

YONGSUNG LEE

March, 2020

2243 Worrall Hill Dr.
Duluth, GA 30096
USA

+1-217-390-4439
yongsung.lee@gatech.edu

EDUCATION

- Georgia Institute of Technology** December 2018
Ph.D. in City and Regional Planning, School of City and Regional Planning
Dissertation Title: “Will Millennials Stay in Cities and Travel without Cars?”
Committee: Subhrajit Guhathakurta (chair), Giovanni Circella, Patricia L. Mokhtarian,
Timothy Welch, & Ram Pendyala.
- University of Illinois at Urbana-Champaign** August 2012
Master in Urban Planning, Department of Urban and Regional Planning
- Seoul National University, South Korea**
Master in Engineering, Department of Architecture February 2008
Bachelor in Engineering, Department of Architecture February 2003

ACADEMIC EMPLOYMENT

- Georgia Institute of Technology**
Postdoctoral fellow, School of Civil and Environmental Engineering 9/2018–Present
Instructor/Graduate Teaching Assistant, School of City and Regional Planning 8/2015–Present
Graduate Research Assistant, Center for Spatial Planning Analytics & Visualization 8/2012–8/2018

RESEARCH INTERESTS

Urban Analytics, Machine Learning, Big Data, Shared Mobility, Autonomous Vehicle, Millennials,
Urban Revival, Consumption Amenities, Neighborhood Change, Gentrification, Migration Patterns

TEACHING INTERESTS

- GIS: Data Science, Urban Analytics, Open-source/web GIS, Data Visualization
- Quantitative Methods: Econometrics, Spatial Statistics, Discrete Choice Model, Causal Inference
- Transportation: Urban Transportation Planning, Transportation Equity, Survey Design/Analysis
- Environment: Sustainable Development, Environmental Planning, GIS on Environmental Issues
- Urban Economics: Urban Economics, Urban/Regional Theory, Real Estate Finance/Development

TEACHING EXPERIENCES

Instructor, Georgia Institute of Technology
Visualizations in Tableau for Urban Planning Application (graduate): Spring 2020.
Advanced Geographic Information Systems (graduate): Spring 2019.
Introduction to Geographic Information Systems (undergraduate/graduate): Summer 2016.

Graduate Teaching Assistant, Georgia Institute of Technology
Environmental GIS (graduate): Spring 2018.
Quantitative/Computer Methods for Planners (graduate): Spring 2017, Spring 2016.
Statistics for Planners (graduate): Fall 2016, Fall 2015.

PEER-REVIEWED PUBLICATIONS

1. **Lee, Y.**, Circella, G., Mokhtarian, P. L., & Guhathakurta, S. (2019). Heterogeneous Residential Preferences Among Millennials and Members of Generation X in California: A Latent-Class Approach. *Transportation Research Part D: Transport and Environment*. <https://doi.org/10.1016/j.trd.2019.08.001>
2. **Lee, Y.**, Circella, G., Mokhtarian, P. L., & Guhathakurta, S. (2019). Are Millennials More Multi-modal? A Latent-Class Cluster Analysis with Attitudes and Preferences among Millennial and Generation X Commuters in California. *Transportation*. <https://doi.org/10.1007/s11116-019-10026-6>
3. **Lee, Y.**, Lee, B., & Shubho, M. T. H. (2019). Urban Revival by Millennials? Intra-Urban Net Migration Patterns of Young Adults, 1980-2010. *Journal of Regional Science*. <https://doi.org/10.1111/jors.12445>
4. Delbosc, A., McDonald, N., Stokes, G., Lucas, K., Circella, G., & **Lee, Y.** (2019). Millennials in Cities: Exploring Travel Behaviour Trends in Six City Regions. *Cities*. <https://doi.org/10.1016/j.cities.2019.01.023>
5. Raymond, E., Dill, J., & **Lee, Y.** (2018). Millennials First Time Homebuyers Before and After the Housing Crisis: The Impact of Age and Credit on Location Choice. *Journal of Planning Education and Research*. <https://doi.org/10.1177/0739456X18807751>
6. Zhang, W., Wang, F., Barchers, C., & **Lee, Y.** (2018). The Impact of Transit-Oriented Development on Housing Value Resilience: Evidence from the City of Atlanta. *Journal of Planning Education and Research*. <https://doi.org/10.1177/0739456X18787011>
7. **Lee, Y.**, & Guhathakurta, S. (2018). An Analysis of the Effects of Suburban Densification on Vehicle Use for Shopping: Do Existing Residents Respond to Land-Use Changes in the Same Way as Recent Movers?. *Journal of Transport Geography* 68(April), 193–204. <https://doi.org/10.1016/j.jtrangeo.2018.03.011>
8. Lee, B., & **Lee, Y.** (2013). Complementary Pricing and Land Use Policies: Does It Lead to Higher Transit Use?. *Journal of the American Planning Association* 79(4), 314–328. <https://doi.org/10.1080/01944363.2014.915629>

