

Spatial and Social Contexts of Mortality Resulting from Interactions with Police

2017 Population Association of America Annual Meeting, Chicago, IL

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Motivation

- Scholarship suggests local racial/ethnic diversity and segregation reduce levels of trust among community members, creates conflict (Putnam 2007; Legewie and Schaeffer 2016)
- Larger minority populations are linked with higher rates of police violence, termed the “threat hypothesis” (Holmes 2000; Smith and Holmes 2003)
- Police use of lethal force has not yet been studied in a spatial context

Research Questions

- Does the spatial distribution of racial and ethnic groups influence the use of lethal force by police officers?
- Do police officers use lethal force more often in local areas with higher racial/ethnic diversity and segregation?

Data and Methods

Texas Justice Initiative data

- Data available on all deaths in Texas police custody, 2005-2015
- Limited to “justifiable homicides” before victim was processed

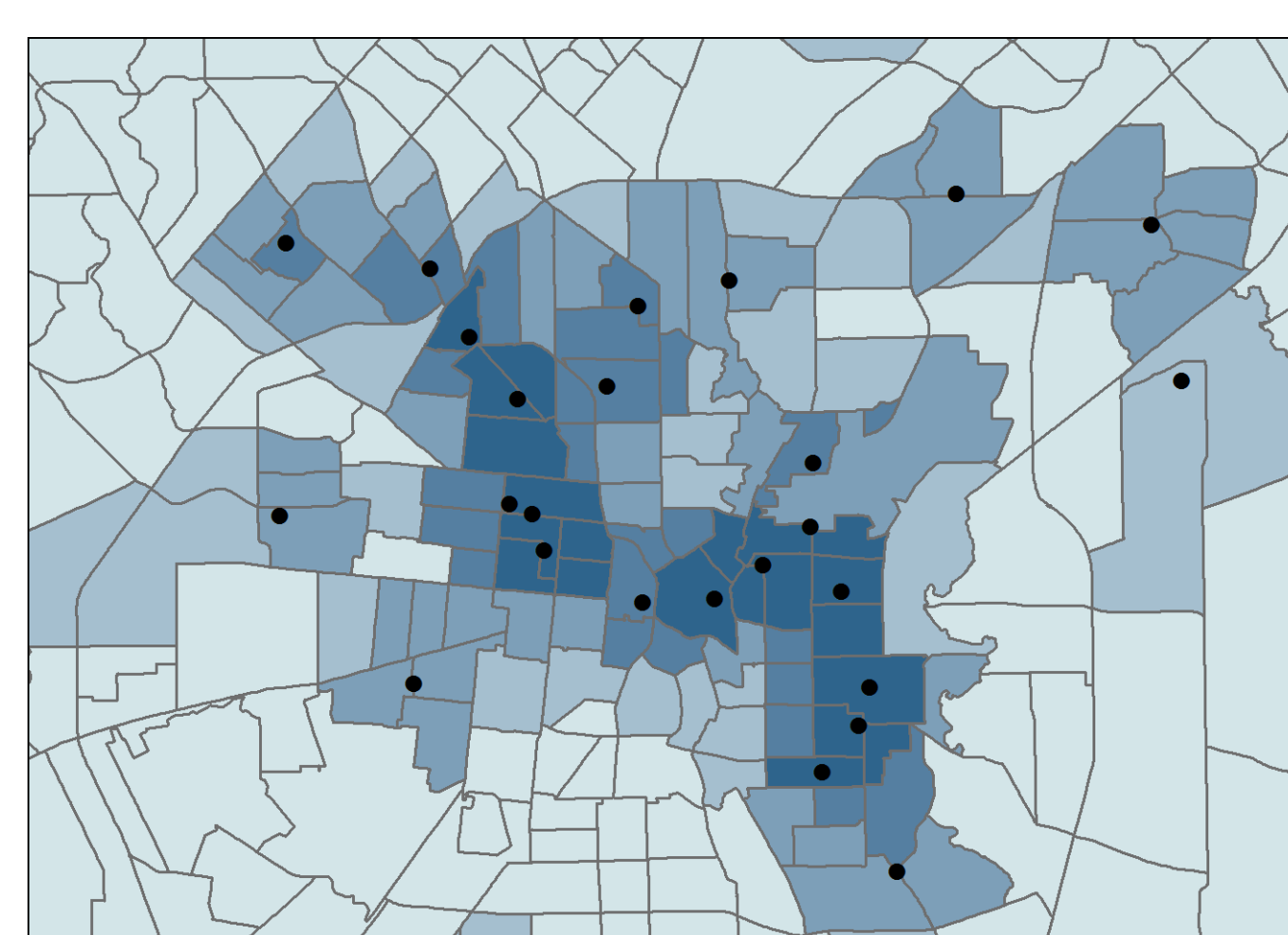
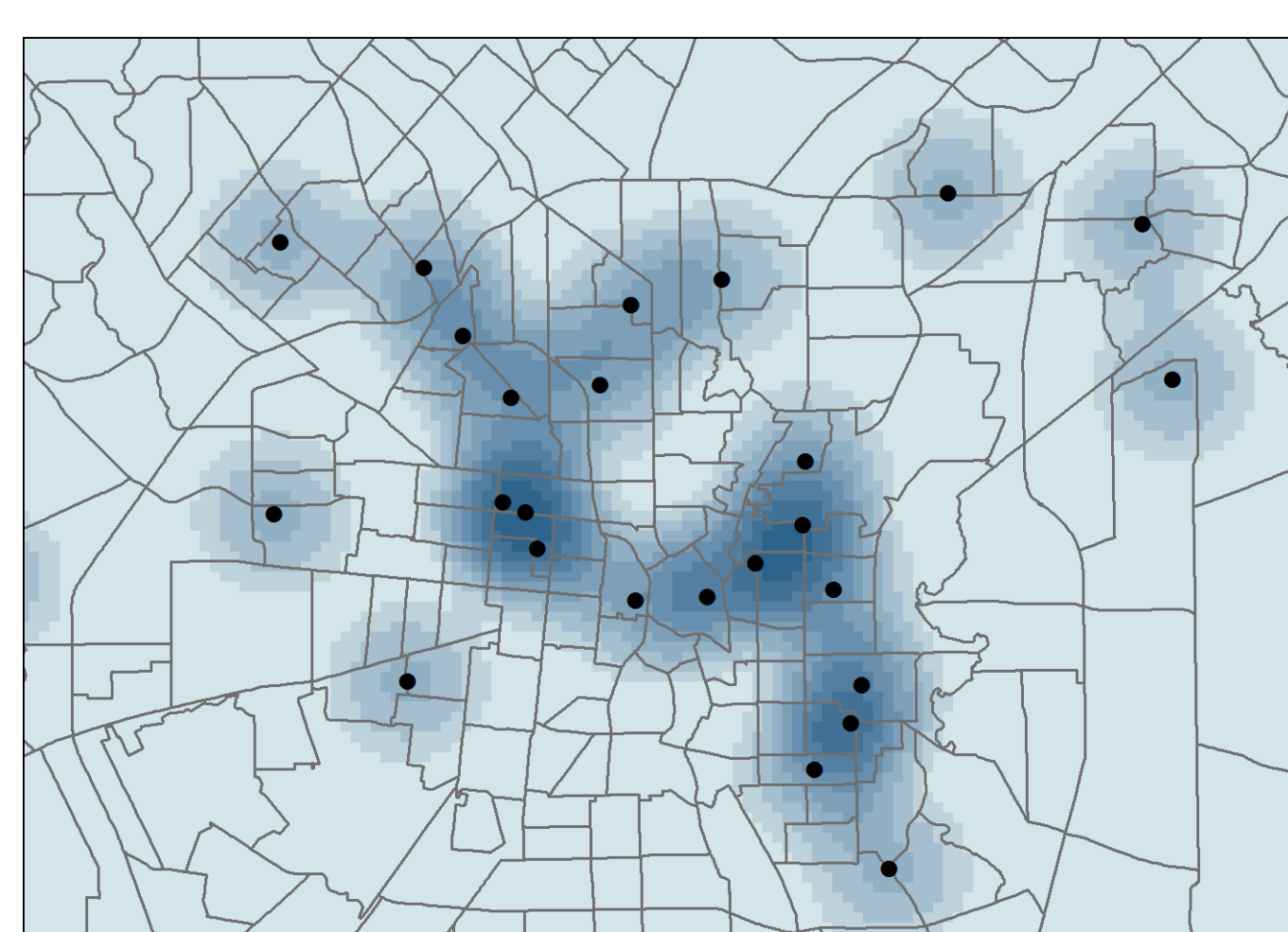
5-year ACS estimates

- Counties in Austin, Dallas, Houston, and San Antonio metro areas
- Local area defined by first-order contiguity Census tracts
- Multi-group Entropy and Theil indices
- Tracts categorized by quartiles within metro context

