

Riley Tucker

Pennsylvania State University

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Professional Appointments

- 2025 – Present **Pennsylvania State University**
Assistant Professor of Criminology and Sociology
Co-Hire, Social Science Research Institute
Affiliate, Institute for Computational and Data Sciences
- 2022 – 2025 **University of Chicago**
Post-Doctoral Fellow
Mansueto Institute for Urban Innovation
Data Science Institute
Environmental Neuroscience Lab

Education

- PhD. **Northeastern University**, Boston, Massachusetts, 2022,
School of Criminology and Criminal Justice. *Who, What, When, Where: Using Online Data to Assess the Characteristics and Criminogenic Dynamics of Guardianship Ecologies*
- M.S. **Northeastern University**, Boston, Massachusetts, 2018,
Criminology and Criminal Justice, College of Social Science & Humanities
- B.A. **Temple University**, Philadelphia, Pennsylvania, 2016, Sociology,
College of Liberal Arts

Refereed Publications

- Riley Tucker**, Nakwon Rim, Alfred Chao, & Marc Berman. "EBK": Leveraging Crowd-Sourced Social Media Data to Quantify How Hyperlocal Gang Affiliations Shape Personal Networks and Violence in Chicago's Contemporary Southside. 2025.
Journal of Quantitative Criminology, <https://doi.org/10.1007/s10940-025-09615-9>
- Kimberly Meidenbauer, Kathryn Schertz, Elizabeth Janey, Andrew Stier, Anya Samtani, Kathryn Gehrke, **Riley Tucker**, & Marc Berman. 2025. Evidence for Environmental Influences on Impulsivity, Aggression, and Emotional State Across Multiple Spatial and

Temporal Scales. *Urban Forestry & Urban Greening*
<https://doi.org/10.1016/j.ufug.2024.128594>

Riley Tucker and Daniel T. O'Brien. 2024. Do Commercial Place Managers Explain Crime Across Places? Yes and NO(PE). *Journal of Quantitative Criminology*.
<https://doi.org/10.1007/s10940-024-09587-2>

Gaby N. Akcelik, Kyoung Whan Choe, Monica D. Rosenberg, Kathryn E. Schertz, Kimberly L. Meidenbauer, Tianxin Zhang, Nakwon Rim, **Riley Tucker**, Emily Talen, and Marc G. Berman. 2024. "Quantifying Urban Environments: Aesthetic Preference Through the Lens of Prospect-Refuge Theory." *Journal of Environmental Psychology*: 102344.

Daniel T. O'Brien, Alina Ristea, **Riley Tucker**, and Forrest Hangen. 2023. The Emergence and Evolution of Problematic Properties: Onset, Persistence, Aggravation, and Desistance. *Journal of Quantitative Criminology*.

Alina Ristea, **Riley Tucker***, Shunan You, et al. A Multisource Database Tracking the Experience of COVID in Boston, Massachusetts, USA. 2022. *Scientific Data*.

Riley Tucker and Michael C. Gearhart. 2022. Social Ties and Collective Efficacy as Predictors of Volunteering. *Community Development*. 53 (1): 109-125.

Daniel T. O'Brien, Alina Ristea, Forrest Hangen, and **Riley Tucker**. 2022. Different Places, Different Problems: Profiles of Crime and Disorder at Residential Parcels. *Crime Science*

Keller Sheppard and **Riley Tucker**. 2022. Police Shooting Mortality: Investigating Individual, Incident, and Contextual Factors Differentiating Fatal and Non-Fatal Police Shootings. *Journal of Ethnicity in Criminal Justice*

Daniel T. O'Brien, Alexandra Ciomek, and **Riley Tucker**. 2022. How and Why is Crime More Concentrated in Some Neighborhoods Than Others?: A New Dimension to Crime. *Journal of Quantitative Criminology*.

Riley Tucker, Daniel T. O'Brien, Alexandra Ciomek, Edgar Castro, Qi Wang, and Nolan Edward Phillips. 2021. Who 'Tweets' Where and When, and How Does it Help Understand Crime Rates at Places? Measuring the Presence of Tourists and Commuters in Ambient Populations. *Journal of Quantitative Criminology*. 37(2): 333-359.

Daniel T. O'Brien, Alexandra Ciomek, and **Riley Tucker**. 2021. Deviations from the Law of Concentration of Crime: Exploring Why Crime is More Concentrated in Some Neighborhoods than Others. *Journal of Quantitative Criminology*. 1-27.