BOOK CHAPTER

1. **Lee, Y.**, & Circella, G. (2019). *ICT, Millennials' Lifestyles, and Travel Choices*. In E. Ben-Elia (Ed.), *Advances in Transport Policy and Planning: The Evolving Impact of Information and Communication Technology on Activities and Travel Behaviour* Volume 3 (pp. 107-141). Oxford, UK: Elsevier. <https://doi.org/10.1016/bs.atpp.2019.08.002>

WORK IN PROGRESS

1. **Lee, Y.**, & Circella, G. Does Gentrification Reduce Transit Use? Longitudinal Trends in the United States, 1990-2017. Preparation for the 2020 World Symposium on Transport and Land Use Research.
2. **Lee, Y.**, Circella, G. & Mokhtarian, P. L. Multimodal Travel Behavior: Do Different Survey Methods Present Different Pictures? Paper scheduled for the 2020 International Conference on Transport Survey Methods.
3. Choi, Y., Lee, H., **Lee, Y.**, & Guhathakurta, S. How does An Urban Greenway Project Affect Local Economies with Varying Characteristics? An Analysis of Heterogeneous Effects of Atlanta BeltLine on Local Economic Performance. Paper presented at the 2018 ACSP Annual Meeting.
4. Lee, B., & **Lee, Y.** Are Millennials Leading Reurbanization? The Net Migration Patterns of Older Millennials in the Largest 20 Urban Areas from 2000 to 2010. Paper presented at the 2017 ACSP Annual Meeting.

5. **Lee, Y., Choi, Y., & Guhathakurta, S.** Does Transit-Oriented Development Induce Residents to be More Multimodal? Paper presented at the 2017 ACSP Annual Meeting.

PROJECT REPORTS

1. Circella, G., **Lee, Y.**, & Alemi, F. (2018). Exploring the Relationships among Travel Multimodality, Driving Behavior, Use of Ridehailing, and Energy Consumption. A research report from the National Center for Sustainable Transportation. Available on <https://escholarship.org/uc/item/31v7z2vf>
2. Circella, G., Alemi, F., Tiedeman, K., Berliner, R. M., **Lee, Y.**, Fulton, L., Mokhtarian, P. L., & Handy, S. (2017). What Affects Millennials Mobility? PART II: The Impact of Residential Location, Individual Preferences and Lifestyles on Young Adults Travel Behavior in California. A research report from the National Center for Sustainable Transportation. Available on <https://escholarship.org/uc/item/5kc117kj>
3. Ross, C. L., Amekudzi, A. A., Guhathakurta, S., Welch, T. F., Kumar, A., **Lee, Y.**, Kent, M., & Smith-Colin, J. (2015). Freight Impacts on Small Urban and Rural Areas. A research report from the National Center for Transportation Systems Productivity and Management. Available on <http://www.nctspm.gatech.edu/pi/freight-impacts-small-urban-and-rural-areas>

RESEARCH EXPERIENCE

* denotes participation as a volunteer.

1. Attitudes and Preferences on Emerging Transportation Modes and Autonomous Vehicles, Center for Teaching Old Models New Tricks, or TOMNET (The United States Department of Transportation Tier-1 University Transportation Center), PIs: Drs. Ram Pendyala & Patricia L. Mokhtarian, 2017-current.
2. *Panel Study of Emerging Transportation Technologies and Trends in California: Phase 2 Data Collection, PI: Dr. Giovanni Circella, 2017-2019.
3. Exploring the Relationships among Travel Multimodality, Driving Behavior, Use of Ridehailing and Energy Consumption, National Center for Sustainable Transportation, PI: Dr. Giovanni Circella, 2017-2019.
4. *The Impacts of Emerging Technologies and Trends on Travel Demand in Georgia, School of Civil and Environmental Engineering, Georgia Institute of Technology, PI: Dr. Patricia L. Mokhtarian, 2016-2019.
5. *What Affects Millennials mobility? The Impacts of Residential Location, Individual Preferences, and Lifestyles on Young Adults Travel Behavior in California, Institute of Transportation Studies, University of California, Davis, PI: Dr. Giovanni Circella, 2015-2017.
6. Freight Impacts on Small Urban and Rural Communities in Georgia, Center for Quality Growth and Regional Development, Georgia Institute of Technology, PI: Dr. Catherine Ross, 2014-2015.

