

YONGSUNG LEE

September 2020

Rm 10.16 Jockey Club Tower
The University of Hong Kong
Pokfulam Road West
Hong Kong, China

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ACADEMIC EMPLOYMENT

University of Hong Kong

Assistant professor, Department of Geography

8/2020-Present

Georgia Institute of Technology

Postdoctoral fellow, School of Civil and Environmental Engineering

9/2018–6/2020

Instructor/Graduate Teaching Assistant, School of City and Regional Planning

8/2015–5/2020

Graduate Research Assistant, Center for Spatial Planning Analytics & Visualization

8/2012–8/2018

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

RESEARCH INTERESTS

Sustainable Urbanization, Resilience, Information and Communication Technology, Shared Mobility,
Autonomous Vehicle, Household/Firm Location Choice, Spatial Structure of Cities, Neighborhood
Change, Gentrification, Migration Patterns

TEACHING INTERESTS

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

TEACHING EXPERIENCES

Teacher, The University of Hong Kong

Sustainable Development (undergraduate): Fall 2020.

Urban Planning in Practice in South Korea (undergraduate): Fall 2020.

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>

WORKING PAPER (manuscript available upon request)

1. Chen, Y. H., Lee, Y., Circella, G., & Mokhtarian, P. L. *Substitution or Complementarity? A Latent-Class Cluster Analysis of Ridehailing Impacts on the Use of Travel Modes in Southern U.S. Cities*. TRBAM-21-03318. Submitted for the Transportation Research Record 100th Annual Meeting.

2. Matson, G., McElroy, S., **Lee, Y.**, & Circella, G. *Longitudinal Analysis of COVID-19 Impacts on Mobility: An Early Snapshot of the Emerging Changes in Travel Behavior*. TRBAM-21-04310. Submitted for the Transportation Research Record 100th Annual Meeting.
3. Makino, K., Malik, J., Circella, G., **Lee, Y.**, Asmussen, K., & Bhat, C. *The Impact of the COVID-19 Pandemic on Long-distance Travel: Reported Changes and Expectations for Future Travel in 15 U.S. Regions*. TRBAM-21-04361. Submitted for the Transportation Research Record 100th Annual Meeting.
4. Wang, K., Qian, X., Circella, G., **Lee, Y.**, Malik, J., & Fitch, D. T. *What Mobility Modes Do Shared E-Scooters Displace? A Review of Recent Research Findings*. TRBAM-21-04082. Submitted for the Transportation Research Record 100th Annual Meeting.
5. **Lee, Y.**, & Alemi, F. *Controlling for selection and simultaneity biases in the Relationships between Ridehailing Use and Vehicle Ownership in the 2017 NHTS*. TRBAM-20-02708. Submitted for the Transportation Research Record 99th Annual Meeting.
6. 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 Association of Collegiate Schools of Planning Annual Meeting.

WORK IN PROGRESS

1. **Lee, Y.**, & Circella, G. *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?* Abstract submitted for the 2020 Sustainability and Emerging Transportation Technology Conference.
2. **Lee, Y.**, & Lee, B. *Transit ridership in America, 2002-2018: Interactions Between Economic Factors and the Built Environment via a Machine Learning Approach*. Paper presented at the 2019 Association of Collegiate Schools of Planning Annual Meeting.
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 Association of Collegiate Schools of Planning Annual Meeting.
4. **Lee, Y.**, Choi, Y., & Guhathakurta, S. *Does Transit-Oriented Development Induce Residents to be More Multimodal?* Paper presented at the 2017 Association of Collegiate Schools of Planning Annual Meeting.

PROJECT REPORTS

1. Chen, Y. H., **Lee, Y.**, Circella, G., & Mokhtarian, P. L. (under preparation). *Attitudes towards Emerging Mobility Options and Technologies – Phase 3: Survey Data Compilation, and Analysis*. A research report from the Teaching Old Model New Trick (TOMNET) University Transportation Center.
2. 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>
3. 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>
4. 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 (not getting paid).

1. *Impacts of the COVID-19 Pandemic on Mobility, Telecommuting, and E-shopping Patterns in the United States, 3 Revolution Future Mobility Program, Institute of Transportation Studies, University of California at Davis, PI: Dr. Giovanni Circella, 2020-current.
2. 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.
3. *Panel Study of Emerging Transportation Technologies and Trends in California: Phase 2 Data Collection, 3 Revolution Future Mobility Program, Institute of Transportation Studies, University of California at Davis, PI: Dr. Giovanni Circella, 2017-2019.
4. 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.
5. *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.
6. *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.
7. 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 Research Grants Council in Hong Kong as PI for project titled, “Changes in Travel Behaviors, Attitudes, Adoption of Information and Communication Technologies, and Spatial Distribution of Jobs and Households during and after the COVID-19 Pandemic in Hong Kong and the United States” (Requested budget, HKD 736,255 or USD 95,000)
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 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, USD 30,000)
4. Proposal 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, USD 170,840)
5. Proposal 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, USD 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 *Chen, Y. H., **Lee, Y.**, Circella, G., & Mokhtarian, P. L. Substitution or Complementarity? A Latent-Class Cluster Analysis of Ridehailing Impacts on the Use of Travel Modes in Southern U.S. Cities. 3 Revolution Future Mobility Program, Institute of Transportation Studies, the University of California at Davis.

Lee, Y., Circella, G. & Mokhtarian, P. L. Micro-mobility and Ridehailing Services: Current Use and Perceptions. Presentation at the ABCs (Attitudes – Behaviors – Choices) of Future Mobility webinar, presented by TOMNET and D-STOP (USDOT-Sponsored Tier 1 University Transportation Centers). Webinar recording available on <https://tomnet-utc.engineering.asu.edu/leadership-webinar-series/>

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 Factors, 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 Transportation 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 Today's 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 Millennials 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, Transportation Research Record, and Case Studies in Transportation Policy

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.newsly.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. Planetizen, 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/>