
Jasmine Siyu Wu

Department address:

127 Meyerson Hall, 210 S. 34th Street
Philadelphia, PA 19104

Email: jsiyuwu@upenn.edu**Phone:** +1 949 668 5008**LinkedIn:** [jasmine-siyu-wu/](https://www.linkedin.com/in/jasmine-siyu-wu/)

My research develops computational, spatial, and visual analytic approaches to support planners optimize complex urban systems when goals conflict and uncertainty is unavoidable. Situated at the intersection of planning, transportation, and public health, I develop analytical frameworks that integrate large-scale administrative and operational data, high-resolution spatial modeling, and visualization for communication to support more transparent and interpretable planning decisions.

EDUCATION

2023- University of Pennsylvania

Doctor of Philosophy in City and Regional Planning (Expected 2027)

Research Trainee, Center for Injury Research and Prevention, Children's Hospital of Philadelphia

Advisor: Dr. Megan S. Ryerson

Dissertation: *Enhancing Teen Transport Safety and Mobility Equity: Assessing the Impacts of Access to Driver Education and Licensing*

Dissertation committee: Dr. Megan S. Ryerson (chair), Dr. Elizabeth Delmelle, Dr. Dylan Small, Dr. Jamaal Green (reader)

2024- University of Pennsylvania

Master of Arts in Statistics and Data Science (Expected 2027)

2021-23 University of Pennsylvania

Master of City Planning

Thesis: *Understanding Links between Teen's Access to Driver Education and Safe Driving Skills Development: Evidence from the State of Ohio*

Thesis advisor: Dr. Megan S. Ryerson

2017-21 University of Southern California

Bachelor of Science in GeoDesign, Minor in Architecture

Summa Cum Laude, Discovery Honors and Departmental Honors

AWARDS, HONORS, AND FUNDING

Lifesavers Traffic Safety Scholar

Lifesavers Conference on Roadway Safety, 2026

Penn Prize for Excellence in Graduate Teaching

University of Pennsylvania, 2025

American Planning Association Outstanding Student

American Planning Association, 2025

Dwight David Eisenhower Transportation Fellowships (\$50,000 in total)

U.S. Department of Transportation, 2022, 2023, & 2024 (program discontinued in 2025)

Association for Advancement of Automotive Medicine Student Travel Grant (\$2,400)

Association for Advancement of Automotive Medicine, 2024

Witte-Sakamoto Family Prize (awarded annually to one first-year planning student for exceptional individual contributions; \$50,000)

University of Pennsylvania Weitzman School of Design, 2022

Ed McClure Award for Best Masters Paper Award

Association of Collegiate Schools of Planning, 2022

Vision for Equity Award

Women's Transportation Seminar Philadelphia Chapter, 2022

Emma Josephine Bradley Bovard Award (highest GPA among undergraduate women)

University of Southern California, 2021

Undergraduate Research Fellowships (merit scholarship; \$9,500)

University of Southern California, 2019 & 2020

Goldman Family Scholarship (merit scholarship; \$3,000)

University of Southern California, 2019

PUBLICATIONS

Articles in Peer-Reviewed Journals

13. **Wu, J.S.***, Dong, X., Walshe, E.A., Winston, F.K., and Ryerson, M.S. (2026). "Mapping Driver Training Deserts: A Data-Informed Decision-Support Tool for Driver Training Resource Allocation." *Professional Geographer*. Accepted.
12. **Wu, J.S.***. (2026). "Driving Delayed: Transportation Planning and Public Health Perspectives on Adolescent Safe Mobility." *Transportation Research and Interdisciplinary Perspectives*. doi.org/10.1016/j.trip.2026.102083
11. Dong, X., **Wu, J.S.**, Guerra, E., Ryerson, M.S., Walshe, E.A. (2026). "GDL-Mandated Comprehensive Driver Training Reduces Novice Young Drivers' Involvement in Seriously Injurious and Fatal Crashes." *Journal of Transport Policy*. doi.org/10.1016/j.tranpol.2026.104172
10. Dong, X., **Wu, J.S.**, Walshe, E.A. (2026). "Urban-Rural and Poverty-Related Differences in Young Driver Licensing Pathways in Ohio." *Findings*. doi.org/10.32866/001c.158237
9. Dong, X., Guerra, E., and **Wu, J.S.** (2026). "How have the associations between crash risks and roadway, speed, and the built environment changed after COVID-19?" *Journal of Safety Research*. doi-org./10.1016/j.jsr.2026.01.016
8. **Wu, J.S.***, Dong, X., Walshe, E.A., Winston, F.K., and Ryerson, M.S. (2025). "Association between Young New Drivers' Skills and Driver Training, Home Neighborhood Income Level, and Urbanicity: Evidence from the State of Ohio." *Transportation Research Record: Journal of the Transportation Research Board*. doi.org/10.1177/0361198125135275

