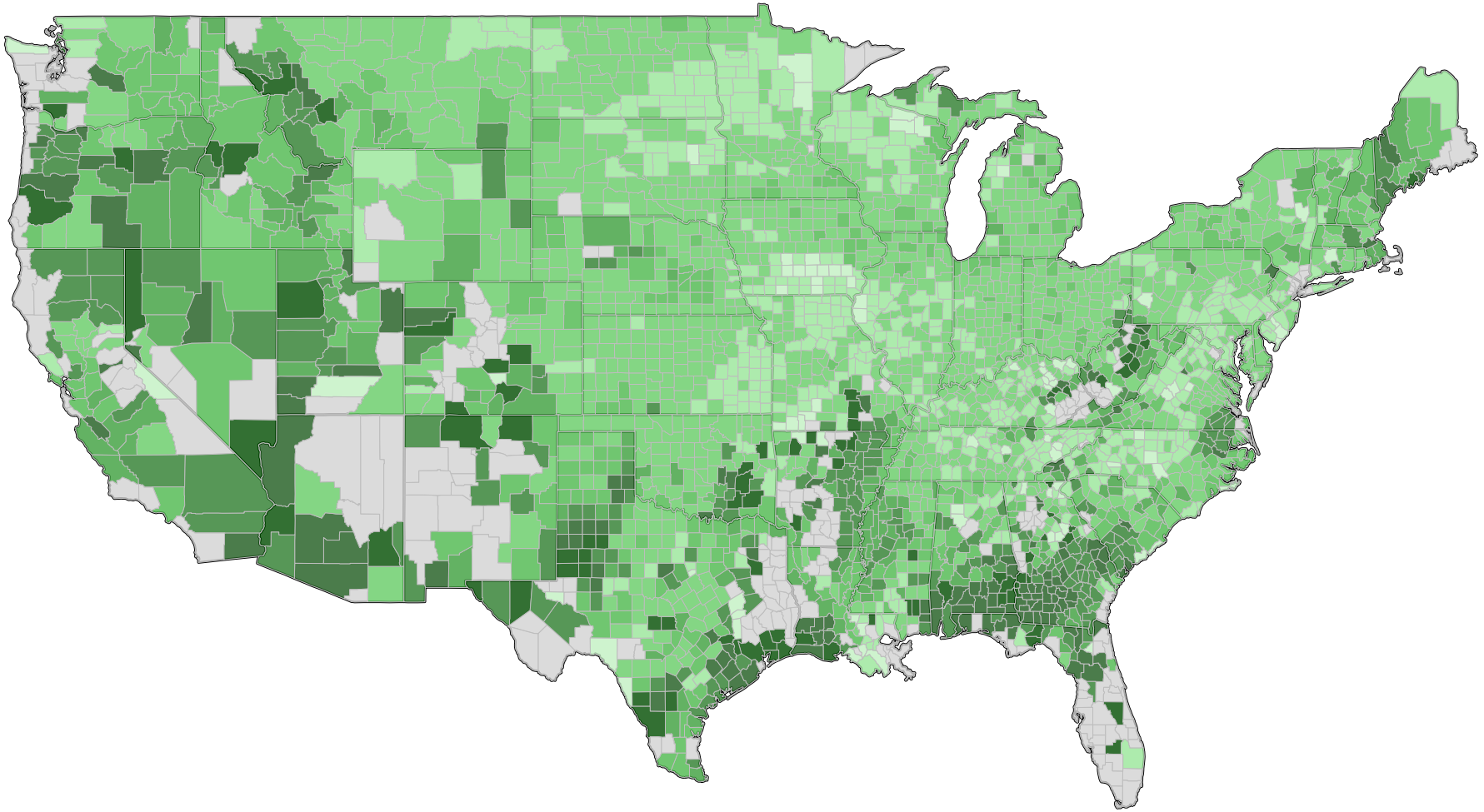
Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph,Anup Paudel, and Logan Moss



Note: ARC and PLC payments are based on actual payments; 2023 payments may slightly increase based on reporting in late 2025 or early 2026.
Base acres for 2016–2018 are estimated as the average of 2015 and 2019 values.
