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**Daryl Deford** and **Nicholas Eubank\*** ([nick@nickeubank.com](mailto:nick@nickeubank.com)), 1014 Hale Street, Durham, NC 27705, and **Jonathan Rodden**. *Partisan Dislocation: A Local Measure of District Naturalness and Gerrymandering*.

In this paper, we introduce a fine-grained local measure of the extent to which electoral districts combine and split local communities of co-partisans in unnatural ways. Our indicator – which we term *partisan dislocation* – is a measure of the difference between the partisan composition of a voter’s geographic nearest neighbors and that of her assigned district. We show that our measure is a good local (and global) indicator of district manipulation, easily identifying instances in which gerrymanderers carve up clusters of co-partisans (cracking) or combining them in unnatural ways (packing). Using districting simulations, we examine the degree to which minimizing dislocation can 1) place limits on the ability of district drawers to create gerrymandered districts, and 2) reduce bias in the transformation of votes to seats. Our measure holds promise not only as a tool for detecting gerrymandering, but also for helping commissions and demographers who wish to draw better districts. (Received January 13, 2020)