

1 Supplementary Figures

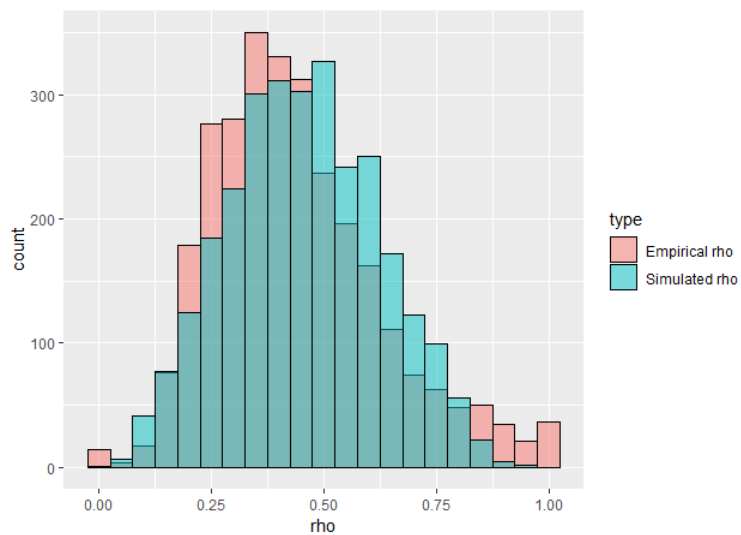


Figure 1: Histogram of comparison of ρ_u with simulated data generated from $\text{Beta}(\hat{a}, \hat{b})$. In practice, \hat{a} and \hat{b} are respectively 3.86 and 4.50 for the commuting dataset in this study.

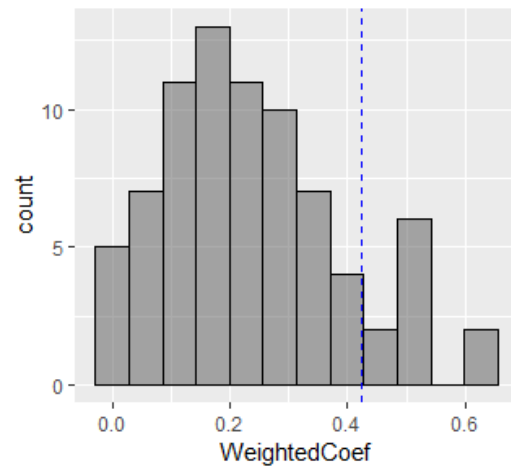


Figure 2: Histogram of weight clustering coefficients as described in section 4.5.

