Sean Andrew Chen

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CONTACT

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EDUCATION

RUTGERS UNIVERSITY 2021–Expected 2027
Bloustein School of Planning & Public Policy
Ph.D. in Planning & Public Policy
Advanced to Candidacy (ABD); expected defense spring 2027
Dissertation: *The Empty Storefront: Form, Regulation, and Transaction on New York City's Streets*
Committee: Clinton Andrews (Chair), Radha Jagannathan, Will Payne, & Michael Lahr

NEW YORK UNIVERSITY 2017–2021
Center for Urban Science & Progress (Tandon School of Engineering)
M.S. in Applied Urban Science & Informatics
Coursework in Data Science, Spatial Analytics, Operations Research, Urban Policy & Planning

PRINCETON UNIVERSITY 2014–2018
School of Public & International Affairs
Master in Public Affairs (MPA)
Concentration in Development Economics & Economic Policy
Certificate in Urban Planning & Policy

PRINCETON UNIVERSITY 2009–2014
School of Public & International Affairs
A.B. in Public & International Affairs
Certificates in Urban & Environmental Studies
Including a year at The Bartlett School of Planning, University College London (2011–2012)

THE JUILLIARD SCHOOL 2005–2009
Pre-College Division
Certificate of Study in Violoncello Performance & Musical Composition

RESEARCH INTERESTS

Topics	Planning knowledge & evidence; empirical tests of planning doctrine; urban models & democratic governance; land-use regulation & street design; climate resilience
Methods	Causal inference; spatial analysis; large administrative & mobility data

MANUSCRIPTS UNDER REVIEW

- **Chen, Sean Andrew**, Andrew Escay, Christopher Haberland, Tessa Schneider, Valentina Staneva, and Youngjun Choe. "Benchmark dataset development for automatic damaged building detection from post-hurricane remotely sensed imagery." *PLOS ONE* (revise and resubmit). Preprint: arXiv:1812.05581.

WORKING PAPERS

- **Chen, Sean Andrew**. "Sorting, Scarring, and Contagion: The Dynamics of Storefront Vacancy in New York City."
- **Chen, Sean Andrew**. "Vitality Is Not Viability: Urban Form, Street Activity, and Storefront Survival in New York City."
- **Chen, Sean Andrew**. "Paper Rules: Mandates, Permissions, and the Non-Bindingness of Ground-Floor Zoning in New York City."
- **Chen, Sean Andrew**. "Street Space Reallocation and Storefront Vacancy: Bike Lanes and Pedestrianization in New York City."
- **Chen, Sean Andrew**. "Making Urban Models Contestable: Assumptions as a Point of Public Entry."

WORK IN PROGRESS

- **Chen, Sean Andrew**. "Was It the River? Repeat-Sales Evidence on Green Gentrification along the Los Angeles River."
- **Chen, Sean Andrew**. "Who Lives Outside the 15-Minute City? Amenity Access and Inequality in New York City."
- **Chen, Sean Andrew**. "Are Third Places Vanishing? Evidence from New York City's Storefronts."

ACADEMIC AWARDS, FELLOWSHIPS, & OTHER HONORS

DR. DONALD A. KRUECKEBERG MEMORIAL SCHOLARSHIP 2026
Rutgers University, Bloustein School of Planning & Public Policy

- Endowed scholarship recognizing professional and academic excellence in planning.

DEAN'S FELLOWSHIP & RUTGERS EXCELLENCE FELLOWSHIP 2021
Rutgers University

- Four years of full funding (tuition remission and stipend) for doctoral study at the Bloustein School.

PACIFIC STANDARD "TOP 30 THINKERS UNDER 30" 2017
Pacific Standard Magazine

- Profiled in a feature story.

CUSP ACADEMIC SCHOLARSHIP 2017
NYU Center for Urban Science & Progress

- Merit scholarship for the M.S. in Applied Urban Science & Informatics.

SCHOLARS IN THE NATION'S SERVICE INITIATIVE 2014
Princeton University School of Public & International Affairs

- One of five students selected each year: MPA admission, a federal summer internship, intensive language training, and a two-year federal placement.