PROPOSAL-WRITING EXPERIENCE

1. (*Under preparation*) Proposal to be submitted to the Federal Reserve Bank of Atlanta as Visiting Scholar for project titled, "Migration Patterns and Financial Conditions of Movers Into/Out of Gentrifying Neighborhoods in the Central City in the US, 2000-2016" (Request data access)
2. (*Under review*) Proposal submitted to the National Center for Sustainable Transportation as collaborator for project titled, "Panel Study of Emerging Transportation Technologies and Trends in California: Individual Lifestyles, Residential Location, Vehicle Ownership, Travel Behavior, Adoption of Shared Mobility, Propensity to Use AVs and Interest in MaaS (Phase 3)"
3. (*Selected*) Proposal to be submitted to the National Center for Sustainable Transportation as PI for project titled, "If Pooling with a Discount were Available for the Last Solo-Ridehailing Trip,

How Much Additional Travel Time Would Users Have Accepted and for Which Types of Trips?” (Requested budget, \$30,000)

4. Proposal to be submitted to the Center for Transportation Equity, Decisions, and Dollars (C-TEDD) as PI for project titled, “Neighborhood Change and Transportation Equity in the United States, 1990-2017” (Requested budget, \$170,840)
5. Proposal to be submitted to the Uber Mobility Research Grants Fund as collaborator for project titled, “Ridehailing, well-being, and transportation disadvantage: Investigating the links in two California cities” (Requested budget, \$400,000)
6. (*Approved*) Proposal submitted to the Institute for Social Research at the University of Michigan as PI for project titled, “The relationship between neighborhood change and transit use in the United States” (Requested data access)

CONFERENCE/WORKSHOP PRESENTATIONS

* denotes presentation by students

- 2020 **Lee, Y.**, Circella, G. & Mokhtarian, P. L. Multimodal Travel Behavior: Do Different Survey Methods Present Different Pictures? Paper scheduled for the 2020 International Conference on Transport Survey Methods, Lisbon, Portugal.
- Lee, Y.**, & Lee, B. Transit Ridership in American, 2002-2017: Interactions between Economic Factors, Transit Service Levels, and Urban Form via a Machine Learning Approach. Paper presented at the 2020 Annual Meeting of the American Association of Geographers, Denver, CO.
- Lee, Y.**, & Alemi, F. Controlling for selection and simultaneity biases in the Relationships between Ridehailing Use and Vehicle Ownership in the 2017 National Household Travel Survey. Paper no. 20-02708. Paper scheduled for the 2020 Transportation Research Board Annual Meeting, Washington, DC.
- 2019 **Lee, Y.**, & Lee, B. Transit Ridership in American, 2002-2018: Interactions between Economic Fac-tors, Transit Service Levels, and Urban Form via a Machine Learning Approach. Paper presented at the 2019 Annual Meeting of the Association of Collegiate Schools of Planning, Greenville, SC.
- Lee, Y.**, & Circella, G. How, to What Extent, and Why do Travel Behaviors of Ridehailing Users Differ from Those of Non Users? Mobility Patterns in the 2017 National Household Transportation Survey. Paper presented at the 2019 Annual Meeting of the Association of Collegiate Schools of Planning, Greenville, SC.
- Lee, Y.** The Adoption of E-Scooters in Atlanta, GA. Presentation at the 3 Revolution Future Mobility Center Research Workshop, Davis, CA.
- Lee, Y.**, Alemi, F., & Circella, G. Investigating the Relationships between Use of Ridehailing and Car Ownership in the 2017 U.S. National Household Travel Survey. Paper presented at the 6th International Choice Modelling Conference, Kobe, Japan.
- Lee, Y.**, Circella, G., Mokhtarian, P. L., & Guhathakurta, S. Are All Millennials Urban Hipsters? A Latent-Class Approach to Modeling Heterogeneous Residential Preferences Among Millennials and Members of Generation X in California. Paper presented at the 2019 Annual Meeting of Transportation Research Board, Washington, DC.
- 2018 **Lee, Y.**, Alemi, F., & Circella, G. Do Ridehailing Services Reduce Car Ownership? Controlling for Self-Selection and Bidirectional Relationships among Users and Non-Users in the 2017 National Household Travel Survey. Paper presented at the 2018 Annual Meeting of the Association of Collegiate Schools of Planning, Buffalo, NY.
- Alemi, F., & Circella, G., **Lee, Y.**, Mokhtarian, P. L., & Handy, S. What Do We Know About Ridehailing? Evidence from 2015-2018 California Panel Data. Paper presented at the 2018 Annual Meeting of the Association of Collegiate Schools of Planning, Buffalo, NY.