Planted acres are based on acreage reported to the Farm Service Agency (FSA), for ARC and PLC 1 eligible or 'program' crops
Crop insurance net indemnities are calculated as the sum of all indemnities less all producer premiums for Risk Management Agency (RMA)− reported policies for program crops.
RMA will sometimes report data from counties with relatively low participation levels in an 'all other counties' category; this category is not reported in this map.

Map 2. Average Annual ARC and PLC Payment per Planted Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph, Anup Paudel and Logan Moss



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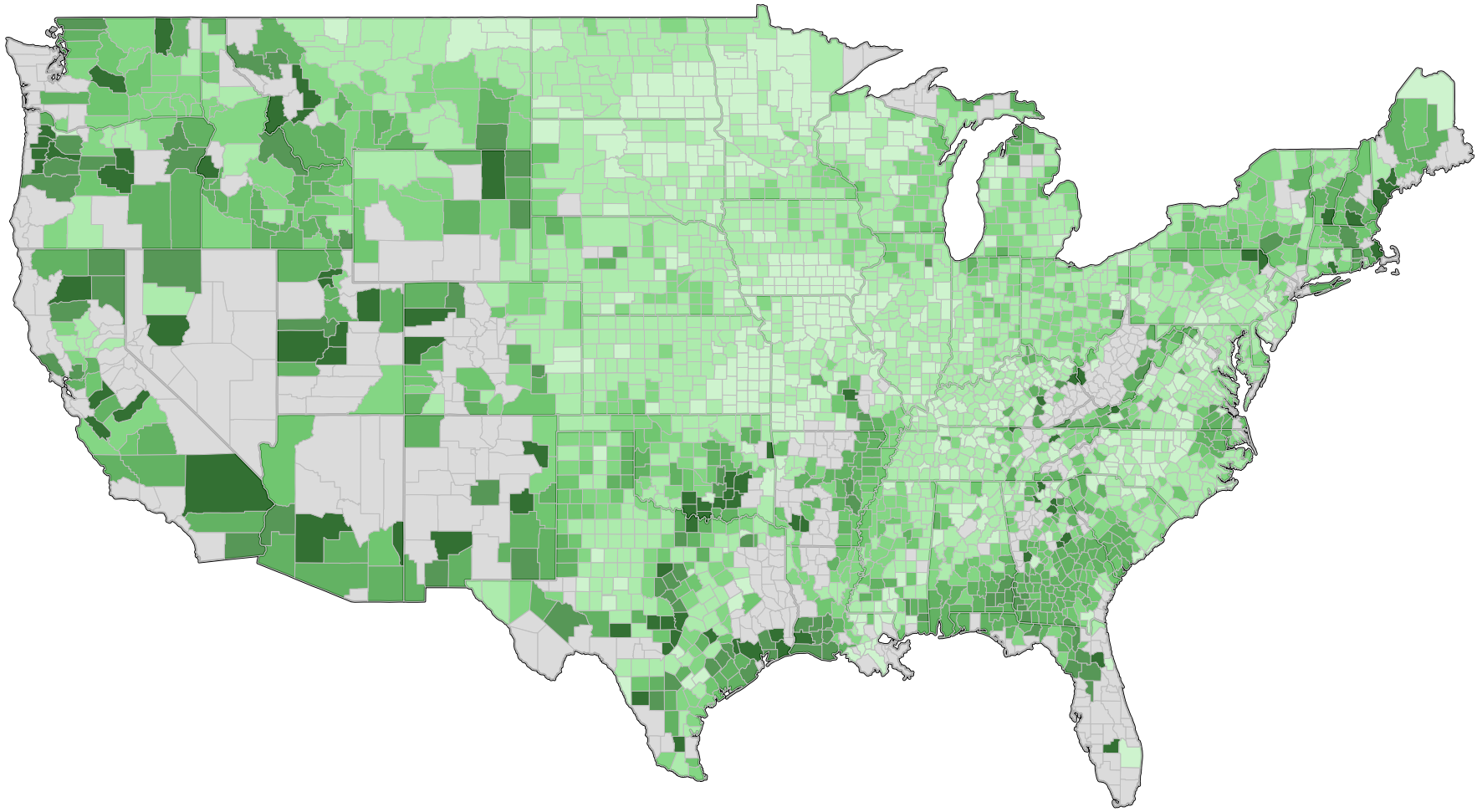
