

# Kaiyi Wen

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## Education

Ph.D. Economics, Binghamton University, 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

Beyond the Haze of Air Pollution: Traffic Noise and Mental Health, 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

## Work in Progress

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

## Conferences

SEA 94th Annual Meeting, Washington, DC, November 2024

2024 NAERA Annual Meeting and Workshop, Rehoboth Beach, DE, June 2024

AERE 2024 Summer Conference, Washington, DC, May 2024

2024 CES North America Conference, Lewisburg, PA, March 2024

\*ASSA 2024 Annual Meeting, San Antonio, TX, January 2024 (NSF-RA project was accepted for presentation)

2023 HINTS Data Users Conference, Bethesda, MD, September 2023

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, 2023-2024

Teaching Assistant Fellowship; Binghamton University, 2020-2022

Graduate Tuition Scholarship; Binghamton University, 2020-2025

## Teaching Experience

### Graduate Teaching Assistant - Binghamton University

Econ 466: Introduction to Econometrics, Fall 2023

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: "Beyond the Haze of Air Pollution: Traffic Noise and Mental Health"**

Abstract: Poor mental health triggers serious labor market penalties and is a growing cause for concern among health professionals and economists. While the literature has linked several factors to poor mental health, the role of non-chemical environmental factors is unclear. Using restricted data on 14,000 survey respondents, we estimate that road noise is associated with sleep deprivation and has a statistically significant, causal effect on mental health, equivalent to a 10% increase in the number of respondents experiencing mild symptoms. This translates to an annual welfare loss as large as \$13 billion for the US.

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

Abstract: Environmental justice is a growing concern in both literature and the implication of government policy (e.g. Justice40). Although there is evidence documenting that people of color are disproportionately exposed to environmental pollutants, fewer studies focus on the determinants behind that. We focus on two new factors, redlining and kinship, and find both of them play significant roles in explaining the environmental pollution gap. Using restricted data on 23,000 survey respondents in the contiguous US, we measure onsite emissions, ambient road noise, and PM<sub>2.5</sub> at the individual and community levels. Our findings suggest how we measure pollutants matters since we unearth different stories when we measure pollution at different scales.

### **"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.

## Miscellaneous

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

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

## Reference

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Binghamton University  
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