- Lee, B., **Lee, Y.**, & Shubho, M. T. H. Census Tract Level Net Migration Patterns of Young Adults in the Largest 20 Urbanized Areas, 1980-2010. Paper presented at the 2018 Annual Meeting of the Association of Collegiate Schools of Planning, Buffalo, NY.
- *Choi, Y., Lee, H., **Lee, Y.**, & Guhathakurta, S. How does An Urban Greenway Project Affect Local Economies with Varying Characteristics? An Analysis of Heterogeneous Effects of Atlanta BeltLine on Local Economic Performance. Paper presented at the 2018 Annual Meeting of the Association of Collegiate Schools of Planning, Buffalo, NY.
- Lee, Y.**, Circella, G., Mokhtarian, P. L., & Guhathakurta, S. Are All Millennials Urban Hipsters? A Latent-Class Approach to Modeling Heterogeneous Residential Preferences Among Millennials and Members of Generation X in California. Paper presented at the 2018 International Association of Travel Behavior Research, Santa Barbara, CA.
- Lee, B., **Lee, Y.**, & Shubho, M. T. H. Census Tract Level Net Migration Patterns of Young Adults in the Largest 20 Urbanized Areas, 1980-2010. Invited paper presented at the Consumption Amenities and Cities workshop, jointly organized by the Journal of Regional Science and Florida State University, Tallahassee, FL.
- Lee, B., **Lee, Y.**, & Shubho, M. T. H. Census Tract Level Net Migration Patterns of Young Adults in the Largest 20 Urbanized Areas, 1980-2010. Paper presented at the 2018 Annual Meeting of the American Association of Geographers, New Orleans, LA.
- Lee, Y.**, Circella, G., Mokhtarian, P. L., & Guhathakurta, S. What Makes Millennials More Mul-timodal than their Older Birth Cohorts: Their Temporarily Delayed Lifecycle Events, or Attitudes Towards Non-Motorized Modes of Travel?. Paper presented at the 2018 Annual Meeting of Trans-ortation Research Board, Washington, DC.
- Delbosc, A., McDonald, N., Stokes, G., Lucas, K., Circella, G., & **Lee, Y.** Millennials in Cities: Exploring Travel Behaviour Trends in Six City Regions. Paper presented at the 2018 Annual Meeting of Transportation Research Board, Washington, DC.
- 2017 **Lee, Y.**, Circella, G., Mokhtarian, P. L., & Guhathakurta, S. Are all Millennials really the Urban Hipster? A Latent Class Approach to Classify Todays Young Adults based on their Location Preference. Paper presented at the 2017 Annual Meeting of the Association of Collegiate Schools of Planning, Denver, CO.
- Lee, B. & **Lee, Y.** Are Millennials Leading Reurbanization? The Net Migration Patterns of Older Millennials in the Largest 20 Urban Areas from 2000 to 2010. Paper presented at the 2017 Annual Meeting of the Association of Collegiate Schools of Planning, Denver, CO.
- *Choi, Y., Guhathakurta, S., & **Lee, Y.** Does Transit-Oriented Development Induce Residents to be More Multimodal? Paper presented at the 2017 Annual Meeting of the Association of Collegiate Schools of Planning, Denver, CO.
- Zhang, W., Wang, F., Barchers, C., & **Lee, Y.** The impact of Transit-Oriented Development on Housing Value Resilience: Evidence from the City of Atlanta. Paper presented at the 2017 Annual Meeting of Transportation Research Board, Washington, DC.
- 2016 **Lee, Y.**, Circella, G., Guhathakurta, S., & Mokhtarian, P. L. Will Millennial stay in cities and travel without cars? An Analysis of Current and Future Choices of Residential Location and Travel Behavior. Paper presented at the 2016 Annual Meeting of the Association of Collegiate Schools of Planning, Portland, OR.
- 2014 **Lee, Y.**, & Guhathakurta, S. How do households economize on travel during periods of high gasoline prices? An examination of trip chaining behavior in Atlanta. Paper presented at the 2014 Annual Meeting of the Association of Collegiate Schools of Planning, Philadelphia, PA.
- 2013 **Lee, Y.**, & Guhathakurta, S. Who reduced travel more after the recent recession, central city residents? Or suburbanites? Paper presented at the 2013 North American Meeting of Regional Science Association International, Atlanta, GA.

