Riley Tucker

Pennsylvania State University

Email: rqt5439@psu.edu

Website: rileytucker.com

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, Daniel T. O'Brien, & Forrest Hangen. 2026. Can a Twitter-Based Measure of Racial Heterogeneity Explain Neighborhood Crime Differences? Proposing an Ambient Population Measure of Social Disorganization.
Justice Quarterly, https://doi.org/10.1080/07418825.2026.2760715

Riley Tucker, Nakwon Rim, Alfred Chao, Elizabeth Gaillard, Gaby Akcelik, & Marc Berman. 2026. "Eyes" on the Street: Using Computer Vision to get the Gist of How Environmental Design Shapes Crime Across Neighborhoods.
Journal of Quantitative Criminology, https://doi.org/10.1007/s10940-026-09675-5

Riley Tucker, Nakwon Rim, Alfred Chao, & Marc Berman. 2026. "EBK": Leveraging Crowd-Sourced Social Media Data to Quantify How Hyperlocal Gang Affiliations Shape Personal Networks and Violence in Chicago's Contemporary Southside. *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, Patricia Chiril, Chirag Mahapatra, & Marc Berman. Your Bar has Crime Because the Food and Prices Suck: an NLP Study of Place Management.
Revise & Resubmit at Journal of Quantitative Criminology

Riley Tucker. Discovering Emergent Constructs: A Computational Epistemology to Advance the Science of Crime. Preprint: *https://www.crimrxiv.com/pub/1ojheepz/release/1*

Eric Baumer & **Riley Tucker**. Accounting for ACS Sampling Uncertainty in Neighborhood Crime Models: When and Where Does it Matter?

Grants Awarded

Riley Tucker. (Co-Investigator), Diane Felmlee. (Principal Investigator), Grant, "Cyberbullying on Reddit: Enforcing Norms and Gaining Upvotes," SoDA & SSRI, Penn State. Total

awarded: (submitted: December 18, 2025, date funding awarded: February 11, 2026, funded: March 2, 2026 -March 1, 2027).

- $20,000.00.

Grant Applications

Riley Tucker (Co-Investigator), Baylor A. Graham (Principal Investigator), "From Childhood Adversity to Decent Work: A Mixed-Methods Study Addressing Contextual and Developmental Influences on Work and Health," SSRI, Penn State. Submitted May 7, 2026.

- Total Requested: $20,000.00

Riley Tucker (Principal Investigator), Eric Baumer (Principal Investigator), "Collaborative Research: Accounting for uncertainty in the American Community Survey (ACS): Implications for neighborhood effects on crime," National Science Foundation, Federal Agencies. OSP Number: 258550 Submitted February 2, 2026

- Total requested: $114,887.00

Media Engagement

"S.F. supervisors say late-night-store ban is working. Not so fast, criminologists say.," Newspaper, Mission Local, San Francisco, CA. February 3, 2026 (Interviewed and quoted).

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 and Alfred Chao. 2025. "*How Do Computer Vision Models Make Crime Predictions (and do Neighborhoods Matter?)*," American Society of Criminology Annual Meeting, American Society of Criminology, Washington DC, USA

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

Advisory Committee for the Social Data Analytics Graduate Program, Penn State
2026-

Program Committee (Sub-Field Chair) for *American Society of Criminology 2025 Annual Meeting*

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 *Criminology, Journal of Quantitative Criminology, Justice Quarterly, Journal of Research in Crime and Delinquency, Social Forces, Social Problems, Journal of Experimental Criminology, Journal of Applied Geography, Crime and Delinquency, Homicide Studies, Asian Journal of Criminology*, *Community Development, Cogent Social Sciences*

Courses Taught and Developed

Graduate-Level

Online-Based Crime Research (CRIM 597) - Spring 2025, Pennsylvania State University

Communities and Crime (CRIM 4660) – Spring 2022, Northeastern University

Undergraduate-Level

Research Methods in Criminal Justice (CRIM 250W) - Fall 2026, Pennsylvania State University

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

Bostonography (INSH 3700) – Spring 2021, *Northeastern University*

Criminology (CRIM 12/2200) - 4 semesters, Pennsylvania State University/
Northeastern University

Criminology (online asynchronous) (CRIM 12R) - Spring 2025, Pennsylvania State University