

# Kaiyi Wen

University of Texas at El Paso  
Department of Economics and Finance  
500 W. University Avenue  
El Paso, TX 79968

Phone: (857) 445-6934  
Email: [kwen@utep.edu](mailto:kwen@utep.edu)  
Homepage: <http://www.kaiyiwen.com/>

## Employment

Postdoctoral Fellow, Woody L. Hunt College of Business, University of Texas at El Paso, 2025 -

## Education

Ph.D. Economics, Binghamton University, 2025.

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

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, Dylan Brewer, and Yueming Qiu

The Hidden Toll: Public Health Burden of Illicit Opioid Market Shifts, with Xiaolong Hou, Yichu Li, Donglan Zhang, and Zhuo Chen

Taxing Addiction in Hard Times: Cigarette Taxes and Smoking During Recessions, with Xiaolong Hou, Yichu Li, Yeongmi Jeong, and Hyeran Chung

Behind Environmental Injustice: Disparate Siting and Post-Siting Migration of Fossil Fuel Power Plants, with Huan Li and Ruohao Zhang

Road Infrastructure, Foreign Direct Investment, and Economic Growth in China, with Yushang Wei

Equal Rights, Better Mental Health? The Impact of Non-Discrimination Laws on LGBTQ Youth, with Xiaolong Hou, Yichu Li, Molin Qin, and Hyeran Chung

## Selected Work in Progress

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

The Persistence in Environmental Exposure: Evidence from Anchoring, with Huan Li, Ruohao Zhang, and Neha Khanna

Insurance Transition and Health Outcomes, with Hyeran Chung

## Conferences

Association of Environmental and Resource Economists (AERE) 2025 Summer Conference, Santa Ana Pueblo, NM, May 2025

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

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

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

Economics Professional Development Research Grant for outstanding performance and departmental contributions, 2025

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 ( $\times 1$ ), AAEA Annual Conference ( $\times 1$ ), AERE Summer Conference ( $\times 1$ ), Journal of Environmental Economics and Policy ( $\times 2$ ), Humanities and Social Sciences Communications ( $\times 1$ )

## 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

## Selected Paper Abstracts

### **"Neglected Hazard: Mental Health and Traffic Noise"-Working Paper**

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<sub>2.5</sub>, 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.

**"The Hidden Toll: Public Health Burden of Illicit Opioid Market Shifts"-Working Paper**

This paper estimates the causal impact of a major supply-side shock in the U.S. illicit opioid market. Beginning in 2012, Mexican drug trafficking organizations displaced Colombian suppliers and took control of white-powder heroin distribution in the Eastern U.S. This transition raised the mean and variance of heroin purity and facilitated widespread fentanyl adulteration. Using 2004–2019 discharge-level data from the National Inpatient Sample and an event-study design, we show that this shift led to a 73 percent (0.11 percentage point) increase in heroin overdose inpatient admissions in affected regions. Placebo tests using alcohol poisoning and cocaine show no comparable effects, while spillovers to fentanyl- and methadone-related admissions are positive but imprecise. The effects are concentrated among Medicaid-covered and self-pay patients, indicating substantial public sector exposure. We estimate direct medical costs of approximately \$4 billion, but the total welfare loss is far larger once accounting for excess mortality, reduced labor force participation, and intergenerational deficits in human capital.

**Miscellaneous**

**Language:** English (Fluent), Chinese (Native)

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

**Reference**

Neha Khanna  
Professor  
Department of Economics  
Binghamton University  
nkhanna@binghamton.edu

Yingjun Su  
Assistant Professor  
Department of Economics  
Binghamton University  
ysu6@binghamton.edu

Huan Li  
Assistant Professor  
College of Business & Economics  
North Carolina Agricultural and  
Technical University  
hli1@ncat.edu