Lee, B. & Lee, Y. Complementarity between land use planning and pricing, variations in gasoline price elasticity of transit ridership in U.S. urbanized areas. Paper presented at the 2013 Annual Meeting of Western Regional Science Association Conference, Santa Barbara, CA.

HONORS & AWARDS

- 2018 Invited to the Endogenous Amenities and Cities Symposium, Florida State University.
- 2017 Teaching Assistant of the Year, School of City and Regional Planning, Georgia Institute of Technology.
- 2011 Michael A. Carroll Scholarship, Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign.

PROFESSIONAL SERVICE

Ad hoc referee:

Transportation Research Part A, Transportation Research Part D, Transportation Research Part F, Journal of Transport Geography, Travel Behaviour and Society, Transport Policy, and Transportation Research Record.

University/Departmental service:

Georgia Institute of Technology

Reviewer of the President's Undergraduate Research Awards (PURA) for Spring 2020

School of City and Regional Planning, Georgia Institute of Technology

Ph.D. Committee for academic year 2016–17

Transportation Faculty Search Committee for academic year 2014–15

Professional membership:

Association of Collegiate Schools of Planning (ACSP, 2014-current)

Transportation Research Board (TRB, 2016-current)

American Association of Geographers (AAG, 2017-current)

International Association of Travel Behavior Research (IATBR, 2018-current)

MEDIA COVERAGE

1. Facchinei, B. (2019, September 5). Cities Are Changing As Young People Stay For Longer. Newsy, Retrieved from <https://www.newsny.com/stories/cities-adapt-as-young-people-stay-for-longer>
2. Simek, P. (2019, July, 2). Does Friscos Success Mean Millennials No Longer Love Cities? D Magazine, Retrieved from <https://www.dmagazine.com/frontburner/2019/07/does-friscos-success-mean-millennials-no-longer-love-cities>
3. Kaul, G. (2019, June 14). Millennials get all the credit for embracing city living. But the trend started with Generation X. MinnPost, Retrieved from <https://www.minnpost.com/metro/2019/06/millennials-get-all-the-credit-for-embracing-city-living-but-the-trend-started-with-generation-x>
4. Brasuell, J. (2019, May 29). Nevertheless, the Youthful Preference for Urban Living Persisted. Planeti-zen, Retrieved from <https://www.planetizen.com/news/2019/05/104546-nevertheless-youthful-preference-urban-living-persisted>

5. Florida, R. (2019, May 28). Young People's Love of Cities Isn't a Passing Fad. Citylab, Retrieved from <https://www.citylab.com/life/2019/05/urban-living-housing-choices-millennials-move-to-research/590347/>
6. Hurley, A. K. (2018, November 15). Millennials Are More Likely to Buy Their First Homes in Cities. Citylab, Retrieved from <https://www.citylab.com/life/2018/11/millennials-buy-homes-cities-generation-x-suburbs/575755/>

REFERENCES

Subhrajit Guhathakura, Ph.D.

Professor & Chair, School of City and Regional Planning Director,
Center for Spatial Planning Analytics & Visualization
Georgia Institute of Technology
245 Fourth St. NW, Suite 204
Atlanta, GA 30332
+1-404-894-2350
subhro.guha@design.gatech.edu

Patricia L. Mohktarian, Ph.D.

Susan G. and Christopher D. Pappas Professor
School of Civil and Environmental Engineering
Georgia Institute of Technology
790 Atlantic Drive
Atlanta, GA 30332
+1-404-385-1443
patmokh@gatech.edu

Bumsoo Lee, Ph.D.

Associate Professor & Tschangho John Kim Professor in Urban and Regional Systems
Department of Urban and Regional Planning
University of Illinois at Urbana-Champaign
Temple Buell Hall M206
611 Lorado Taft Drive
Champaign, IL 61820
+1-217-333-3601
bumsoo@illinois.edu

Alex Karner, Ph.D.

Assistant Professor & Hampton K. and Margaret Frye Snell Endowed Chair in Transportation
Graduate Program in Community and Regional Planning
University of Texas at Austin
310 Inner Campus Drive, Stop B7500
Austin, TX 78712
+1-512-471-5663
alex.karner@utexas.edu