

Project Title: A CONUS-wide application of KBAABB for formal assessment of PSAE-funded estimates

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Period of Report: July 1, 2024 to Dec. 31, 2024

1 Progress

This project is off to a good start. The initial algorithm for simulating CONUS scale populations is under review.

In review:

1. White G.W., Wieczorek J.A., Cody Z.W., Tan E.X., Chistolini J.O., McConville K.S., Frescino T.S., and Moisen G.G. (2024+) Assessing small area estimates via bootstrap-weighted k-Nearest-Neighbor artificial populations. arXiv preprint. <https://arxiv.org/abs/2306.15607>

On-going work:

- We are testing SAE zero-inflated models using these simulated populations in WA and NV with FIA-like data.
- We are experimenting with a modified population generating algorithm that adds more realistic local (e.g., with-stand) spatial and temporal dependence.

2 Next Period Plans

Continue progress on all points above. Finalize and further document CONUS simulated populations for use by the PSAE community. Organize comparisons using the population benchmark.

3 Problems/Delays

None.