

NHTS Transferability Project

2018 National Household Travel Survey Workshop, August 8, 2018 Theresa Firestine and Clara Reschovsky

Objective

Develop sub-national estimates. Estimate for all U.S. Census tracts, average weekday household:

- Person-miles traveled
- Person trips
- Vehicle-miles traveled
- Vehicle-trips

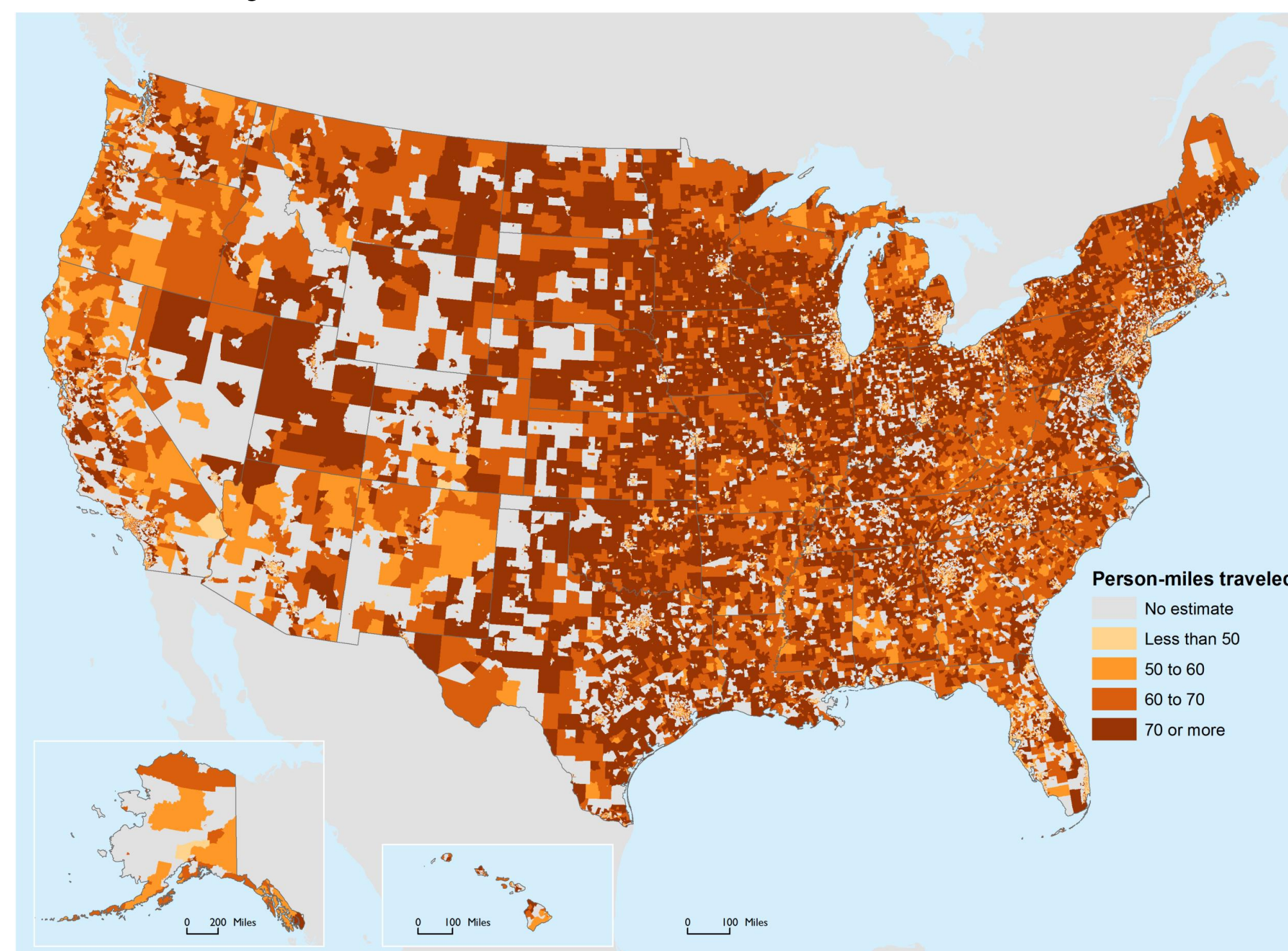
Challenges

- What is truth? The holy grail of transferability is knowing the subtleties of each dataset and what biases they bring to the overall work
- Which survey data to include or exclude and why
 - Ex. Households travel and move during the survey making their regular travel patterns different than that of their communities
- Understanding the changes in methodology upon resulting data
 - Ex. Income change vs. inflation
 - NHTS Random Digit Dialing vs. Address Based Sampling
 - ACS questionnaire & follow-up changes between 2009 and 2017
- Understanding the impacts at different geographic levels in terms of sampled households representing their neighbors vs. being an outlier
- Choosing the appropriate geographic level without losing data quality
 - Margin of Error varies by geographic level
 - Margin of Error > Estimate
 - Necessitating combining of subgroups for data quality