Michael C. Gearhart and **Riley Tucker**. 2020. Criminogenic Risk, Criminogenic Need, Collective Efficacy and Juvenile Delinquency. *Criminal Justice and Behavior*. 47(9):1116-1135

Riley Tucker, Gregory M. Zimmerman, Jacob I Stowell, and David Squier Jones. 2019. Examining the (Dis)Agreement Between Etiology and Consequences of Adults' and Youths' Perceptions of Collective Efficacy in Boston. *Journal of Research in Crime and Delinquency*. 56(6): 888-936.

Gregory M. Zimmerman, **Riley Tucker**, and Jacob I Stowell. 2019. Neighborhood Through a Familial Lens: Examining the Intergenerational Transmission of Collective Efficacy. *Journal of Developmental and Life-Course Criminology*. 5(4): 498-516.

* Denotes Co-First Authorship

Manuscripts Under Review

Riley Tucker, Daniel T. O'Brien, & Forrest Hangen. Can Twitter Measure Race Across Space? Proposing an Ambient Population Measure of Social Disorganization.
Preprint available: <https://www.crimrxiv.com/pub/kxlyvjce/release/2>

Riley Tucker, Alfred Chao Nakwon Rim, Alfred Chao, Elizabeth Gaillard, Gaby Akcelik, & Marc Berman. "Eyes" on the Street: Using Computer Vision to get the Gist of How Environmental Design Shapes Crime Across Neighborhoods
Preprint available: <https://www.crimrxiv.com/pub/vonxftmd/release/1>

Manuscripts in Preparation

Riley Tucker, Mian Li, Nakwon Rim, Gaby Akcelik, Elizabeth Gaillard & Marc Berman.
Evaluating How Perceptions of Urban Images Vary Across Types of People and Places.

Riley Tucker, Patricia Chiril, Chirag Mahapatra, & Marc Berman. Your Bar has Crime Because the Food and Prices Suck: an NLP Study of Place Management

Riley Tucker, Elizabeth Gaillard, Andrew Stier, Akram Bakkour, Marc Berman. How Do Residential Environments and Personal Characteristics Shape Perceptions of Life Expectancy and Preferences for Delay Discounting?

Non-Refereed Publications & Data Releases

Qiliang Chen, **Riley Tucker**, and Daniel T. O'Brien. 2020. "Yelp Reviews in Boston, MA" <https://doi.org/10.7910/DVN/DMWCBT>

Mehrnaz Amiri, **Riley Tucker** and Daniel T. O'Brien. 2020. "Airbnb in Greater Boston, MA" <https://doi.org/10.7910/DVN/GXLZXF>

Edgar Castro, Mehrnaz Amiri, **Riley Tucker** and Daniel T. O'Brien. 2020. "Craigslist Postings in Massachusetts" <https://doi.org/10.7910/DVN/52WSPT>,

Daniel T. O'Brien, Nolan Edward Phillips, Saina Sheini, Justin de Benedictis-Kessner, Alina Ristea, and **Riley Tucker**. 2019. "Geographical Infrastructure for the City of Boston v. 2019"

Daniel T. O'Brien, Alexandra Ciomek, and **Riley Tucker**. 2019. "Massachusetts Census Indicators" <https://doi.org/10.7910/DVN/XZXAUP>

Braga, Anthony A., and **Riley Tucker**. 2018. "Problem Analysis to Support Decision Making in Evidence Based Policing." *Evidence-Based Policing: An Introduction*. Policy Press, University of Bristol, Bristol, UK.

Invited Talks

Riley Tucker. 2024. *AI, Machine Learning, and Related New Technologies in Criminology* Crime and Place in the Making Webinar Series. KTH Royal Institute of Technology & American Society of Criminology Division of Crime and Place

Riley Tucker. 2024. *What AI & Online Data Can Teach Us About the Geography of Crime*. BIGDATPOL Mini Symposium. University of Gent. Gent, BE.

Riley Tucker. 2024. *What AI & Online Data Can Teach Us About the Geography of Crime*. Netherlands Institute for the Study of Crime (NSCR). Amsterdam, NL.

Riley Tucker. 2024. *What AI & Online Data Can Teach Us About the Geography of Crime*. Criminology & Criminal Justice Seminar Series. University of Leeds, School of Law. Leeds, UK.