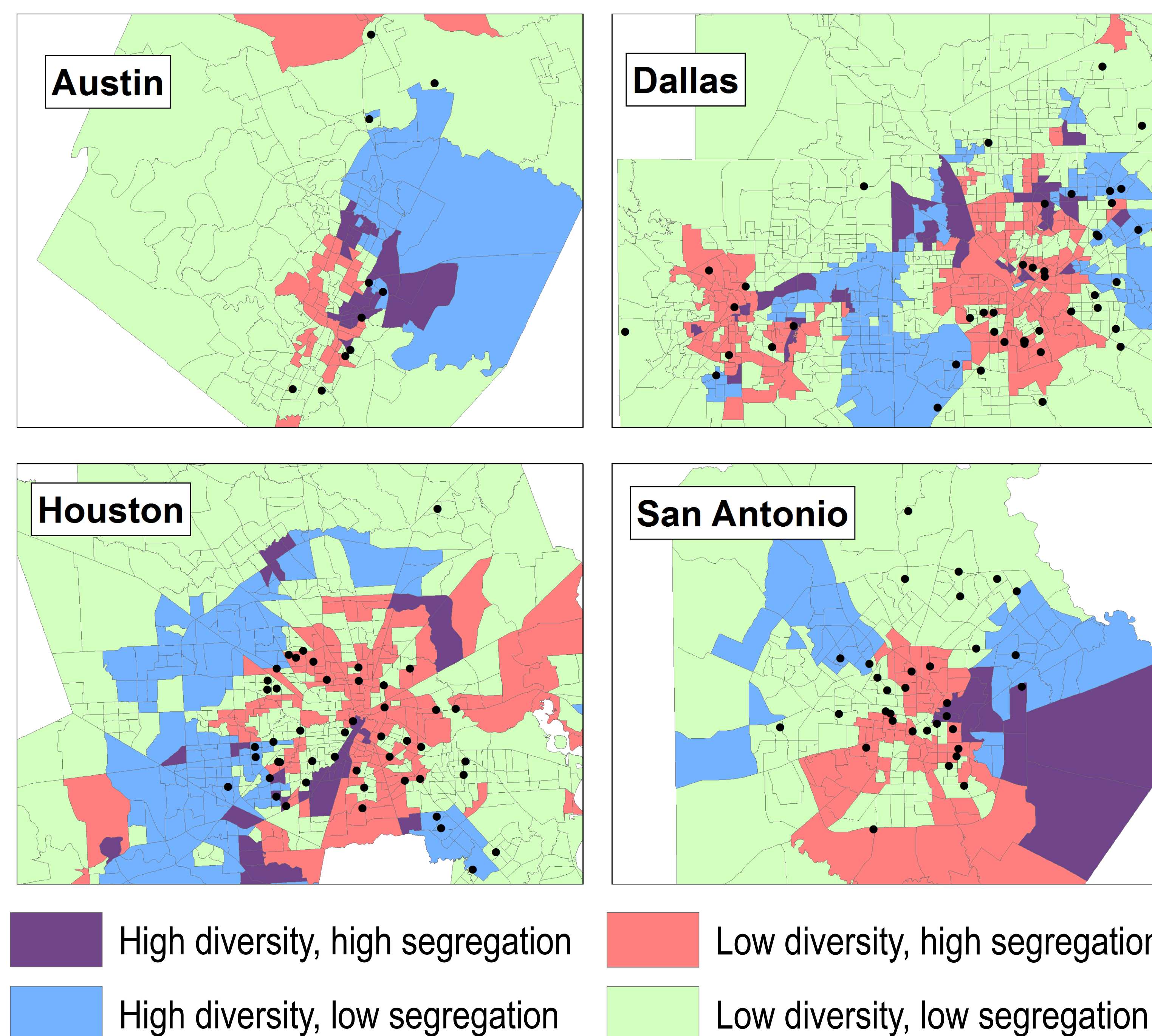
Kernel density surfaces generated from death locations

- 3km bandwidth, mean density taken calculated for tracts
- Measure of spatial exposure to events