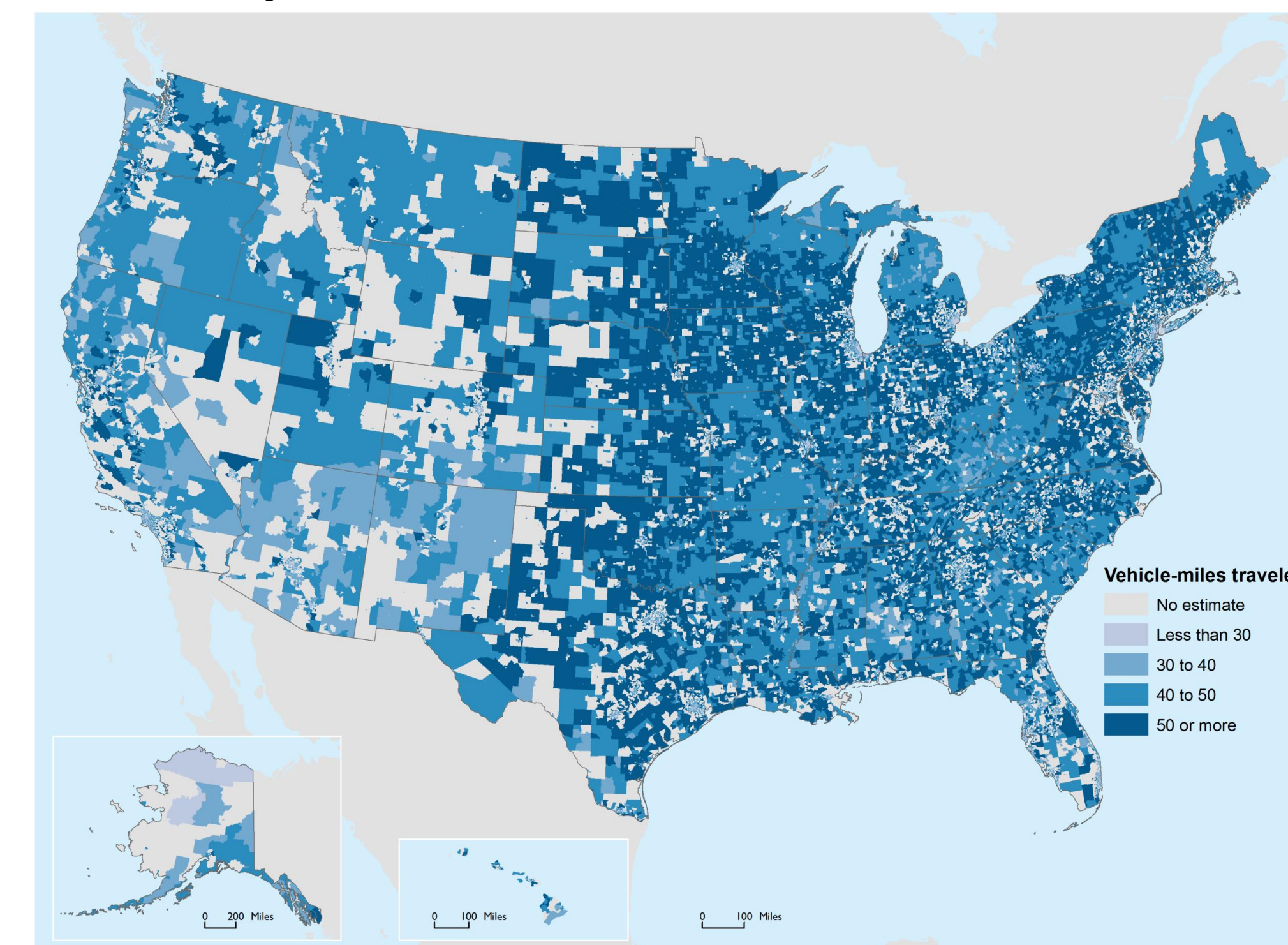
Next Steps

Results

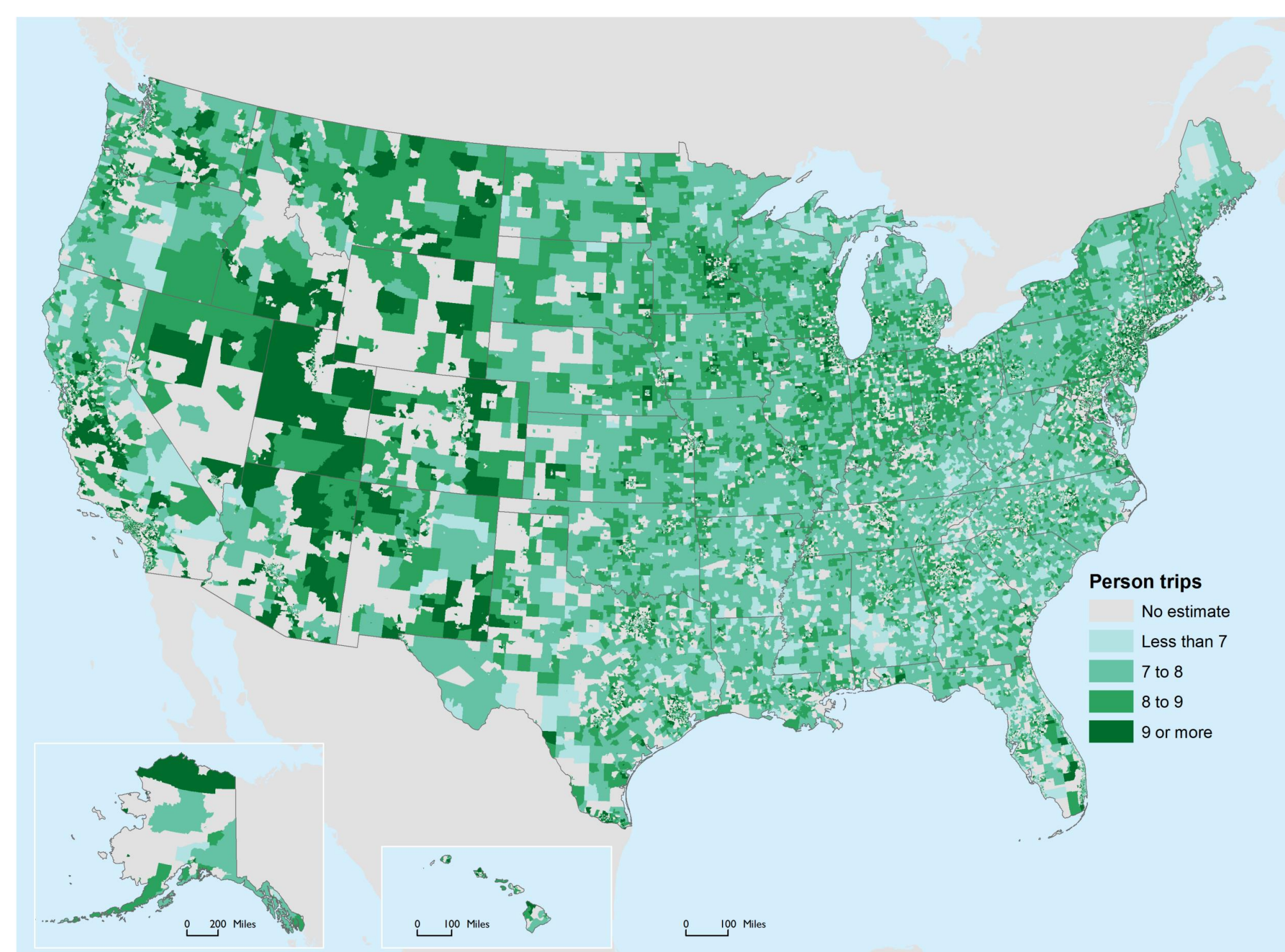
Average weekday household person-miles traveled by U.S. Census tract



