

Kaiyi Wen

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Education

Ph.D. Economics, Binghamton University, Spring 2025 (expected).

M.A. Economics, Boston University, 2020.

B.A. Economics, China Agricultural University & University of Colorado Denver, 2018.

Area of Interests

Environmental Economics; Health Economics; Labor Economics

Working Papers

Neglected Hazard: Mental Health and Traffic Noise, with Neha Khanna (Job Market Paper)

As Time Goes By: Redlining, Kinship, and Environmental Justice, with Neha Khanna

Too Shiny to Handle: Nighttime Light and Mental Health, with Yushang Wei

Energy Transition and Mental Health, with Jancy Liu, and Dylan Brewer

Work in Progress

Highway Noise Pollution and Infant Health Outcomes: Evidence from California, with Huan Li, Ruohao Zhang, and Neha Khanna

Extreme Precipitation, Flooding, and Land Use: Evidence from Daily Data, with Huan Li, Ruohao Zhang, and Yuqiao Cen

Conferences

Eastern Economic Association (EEA) 51st Annual Meeting, New York, NY, February 2025 (scheduled)

American Economic Association (AEA/ASSA) 2025 Annual Meeting, San Francisco, CA, January 2025 (scheduled)

Global Labor Organization (GLO) Global Conference (Virtual), December 2024

Southern Economic Association (SEA) 94th Annual Meeting, Washington, DC, November 2024

The Heartland Environmental and Resource Economics (HERE) Workshop, Champaign, IL, October 2024

Online Summer Workshop in Environment, Energy, and Transportation (OSWEET), September 2024

2024 Northeastern Agricultural and Resource Economics Association (NAERA) Annual Meeting and Workshop, Rehoboth Beach, DE, June 2024

Association of Environmental and Resource Economists (AERE) 2024 Summer Conference, Washington, DC, May 2024

2024 Chinese Economist Society (CES) North America Conference, Lewisburg, PA, March 2024

* American Economic Association (AEA/ASSA) 2024 Annual Meeting, San Antonio, TX, January 2024 (NSF-RA project was accepted for presentation)

2023 Health Information National Trends Survey (HINTS) Data Users Conference, Bethesda, MD, September 2023

Association of Environmental and Resource Economists (AERE) 2023 Summer Conference, Portland, ME, June 2023

* indicates attendee, instead of presenter

Awards and Scholarships

Teaching Assistant Fellowship; Binghamton University, 2025

National Science Foundation Research Assistant Fellowship; Supervisor: Neha Khanna, 2023-2025

Teaching Assistant Fellowship; Binghamton University, 2020-2023

Graduate Tuition Scholarship; Binghamton University, 2020-2025

Professional Activities and Services

Referee for SEA Annual Meeting (×1), AAEA Annual Conference (×1), AERE Summer Conference (×1)

Teaching Experience

Instructor of Record - Binghamton University

Econ 160: Principles of Microeconomics, Spring 2025

Graduate Teaching Assistant - Binghamton University

Econ 696G: Industrial Organization 1, Fall 2024

Econ 466: Introduction to Econometrics, Fall 2022

Econ 454: Economics of Corporations, Spring 2022

Econ 461: Game Theory, Fall 2021

Econ 360: Microeconomic Theory, Fall 2020, Spring 2021

Programming Skills

Stata, ArcGIS Pro, QGIS, R, Latex, Python

Paper Abstracts

Job Market Paper: "Neglected Hazard: Mental Health and Traffic Noise"

Abstract: Poor mental health triggers serious labor market penalties and is a growing cause for concern among health professionals and economists. Using restricted data on approximately 14,000 survey respondents combined with spatially detailed national noise maps, we estimate that road noise is associated with sleep deprivation and has a statistically significant, causal effect on mental health, equivalent to a 12.7% increase in the number of respondents experiencing mild symptoms. This translates to an annual welfare loss as large as \$12.8 billion for the US.

"As Time Goes By: Redlining, Kinship, and Environmental Justice"-Working Paper

Abstract: We contribute to the literature on environmental justice by exploring the role of two relatively unexplored factors, redlining and kinship, in explaining the environmental pollution gap between marginalized and non-marginalized communities. Using restricted data on 20,000 survey respondents in the contiguous US, we measure onsite toxic emissions, ambient road noise, PM_{2.5}, and toxicity concentrations at the individual and community levels between 2014 and 2022. We show both redlining and kinship play significant roles in explaining the contemporary pollution gap. We also find that individuals identifying as Black and Hispanic are exposed to higher levels of all four pollutants as compared to White individuals. However, the results are sensitive to geographic scale and it matters whether we measure pollution at the local (i.e. individual) or neighborhood scale. Overall, our results suggest that while neighborhoods with higher shares of African Americans may have no greater ambient pollution than relatively white neighborhoods, within these neighborhoods, individuals of color may still be disproportionately exposed to pollutants as compared to white individuals.

"Too Shiny to Handle: Nighttime Light and Mental Health"-Working Paper

Abstract: Poor mental health imposes significant labor market penalties and is a growing concern among health professionals and economists. While several factors are linked to poor mental health, the role of non-chemical environmental factors remains unclear. Meanwhile, the average night sky has become brighter by 9.6% per year since 2011. This excessive light usage results in substantial welfare losses and health problems. We conduct the first study to establish a causal relationship between light pollution and mental health in the US. Using restricted data on approximately 14,000 survey respondents and granular nighttime light data from NASA, we exploit variations in local cloud cover to establish the exogenous change in nighttime light pollution. Our findings demonstrate that 2.7% of respondents who previously reported minimal mental health concerns are now showing mild symptoms of mental health issues. This translates to an annual welfare loss of up to \$47 billion attributed to lost earnings in the labor market.

"Energy Transition and Mental Health"-Working Paper

Abstract: We provide quasi-experimental estimates of the impact of coal and natural gas power plant retirements on the mental health of local residents in the United States. Combining data on power plant retirements and restricted mental health data, we employ a difference-in-differences approach and find that coal-fired power plant retirements have a significant negative impact on mental health, while natural gas retirements have a positive effect. We explore potential mechanisms and find evidence suggesting that economic impacts and local amenity improvements drive these divergent effects. Our findings highlight the importance of considering mental health implications in energy transition policies and strategies.

Miscellaneous

Language: English (Fluent), Chinese (Native)

Citizenship: Chinese (US visa status: F-1)

Reference

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