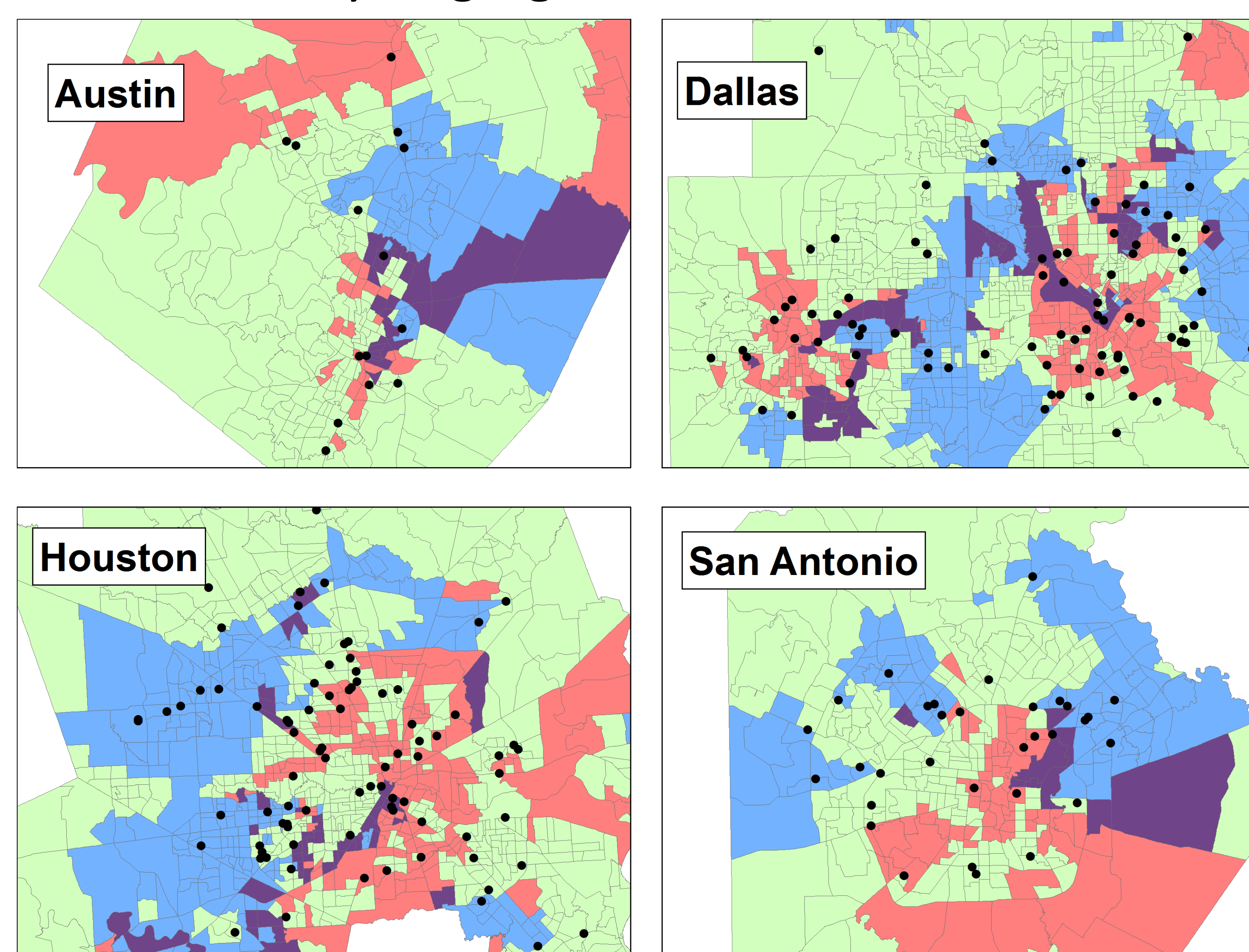
OLS estimation



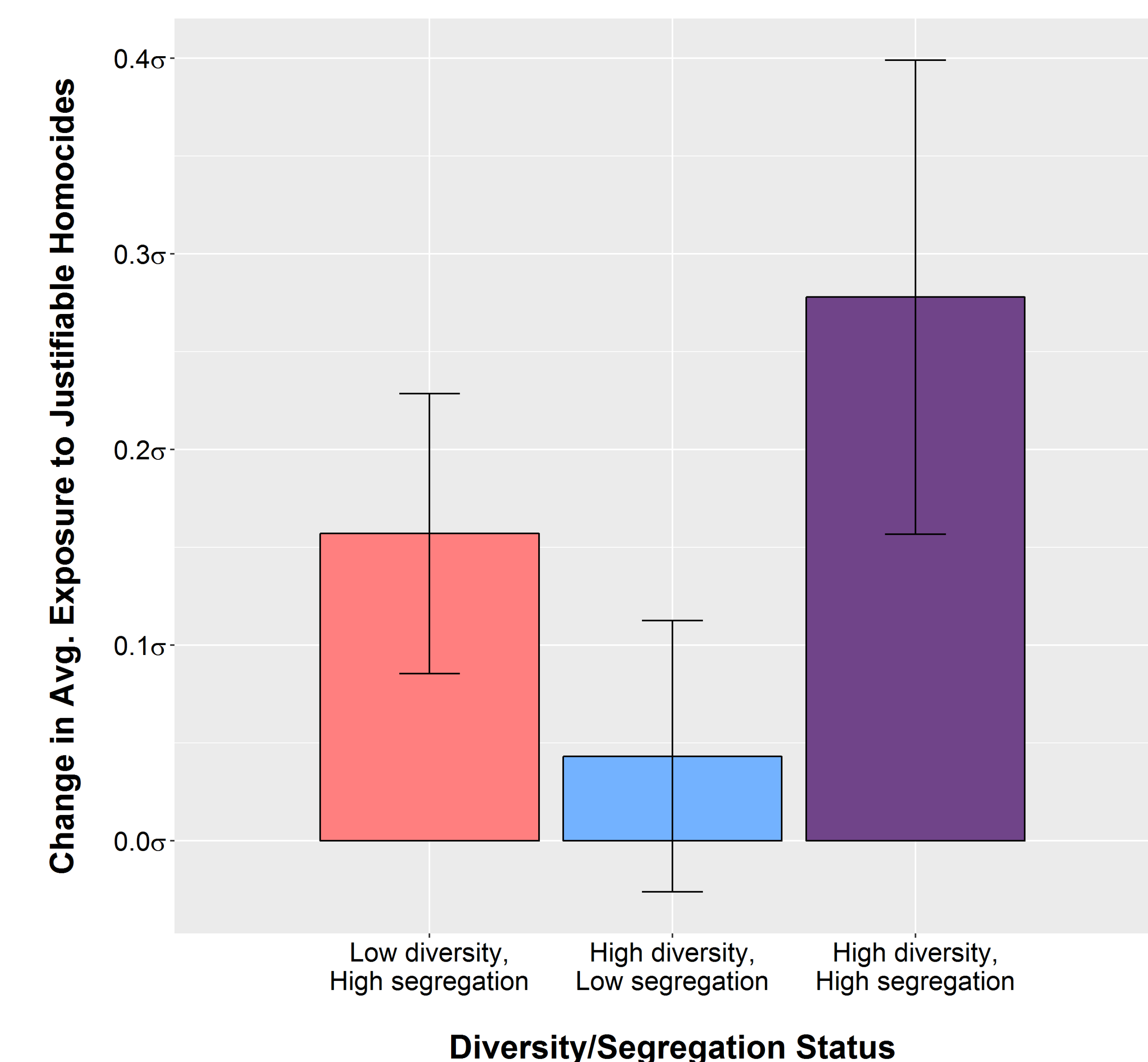
Justifiable Homicides by Police and Local Diversity/Segregation, 2005-2009



Justifiable Homicides by Police and Local Diversity/Segregation, 2010-2015



Effect of Levels of Diversity and Segregation on the Prevalence of Justifiable Homicide by Police



Results

- High local segregation is associated with increased exposure to events of lethal force
- High local diversity amplifies exposure to events of lethal force

References

- Holmes, M.D. “Minority Threat and Police Brutality: Determinants of Civil Rights Criminal Complaints in U.S. Municipalities.” *Criminology* 38: 343-68.
- Legewie, J. and M. Schaeffer. “Contested Boundaries: Explaining Where Ethnoracial Diversity Provokes Neighborhood Conflict.” *American Journal of Sociology* 122: 125-61.
- Putnam, R.D. “*E Pluribus Unum*: Diversity and Community in the Twenty-first Century.” *Scandinavian Political Studies* 30: 137-74.
- Smith, B.W. and M.D. Holmes. “Community Accountability, Minority Threat, and Police Brutality: An Examination of Civil Rights Criminal Complaints.” *Criminology* 41: 1035-64.

Acknowledgements

We are very grateful to Amanda Woog at the Texas Justice Initiative, Selene Arrazolo at data.world, and Sean Dellis at Open Austin for their efforts in collecting, cleaning, and geocoding our event data. Support was provided by Spatial Structures in the Social Sciences (S4) and by the Population Studies and Training Center, Brown University (R24 HD041020).