Urban Analytics in Philadelphia

How can we use data to improve our cities? Urban analytics has recently been improved through publicly available high-resolution data, allowing us to empirically investigate urban design principles of the past half century. We are exploring how safety in Philadelphia relates to local neighborhood features such as land-use zoning and business activity, as well as economic measures and population density. I will discuss matching analyses of the relationship between the built environment and safety as well as spatial modeling of the change in crime over the past decade. Philadelphia is an interesting case study for this work with its recent population growth and substantial urban development.

Here are a couple recent papers that are most relevant to my presentation:

Forthcoming in Environment and Planning B: Urban Analytics and City Science
https://arxiv.org/abs/1702.07909

Forthcoming in the Annals of Applied Statistics

You can also read more about the goals of our urban analytics research program in these media articles:

https://nextcity.org/daily/entry/philly-streets-get-test-of-jane-jacobs-eyes-on-the-street-effect
https://knowledge.wharton.upenn.edu/article/urban-analytics/