Map 3. Average Annual ARC and PLC Payment per Insured Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph, Anup Paudel and Logan Moss



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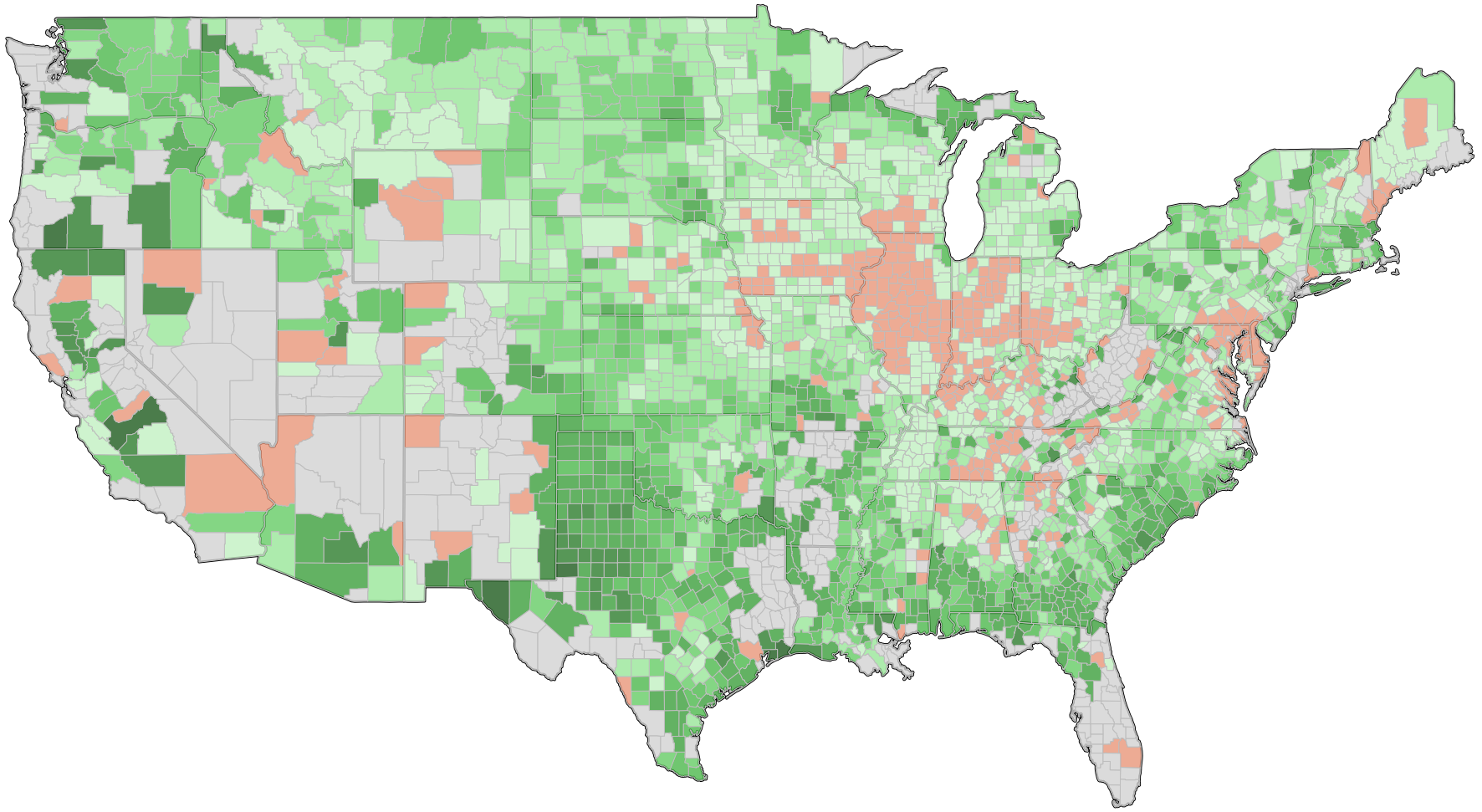
Map 4. Net Crop Insurance Indemnities per Insured Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph,Anup Paudel, and Logan Moss