-
7. Dong, X., **Wu, J.S.**, Walshe, E.A., Winston, F.K., Cheng, S., and Ryerson, M.S. (2024). "Adult-Supervised Practice in Learner's Permit Phase Has A Significant But Limited Ability to Improve Safe Driving Skills." *Traffic Injury Prevention*. doi.org/10.1080/15389588.2024.2374538
 6. **Wu, J.S.***, Dong, X., Green, J., and Ryerson, M.S. (2024). "The Role of the Built Environment, Roadway Characteristics, and Socioeconomic Factors in Keeping Teen Drivers Safe: An Investigation of the Factors most Related to Teen Driver Fatalities." *Transportation Research Record: Journal of the Transportation Research Board*. doi.org/10.1177/03611981241275543
 5. Albers, L., Rogers, C.J., Steinberg, J., Vos, R.O., Soto, D., Lee, R., **Wu, J.S.**, and Unger, J.B. (2023). "Proximity to cannabis retailers and recent cannabis use among a diverse sample of California adolescents." *Substance Use & Misuse*. doi.org/10.1080/10826084.2023.2294965
 4. Dong, X., **Wu, J.S.**, Walshe, E.A., Winston, F.K., and Ryerson, M.S. (2023). "Residing in a Driver Training Desert leads to Delayed Licensure: Investigating the Relationship between Accessibility to Driver Training and Young Driver's Licensure." *Findings*. doi.org/10.32866/001c.85096
 3. Dong, X., **Wu, J.S.**, Jensen, S.T., Walshe, E.A., Winston, F.K., and Ryerson, M.S. (2023). "Financial status and travel time to driving schools as barriers to obtaining a young driver license in a state with comprehensive young driver licensing policy." *Accident Analysis and Prevention*. doi.org/10.1016/j.aap.2023.107198
 2. Ryerson, M.S., Davidson, J., **Wu, J.S.**, Feiglin, I., Winston, F.K. (2022). "Identifying community-level disparities in access to driver education and training: Toward a definition of driver training deserts." *Traffic Injury Prevention*. doi.org/10.1080/15389588.2022.2125305
 1. Unger, J.B., Vos, R.O., **Wu, J.S.**, Hardaway, K., Sarain., A.Y.L., Soto, D.W., Rogers, C., and Steinberg, J. (2020). "Locations of Licensed and Unlicensed Cannabis Retailers in California: A Threat to Health Equity?" *Preventive Medicine Reports*. 10.1016/j.pmedr.2020.101165

Manuscripts under Review or in Preparation

3. **Wu, J.S.***, Xu, J., and Luu, J. "How Mass Aircraft Diversions Emerge: Reconstructing Major Events in the U.S. Aviation System." Submitted Summer 2026.
2. **Wu, J.S.*** "Young Drivers in Vision Zero: Teen Licensure and Driver Education Access in U.S. Traffic Safety Planning."
1. **Wu, J.S.*** "The Role of Priming and Benefits Messaging in Public Support for Mandatory Driver Training for Teen Drivers."

CONFERENCES, PRESENTATIONS, AND INVITED SEMINARS

- | | |
|------|--|
| 2026 | Presenter (oral). "Reconstructing Mass Flight Diversions: Forecast, Operational Responses, and Early Insights." 2026 Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting. In-Person, San Francisco, CA. November 1-4. |
| 2026 | Presenter (oral). "Navigating the Road: Bridging Barriers in Driver Training Across Cultures." 2026 Lifesavers Conference on Road Safety. In-Person, Baltimore, MD. April 20. |

-
- 2026 Presenter (oral). "Mapping Driver Training Deserts: A Spatial Tool for Driver Training Resource Allocation." 2026 Association of American Geographers Annual Meeting. In-Person, San Francisco, CA. March 19.
- 2026 Invited Talk. "Safety, Access, and Equity in Teen Driver Licensing, from a Planning Perspective on Youth Safe Mobility." University of Southern California. Los Angeles, CA. January 29.
- 2025 Panelist. "Navigating the Complex Dynamics of Accessibility, Safety, and Mobility for Vulnerable Road Users." 65th Association of Collegiate Schools of Planning Annual Conference. In-Person, Minneapolis, MN. October 23.
- 2025 Presenter (lectern). "Which young drivers develop safe driving skills? An investigation of relationships between young driver skills and driver training, home neighborhood urbanicity, and economic conditions." 104th Transportation Research Board Annual Meeting. In-Person, Washington, D.C. January 7.
- 2025 Presenter (poster). "Which young drivers develop safe driving skills?" 104th Transportation Research Board Annual Meeting. In-Person, Washinton, D.C. January 7.
- 2024 Presenter (lectern). "Adult-Supervised Practice in Learner's Permit Phase Has A Significant But Limited Ability to Improve Safe Driving Skills." 68th Association for Advancement of Automotive Medicine's Annual Meeting. In-Person, Seoul, South Korea. November 13.
- 2024 Moderator. "Human, Crash, and Injury Factors" session. 68th Association for Advancement of Automotive Medicine's Annual Meeting Student Symposium. In-Person, Seoul, South Korea. November 12.
- 2024 Presenter (poster). "Financial Status and Travel Time to Driving Schools as Barriers to Obtaining A Young Driver License." 103rd Transportation Research Board Annual Meeting. In-Person, Washington, D.C. January 9.
- 2024 Presenter (lectern). "The Role of the Built Environment, Roadway Characteristics, and Socioeconomic Factors in Keeping Teen Drivers Safe: An Investigation of the Factors most Related to Teen Driver Fatalities." 103rd Transportation Research Board Annual Meeting. In-Person, Washinton, D.C. January 8.
- 2023 Presenter (poster). "Financial Status and Travel Time to Driving Schools as Barriers to Obtaining A Young Driver License." Safety21 University Transportation Center Deployment Partner Consortium. In-Person, Pittsburgh, PA. November 16.
- 2023 Presenter (poster). "Mobility Disparities in Access to Early Licensure for Teens: Towards a Definition of Driving Training Deserts." 102nd Transportation Research Board Annual Meeting. In-Person, Washington, D.C. January 11.
- 2022 Presenter (oral). "Identifying community-level disparities in access to driver education and training: Toward a definition of driver training deserts." The Association for Advancement of Automotive Medicine's Annual Meeting. In-Person, Portland, OR. October 12.
- 2021 Presenter (oral). "The Landscape of Health Behavior Bads in Greater Los Angeles: Estimating Population Exposure with Local Colocation Quotients (LCLQ)." The American Association of Geographers' Annual Meeting. Virtual. April 10.
- 2020 Presenter (oral). "Locations of Licensed and Unlicensed Cannabis Retailers in California: A Threat to Health Equity?" The American Association of Geographers' Annual Meeting.