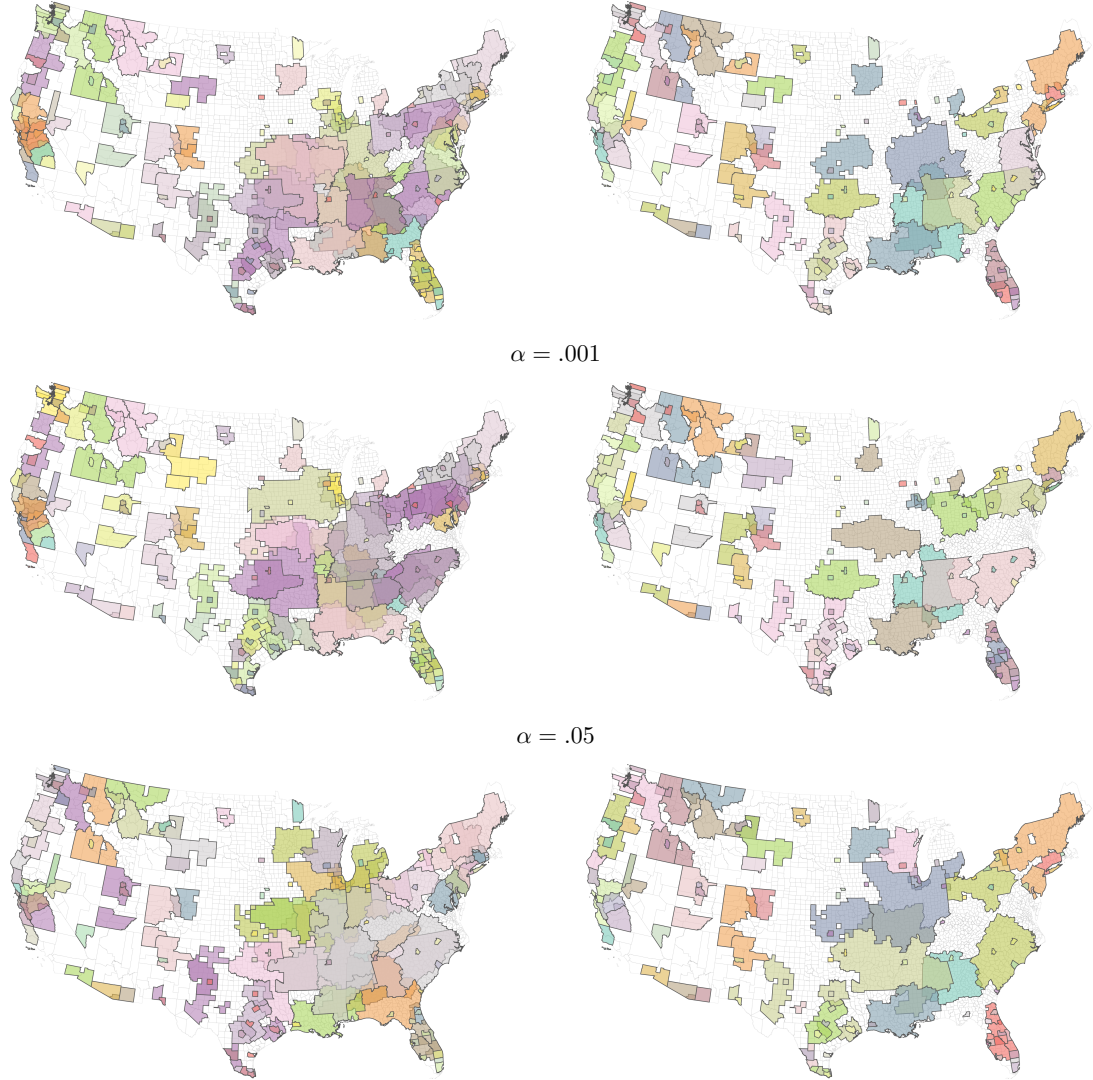


Figure 3: CCME-SL algorithm run under varying constraints for τ (*left*: $\tau = .8$, *right*: $\tau = .5$) and α . Decreasing the overlap parameter τ and the significance parameter α in general yields lower coverage of the total counties.

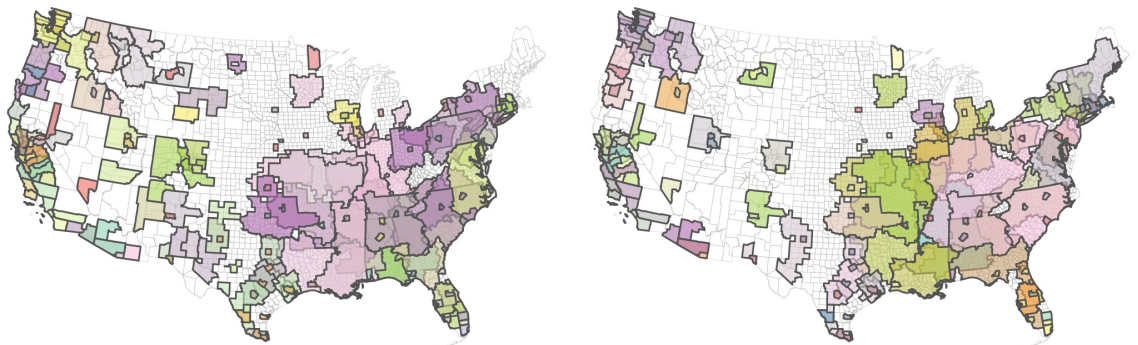


Figure 4: CCME-SL algorithm run under differing initializations using thresholding of self-loops (*left*: $W_{uu} > 10,000$, *right*: $W_{uu} > 50,000$ and α). The resultant communities do not differ much from those initialized with the threshold 20,000