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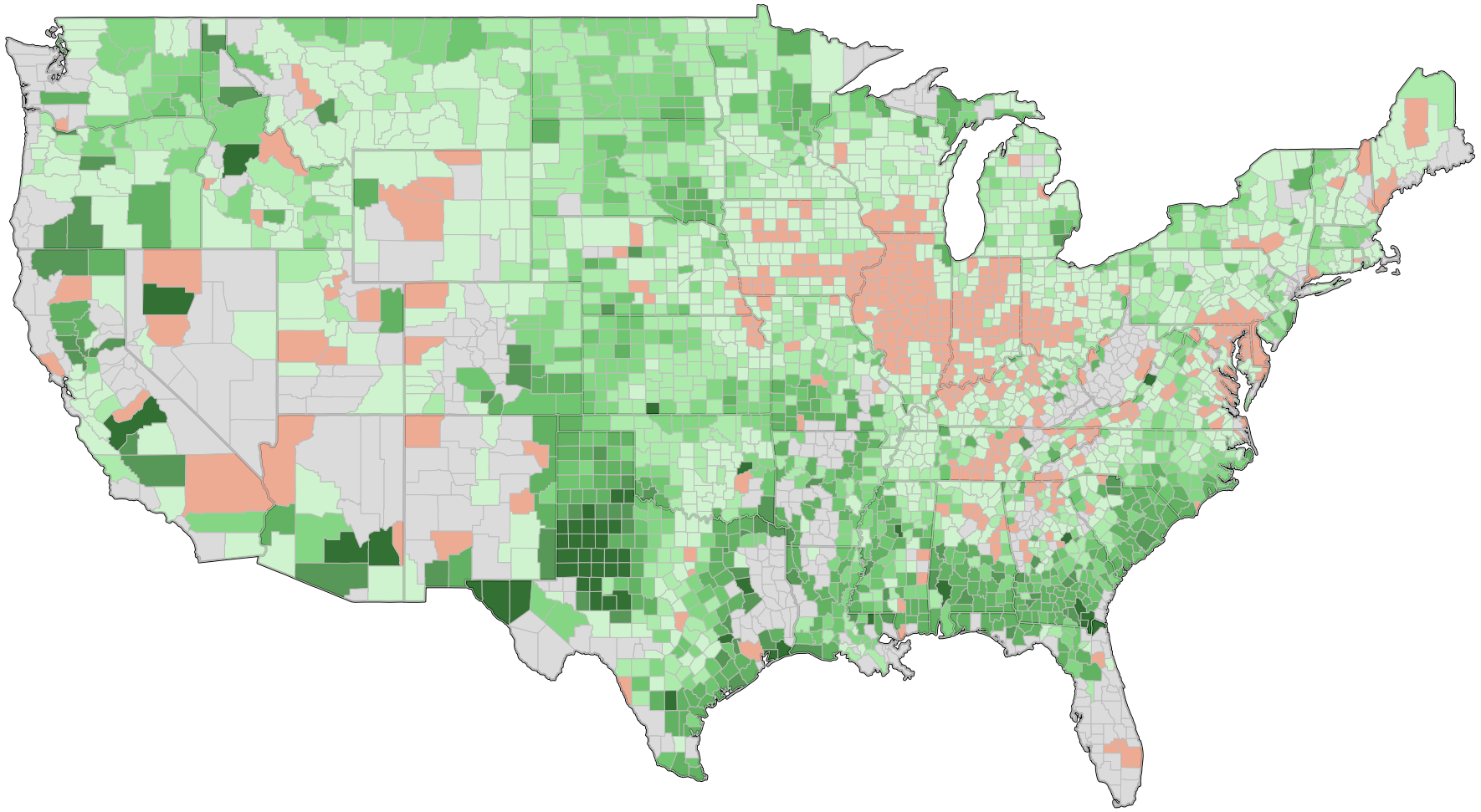
Map 5. Net Crop Insurance Indemnities per Planted Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph, Anup Paudel and Logan Moss



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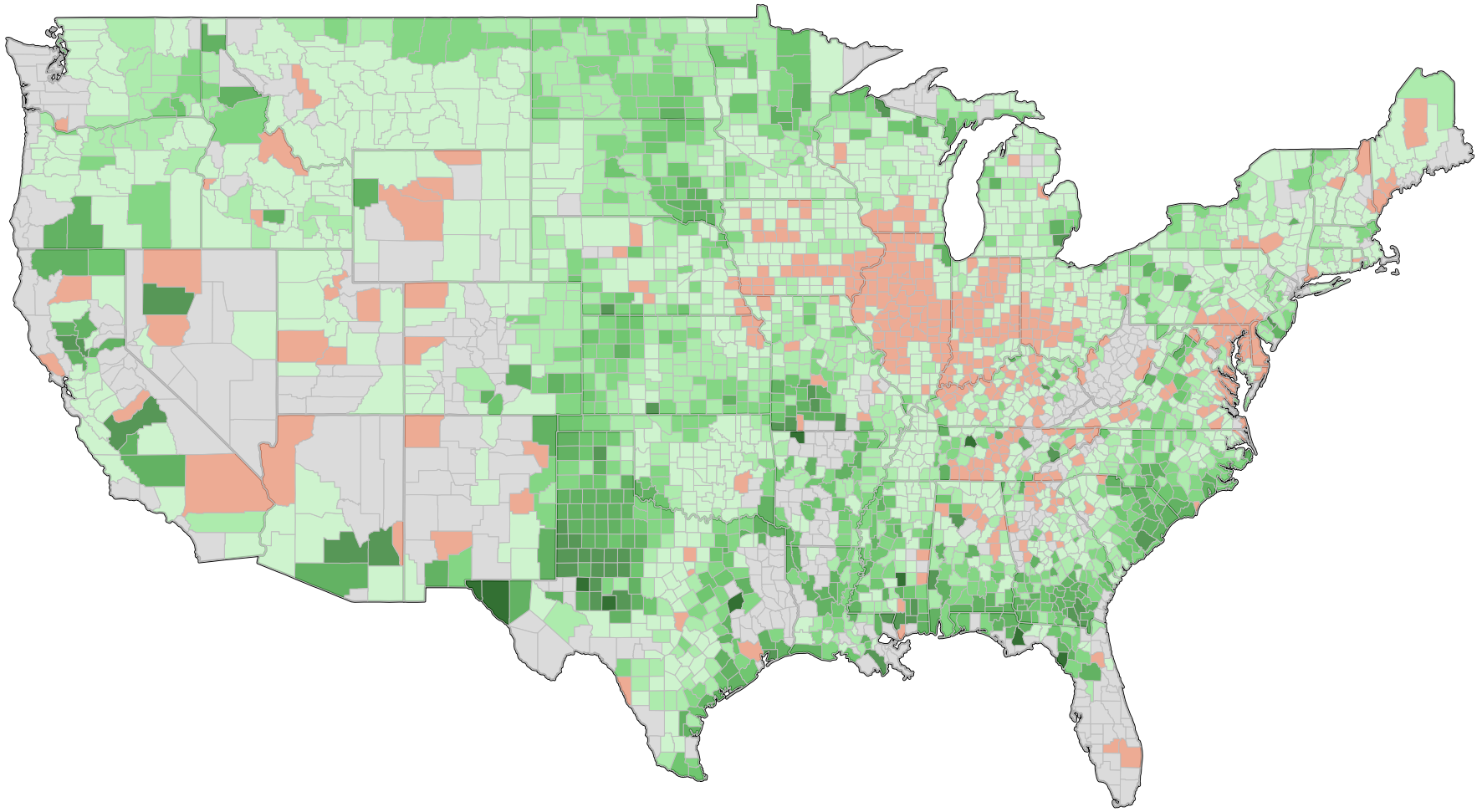