Riley Tucker. 2024. *What AI & Online Data Can Teach Us About the Geography of Crime*. University College London, Department of Crime & Security Science. London, UK.

Riley Tucker. 2023. *Can Chicago Gangs Be Studied Using Crowd-Sourced Social Media Data?* Mansueto Institute Lunch Colloquium, University of Chicago.

Riley Tucker. 2023. *'Eyes' on the Street: How Computer Vision and Cognitive Psychology Can Help Us Get the Gist of Neighborhood Environmental Design to Explain Crime.* Cognitive Brown Bag Talk Series, University of Chicago.

Riley Tucker. 2023. *Do Commercial Place Managers Explain Crime Across Places? Yes and NO(PE).* Political Science Applied Quantitative Methods Workshop, University of Chicago.

National Conference Presentations

Riley Tucker, Gaby Akcelik, Nakwon Rim, Alfred Chao, Elizabeth Gaillard, Hassaan Haq, Marc Berman. 2024. *'Eyes' on the Street: How Computer Vision and Cognitive Psychology Can Help Us Get the Gist of Neighborhood Environmental Design to Explain Crime.* American Sociological Association Annual Meeting (round-table), Chicago, IL.

Riley Tucker, Gaby Akcelik, Nakwon Rim, Alfred Chao, Elizabeth Gaillard, Hassaan Haq, Marc Berman. 2024. *'Eyes' on the Street: How Computer Vision and Cognitive Psychology Can Help Us Get the Gist of Neighborhood Environmental Design to Explain Crime.* American Society of Criminology Annual Meeting, San Francisco, CA.

Riley Tucker and Chirag Mahapatra. 2024. *Using Large Language Models to Annotate Yelp Reviews so We Can Understand How Commercial Place Management Quality Shapes Crime Across Addresses.* International Conference on Computational Social Sciences, Philadelphia, PA.

Riley Tucker, Nakwon Rim, Alfred Chao, & Marc Berman. 2023. *Can Chicago Gangs Be Studied Using Crowd-Sourced Social Media Data?* American Society of Criminology Annual Meeting, Philadelphia, PA.

Riley Tucker. 2022. *People or Places? Using Online Data to Assess Sources of Criminal Opportunity at Micro-Scale.* American Society of Criminology Annual Meeting, Atlanta, GA.

Riley Tucker. 2021. *Who, What, Where When: Using Twitter to Assess Demographics of Ambient Populations.* American Society of Criminology Annual Meeting, Chicago, IL.

Riley Tucker, Dan O'Brien, Alexandra Ciomek, and Nolan Edward Phillips. 2019. *Who Tweets Where and When? How Does it Help us Understand Crime Rates at Places?* American Society of Criminology Annual Meeting, San Francisco, CA.

McDevitt, Jack and **Riley Tucker**. 2018. *Measurement of Crimes Against Vulnerable Victims*. American Society of Criminology Annual Meeting, Atlanta, GA.

Tucker, Riley. 2018. *Assessing the Relationship Between Collective Efficacy, Neighborhood Activism, and Organizational Participation in Chicago Neighborhoods*. American Society of Criminology Annual Meeting, Atlanta, GA.

Tucker, Riley. 2017. *The Impact of Collective Efficacy and Satisfaction with Police on Willingness to Report & Crime*. American Society of Criminology Annual Meeting, Philadelphia, PA.

Tucker, Riley. 2016. *Policing and Collective Efficacy: Baltimore, Maryland, 1986*. American Society of Criminology Annual Meeting, New Orleans, LA.

Service and Professional Development

Program Committee for *International Conference on Computational Social Science*
2022- 2025

Program Committee for the *Annual Conference on Complex Systems*
2024-2025

Data Science Institute Clinic Mentor, University of Chicago
2022-2023

Ad Hoc Reviewer for *Journal of Quantitative Criminology*, *Crime and Delinquency*,
Journal of Research in Crime and Delinquency, *Journal of Experimental Criminology*,
Social Problems, *Homicide Studies*, *Asian Journal of Criminology*,
Community Development, *Cogent Social Sciences*

Courses Taught and Developed

Criminology (CRIM 2200) – Spring and Fall 2020, Northeastern University

Bostonography (INSH 3700) – Spring 2021, Northeastern University

Analyzing and Using Data on Crime and Justice (CRIM 3700) – Fall 2021,
Northeastern University