RESEARCH EXPERIENCE

HOUSEHOLD ECONOMIC VIABILITY AND LOCAL ECONOMIC STABILITY 2026–Present
Co-Principal Investigator & Lead Analyst, Bloustein School, Rutgers University

- Research program, with Radha Jagannathan and Artem Pankin, testing whether the share of households unable to cover local basic costs predicts county economic and household stability beyond standard indicators, and which policies move that share.
- County panel built from United For ALICE, federal payroll, court, credit, migration, and mortality records; in collaboration with United Way and the MIT Living Wage Institute, which provides its data in kind.

MEGALOPOLITAN COASTAL TRANSFORMATION HUB (MACH) 2023–2024
Graduate Research Assistant

- NSF-funded hub studying coastal climate transformation and adaptation in the urbanized Northeast.
- Researched intergovernmental fiscal flows and fiscal federalism under managed retreat from coastal hazards.

MARRON INSTITUTE OF URBAN MANAGEMENT 2020–2021
Civic Analytics Fellow

- Competitive, paid fellowship for two graduate students at New York University's Marron Institute of Urban Management.
- Researched urban mobility, land use, and 311 calls to understand the spread of COVID-19, applying machine learning and geospatial analysis to sensitive data on secure infrastructure.

DATA SCIENCE FOR SOCIAL GOOD 2018
Research Fellow

- Competitive, paid fellowship at the University of Washington's eScience Institute.
- Used computer vision to detect and tag damage in post-disaster remote sensing imagery; produced a public dataset and a manuscript (see Manuscripts Under Review).

TEACHING EXPERIENCE

RUTGERS UNIVERSITY 2026–Present
Lecturer

- Basic Quantitative Methods (34:970:515), graduate, in person — Fall 2026, Spring 2027
- Basic Statistical Methods (10:775:205), undergraduate, two sections — Spring 2026, Fall 2026

RUTGERS UNIVERSITY 2024–2026
Teaching Assistant

- Basic Quantitative Methods (graduate) — Fall 2024 – Spring 2026; led weekly review sessions and taught one week of lecture
- Discrete Choice Methods (graduate) — Spring 2025, Spring 2026

COURSE DEVELOPMENT

- *Advanced Spatial Analysis* — syllabus
- *Planning for Climate Adaptation* — lecture notes and lesson plans

Teaching effectiveness (Rutgers SIRS, out of 5): 4.68 and 4.91 as teaching assistant, Basic Quantitative Methods (department means 4.52 and 4.53); 4.29 and 4.63 as instructor, Basic Statistical Methods (department mean 4.29).

ACADEMIC PRESENTATIONS

- "Making Urban Models Contestable: Assumptions as a Point of Public Entry." Research brief. *Urban Affairs Association Annual Conference*, New York, NY, 2027.
- "Sorting, Scarring, and Contagion: The Dynamics of Storefront Vacancy in New York City." *AAG Annual Meeting*, New York, NY, 2027.
- "Paper Rules and Street Space: Ground-Floor Retail Mandates, Street Reallocation, and Storefront Vacancy in New York City." *APPAM Fall Research Conference*, Boston, MA, 2026.
- "Vitality Is Not Viability: Urban Form, Street Activity, and Storefront Survival in New York City." Research in Motion. *ACSP Annual Conference*, Pittsburgh, PA, 2026.
- "Vacant Windows, Active Streets: Do Place-Based Policies Reduce Storefront Vacancy?" Causal Inference in Geography session. *AAG Annual Meeting*, San Francisco, CA, 2026.
- Agent-based models of intergovernmental fiscal flows under managed retreat from coastal hazards. *ACSP Annual Conference*, Chicago, IL, 2023.
- Intergovernmental fiscal flows and coastal hazards (NSF research project). *NIST-NSF Disaster Resilience Research Symposium*, 2023.
- Machine and deep learning for urban object classification with LiDAR data (poster). *ISPRS 3D GeoInfo 16th Conference*, 2021.
- Social Impact panel on data science for social good. *ACM SIGKDD Conference*, 2020.
- Neural networks for detecting damaged buildings in post-hurricane remotely sensed data (poster). *Cascadia Innovation Corridor Conference*, Vancouver, BC, 2018.
- IT infrastructure investment, urban economic development, and the failures of "Smart City" technologies. *Urbanization in China: Past, Present, Future Conference*, Hong Kong University Shanghai Study Centre, Shanghai, 2014.