Map 6. Net Crop Insurance Indemnities per Base Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph, Anup Paudel and Logan Moss



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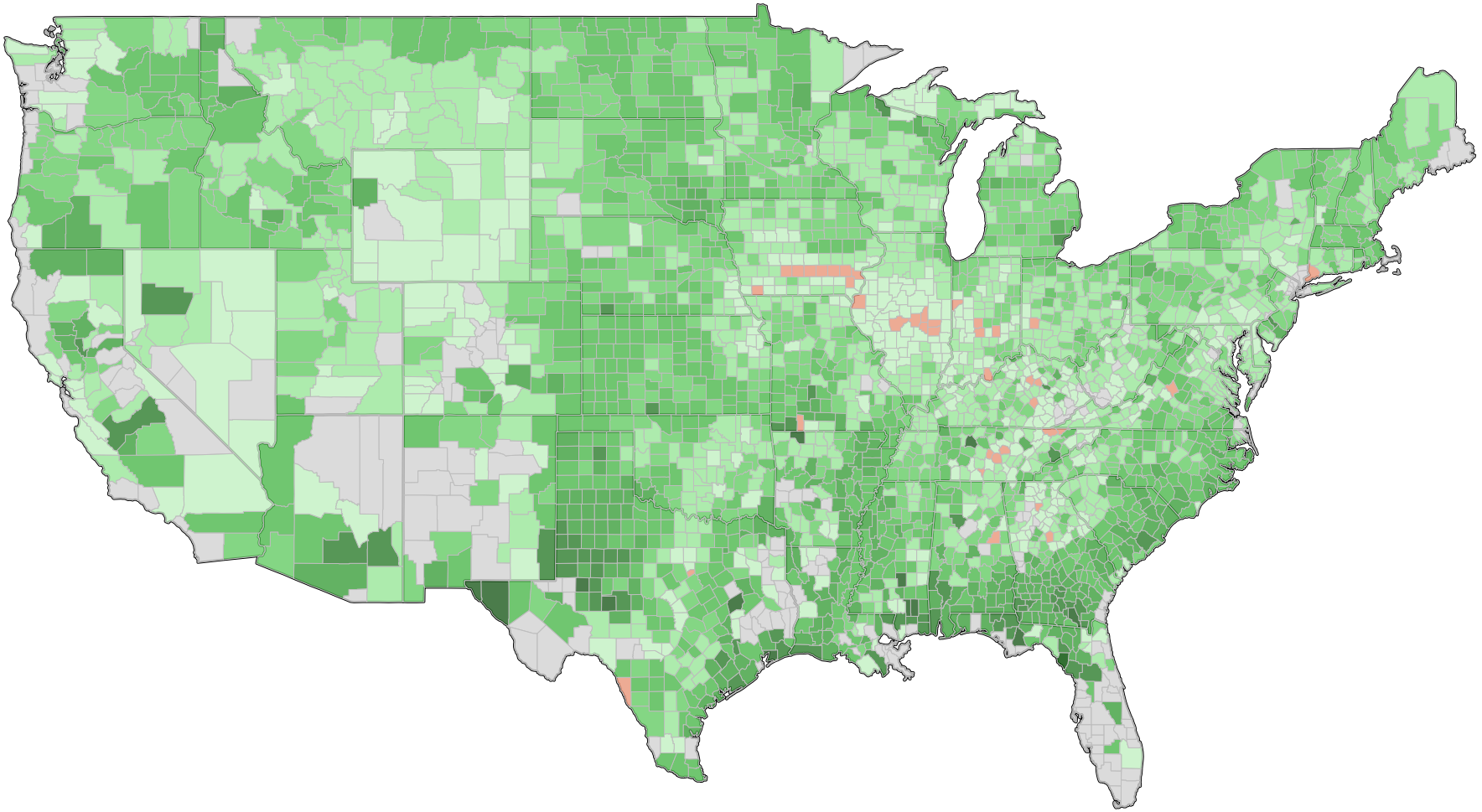
Map 7. Average Annual ARC and PLC Payment and Net Crop Insurance Indemnities per Base Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph, Anup Paudel and Logan Moss