Virtual. April 6-10.

PROFESSIONAL EXPERIENCE

2020-21 **Professional Student Worker: GIS/Data Analyst**

Los Angeles Department of Transportation Vision Zero Division, Los Angeles, CA

TEACHING EXPERIENCE

University of Pennsylvania

Instructor

2027 Sp. MUSA 5080/CPLN 5920: Public Policy Analytics (scheduled)

This course teaches advanced spatial analysis and an introduction to data science/machine learning in the urban planning and public policy realm.

Graduate Teaching Fellow/Assistant

2024 Sp. CPLN 5050: Planning by Numbers

Led office hours and graded students' quantitative assignments and projects.

2024 Sp. CPLN 6220: Healthy People/Healthy Places

Revised syllabus, facilitated seminar discussions, and designed and delivered method labs on spatial analysis.

2023 Fall CPLN 5000: Introduction to City and Regional Planning: History, Theory, and Contemporary Practice

Led office hours, graded students' history & theory papers, guided history walking tours, and facilitated discussion sessions.

2022 Fall CPLN 6500: Transportation Planning Methods

Led office hours, grading, lab sessions, and coordinated guest lectures.

Invited Guest Lectures

2025 Sp. CPLN 5280/URBS 4280: Undergraduate Urban Research Colloquium

Gave a lecture on "Urban Research Methods", introducing quantitative methods and urban data collection to urban studies undergraduate students. Online. April 8.

2024 Sp. CPLN 5050: Planning by Numbers

Gave a lecture of "From Data to Decisions: Using Visualization to Speak about City Planning", including design rules, communication methods, and visualization techniques to graduate students. Philadelphia, PA. April 14.

SERVICE

Journal Paper Reviews (30+ reviews)

Transportation Research Part A: Policy and Practice (1 article)

Transportation Research Part D: Transport and Environment (24 articles)

Transportation Research Part F: Traffic Psychology and Behaviour (1 article)

Transportmetrica A: Transport Science (1 article)
Injury Epidemiology (1 article)
Journal of Air Transportation (1 article)
Sustainable Futures (2 articles)

Juries (Awards and Studios)

Awards

2024-26 University of Pennsylvania Witte-Sakamoto Family Prize
2023-25 Council of University Transportation Centers Award for the Parker Policy and Planning

Studios

2026 Sp. MUSA 8010/CPLN 7900 MUSA/Smart Cities Practicum
2024 Sp. CPLN 5040 Site Planning (Mixed-use housing at Grays Ferry, Philadelphia)
2023 Fall CPLN 70x0 Planning Studio (Affordable housing and high-capacity transit in Bogota, Colombia)
2023 Fall CPLN 5040 Site Planning (Future of the Pennovation site, Philadelphia)

Board and Committee Service

2023-26 Board (Social Media Lead) of WTS Philadelphia Student Chapter
2022-23 Co-President and Treasurer of Penn Transportation Club
2019-21 Vice President of USC Chinese Student and Scholar Association

Professional and Academic Affiliations

2021-Present Student Member of American Planning Association
2021-Present Student Member of Association of Collegiate Schools of Planning
2021-Present Member of USC chapter of Gamma Theta Upsilon (geographic honor society)
2021-Present Member of USC chapter of Phi Beta Kappa (undergraduate honor society)
2022-26 Student Member of Association for Advancement of Automotive Medicine
2020-21 Student Member of American Association of Geographers

SKILLS

Programming	R, Python, SQL, $\text{\LaTeX}$
Spatial Analysis	ArcGIS Pro/Online/Desktop, MS SQL Server Database, PostgreSQL/PostGIS
Design	Adobe (Photoshop, InDesign, Illustrator), AutoCAD, Sketchup, Rhino
Modeling	VISUM, VISSIM

Updated July 2026