PROFESSIONAL EXPERIENCE

HR&A ADVISORS 2021–2023; 2026–Present
Consultant (Contractor)

- Built planning support software for clients, including data visualizations and web platforms.
- Performed client planning analyses, including housing needs assessments, using data science and spatial methods.
- Developed internal tools to streamline the firm's analyses and workflows.

US ARMY CORPS OF ENGINEERS 2015–2017
Scholars in the Nation's Service Initiative Fellow (SINSI)
Institute for Water Resources *(Washington, DC)* 2015 & 2017

- The Corps' internal think tank for hydrology, engineering, planning, and economics; evaluated new technologies such as UAVs and the Internet of Things for Corps use.

Omaha District *(Omaha, NE; Denver, CO; Tribal Lands)* 2015–2016

- Economist on flood risk management and ecosystem restoration on the Lower Platte River and local gulches in Denver, CO, using the Corps' flood damage models (HEC-FDA, HEC-FIA).
- Developed a Social Vulnerability Index for project-area neighborhoods; facilitated public meetings in Denver and with partner agencies (EPA, FWS, Colorado DNR, City and County of Denver).
- Represented the Corps at the Missouri River Restoration Implementation Committee and in consultation with the Standing Rock Sioux Reservation; compiled a Socioeconomic and Cultural Resources Report on Tribes within the Missouri River Basin.

Bangkok & Udon Thani, Thailand 2016–2017

- Developed an interactive, graphically interfaced hydrological, land use, and economic model for serious-gaming workshops supporting participatory decision making with city and provincial officials on urbanization, climate change, flooding, and drought in metropolitan Udon Thani (with USAID and ADB partners).
- With the city, the province, and a Bangkok landscape architecture firm, created a green infrastructure site suitability analysis using remote sensing land classification, land cover change detection, and land use modeling.

Jacksonville District *(Jacksonville, FL; San Juan, PR; Mobile, AL)* 2016–2017

- Formulated a plan for improvements to San Juan Harbor, Puerto Rico; trained in Corps navigation project procedures at the Deep Draft Center of Expertise (Mobile District).

WHITE HOUSE SC2 INITIATIVE 2013
Policy Analyst

- Drafted daily memo for White House, Treasury, and HUD staff on urban issues, particularly the unfolding Detroit municipal bankruptcy.
- Analyzed municipal bond ratings of candidate cities to recommend which were most distressed in creditworthiness and debt.
- Organized a site visit to Chester, PA, and facilitated UPenn PennPraxis's pro bono planning for the city.

NEXT CITY 2012
Reporter & Multimedia Production

- Wrote articles on urban issues in the United States and abroad, including affordable housing in the Philadelphia region and municipal pension reform, for a national urban affairs magazine.

THE STREET PLANS COLLABORATIVE 2012
Research Associate & Graphic Designer

- Developed a report on "Tactical Urbanism" strategies, including visual guides for planning practitioners.
- Researched the economics of street food vending and policy solutions to its legal, social, and cultural barriers.

SERVICE

- Discussant, book talk by Burcu Baykurt, Bloustein School of Planning & Public Policy, Rutgers University, November 2026 (scheduled).
- Led quantitative methods qualifying-exam bootcamp for doctoral students, Bloustein School, September 2026.
- Organizing committee, 18th Annual Krueckeberg Doctoral Conference, Bloustein School of Planning & Public Policy, Rutgers University, March 2026.
- Peer tutor, selected by the department to tutor doctoral students preparing for the quantitative methods qualifying examination, 2026–Present.

PUBLIC WRITING

- Chen, Sean Andrew. “Power to the Cities.” The Chronicle of Higher Education, July 30, 2017.
- Chen, Sean Andrew. “Questioning the Cult of the Creative Class.” Next City, June 26, 2012.

SKILLS

Methods	Causal inference (difference-in-differences, event studies), survival analysis, spatial econometrics, machine learning, computer vision, agent-based modeling, discrete choice models
Programming	Python, R, SQL (PostgreSQL/PostGIS), JavaScript, Stata
GIS	ArcGIS, QGIS, GeoDa, GDAL/OGR, GeoPandas, PySAL
Design	Adobe Creative Suite (Photoshop, InDesign, Illustrator)

PROFESSIONAL AFFILIATIONS

Association of Collegiate Schools of Planning (ACSP)
American Association of Geographers (AAG)
Association for Public Policy Analysis & Management (APPAM)
Urban Affairs Association (UAA)