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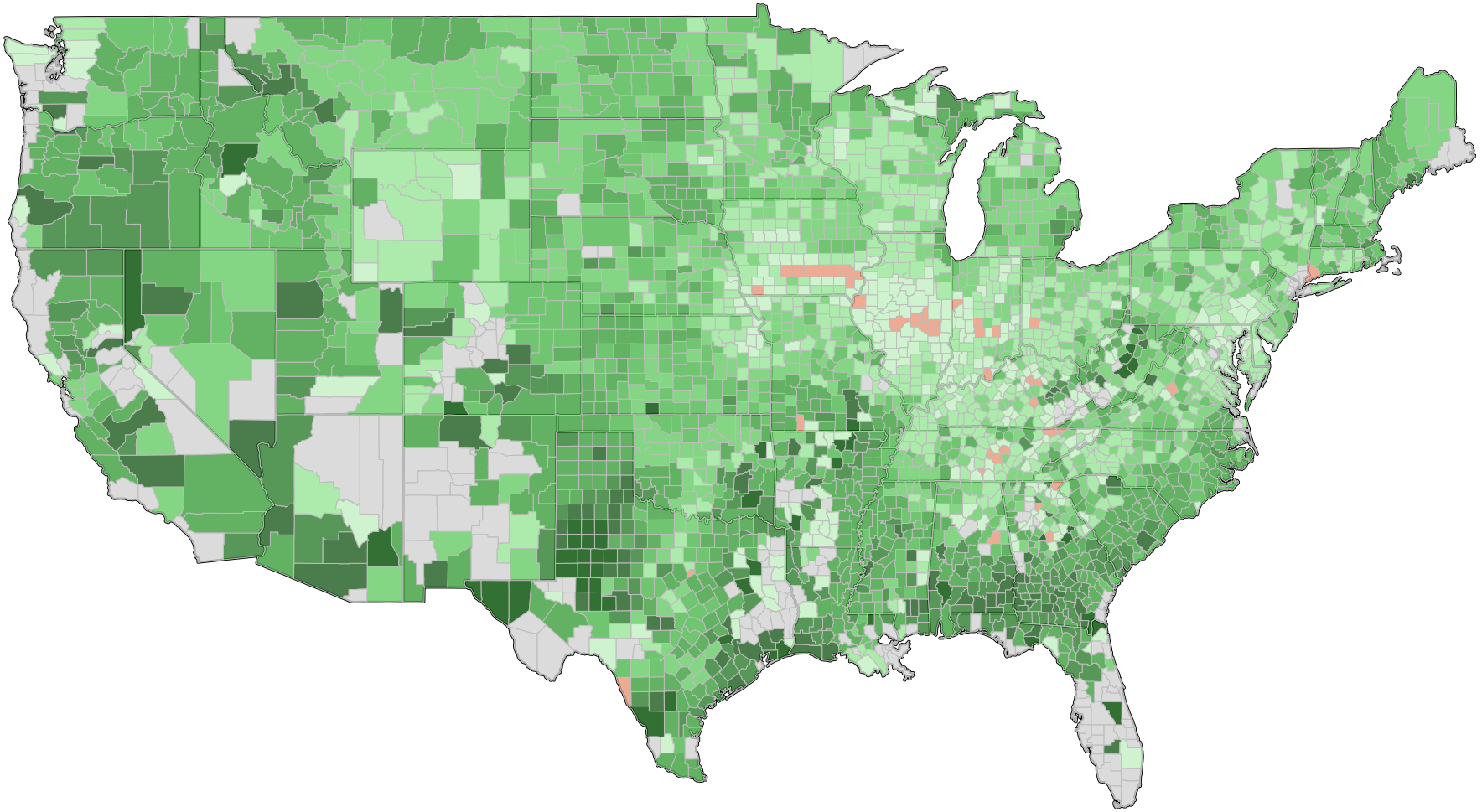
Map 8. Average Annual ARC and PLC Payment and Net Crop Insurance Indemnities per Planted Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph, Anup Paudel and Logan Moss



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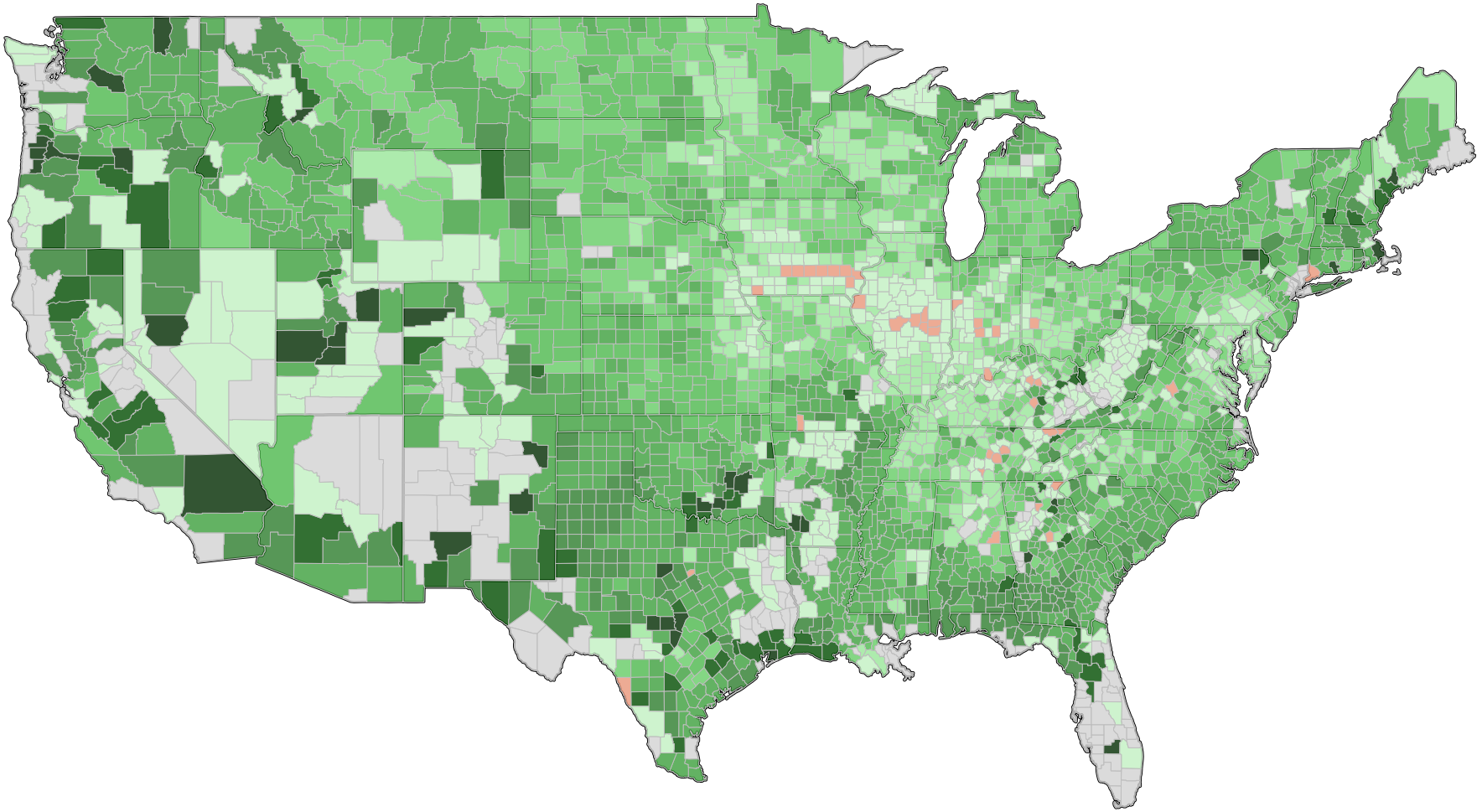
Map 9. Average Annual ARC and PLC Payment and Net Crop Insurance Indemnities per Insured Acre ($) (2014–2023)

Data Source: USDA − Farm Service Agency and Risk Management Agency
Prepared by: Jennifer Ifft (jifft@ksu.edu), Delide Joseph, Anup Paudel and Logan Moss



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