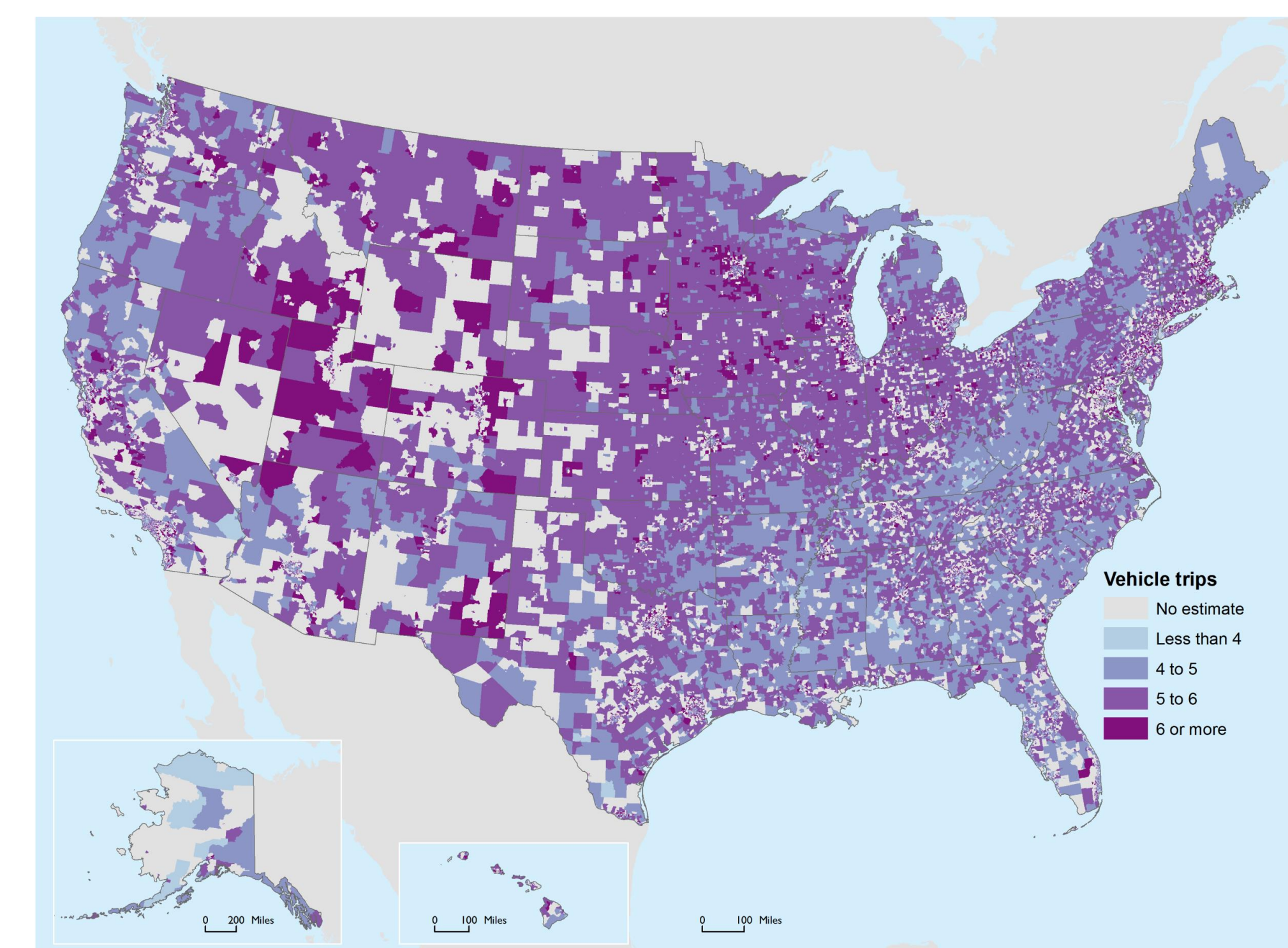
Average weekday household vehicle-miles traveled by U.S. Census tract



Average weekday household person-trips by U.S. Census tract



Average weekday household vehicle-trips by U.S. Census tract



Validate!

- Use selected local data sources and add-ons for reasonable testing
- Comparisons between 2009 & 2017
- Documentation