# Dohyung (Do) Kim, Ph.D.

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#### **Areas of Interest**

GIS Application in Planning; Sustainable Transportation; Land Use and Transportation Relationship; Active Living; Geo-spatial Visualization and Simulation; Quantitative Research Method; Spatial Statistics; Big Data and Data Analytics

# **Education**

2005 Ph.D. in Urban and Regional Planning

Dissertation: Three-dimensional Urban Simulation for Collaborative Urban Design Dissertation Committee: Paul Zwick, Ilir Bejleri, Richard Schneider, and Michael Binford

1997- University of Wisconsin, Madison

1999 MS in Urban and Regional Planning (Specialization: Land use planning)

1991- Kyunghee University, Korea

**1993** MS in Public Administration (Specialization: Urban policy)

1987- Kyunghee University, Korea

**1991** BS in Public Administration

# **Academic Employment**

# 2009 - California State Polytechnic University, Pomona

**Present** Department of Urban and Regional Planning

Interim Department Chair	2024 - present
Professor	2019 - present
Department Chair	2016 - 2020
Associate Professor	2014 - 2019
Graduate Program Coordinator	2013 - 2016
Assistant Professor	2009 - 2014

<u>Undergraduate courses</u>: Demographics and Quantitative Research Methods / Introduction to GIS / Intermediate GIS / Advanced GIS / GIS Studio / Local Transportation Planning / Travel Demand Modeling / Senior Project Preparation

<u>Graduate courses</u>: Quantitative Research Methods / Introduction to Graphic Communication and Physical Design Skills / Introductory and Intermediate GIS / Policy Analysis and Advanced Research Method / Master's Thesis Preparation

# 2013 Kyunghee University, Korea

Department of Public Administration Visiting Scholar

# 2002- University of Florida

2006 Department of Urban and Regional Planning

Research Coordinator/Instructor

<u>Graduate course</u>: Urban Visual Simulation Research Assistant/Teaching Assistant

**Graduate courses**: 3D Urban Simulation/Site Design/Community Design

# 1999 University of Wisconsin, Madison

Program on Agricultural Technology Studies

Research Assistant

# **Professional Employment**

**2006 – 2009** Renaissance Planning Group, Sr. Planner/Designer

2000 – 2001 Urban Data Solutions, GIS Associate

# **Research Grants**

#### **External**

Externo	11	
2024	ΡI	The Detection of and Contributing Factors to Residential Infill Development in a High-Quality Transit Area (HQTA): An Application of Deep Learning funded by Mineta Transportation Institute (\$74,911)
2023	PI	Geographic Information Systems (GIS) Training and Workforce Development funded by Southern California Association of Governments (SCAG) (\$60,293)
2022	Co-PI	A Guide to Navigating Existing and Emerging Sources of Local VMT and Travel Data funded by Mineta Transportation Institute (\$27,246 out of \$74,686)
	Co-PI	Identification of Infill Housing Development for Smart Urban Growth: Application of Deep Learning Technologies funded by Sungkyunkwan University, Korea (\$10,000 out of \$30,000)
2021	PI	Accessory Dwelling Unit (ADU) Potential in the Southern California Association of Governments (SCAG) Region funded by SCAG (\$112,360)
2020	PI	Big Data Research: A Machine Learning Approach to Forecasting Infill Housing Development funded by Southern California Association of Governments (SCAG) (\$75,000)
2018	PI	Analysis of Pedestrian Collisions at Mid-Blocks and Intersections funded by Southern California Association of Governments (SCAG) (\$48,000)
2017	Co-PI	Advanced Research on the Built Environment and Collisions funded by Southern California Association of Governments (SCAG) (\$24,500 out of \$49,800)
2016	PI	Travel Behavior of Millennials in Southern California funded by Metro Gold Line Foothill Extension Construction Authority (\$20,000)
	Co-PI	CalTran AICP Exam Preparation and Training funded by Leonard Transportation Center (\$7,500 out of \$76,800)
	PI	Measuring Longitudinal Changes of Socio-Economic and Land Use around Transit Stations funded by Southern California Association of Governments (SCAG)

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- 2015 PI Environmental Justice Analysis for the City of Seoul funded by Seoul Institute (\$10,000)
  - PI Advanced Research on Environmental Justice Analysis and Application with GIS funded by Southern California Association of Governments (SCAG) (\$39,800)
- 2014 PI Advanced Research on Land Use Scenario Planning and Growth Allocation funded by Southern California Association of Governments (SCAG) (\$31,883)
- 2011 PI A Case Study on Long Range Transportation Planning and Land Use Planning Applying the Urban Place Types funded by Korea Research Institute for Human Settlements (KRIHS) (\$10,000)
  - Co-PI SB375 Toolkit Outreach and Training Development funded by Leonard Transportation Center (\$25,000 out of \$49,745)
- 2010 PI The Improvement of Bicyclists and Pedestrians Safety in Riverside County:
  Focusing on Environmental Contributing Factors to Bicyclist and Pedestrian
  Crashes funded by Leonard Transportation Center (\$49,955)
- 2006 PI The Development of 3D GIS Database for Historic Buildings funded by Alachua County, Florida (\$5,000)

#### Internal

- 2023 PI Accessory Dwelling Units (ADUs) as Affordable Housing Choices: The Case of Los Angeles. Research, Scholarship, and Creative Activity (RSCA) Mini-Grant (\$5,000)
- 2022 PI Downzoning: Conversion of Commercial Properties to Residential Uses. Teacher-Scholar Model Research Fund (3 teaching units)
- 2017 PI The Application of Big Data in Urban and Regional Planning. Teacher-Scholar Model Research Fund (\$6,000)
- 2013 PI The Development of Active Transportation Prediction Models for Metropolitan and Suburban Cities. Research, Scholarship, and Creative Activity (RSCA) Mini-Grant (\$4,000)
- 2012 PI Impacts of Environment Conditions on Pedestrian and Bicycle Safety. Kellogg Foundation Research Fund (\$1,000)

### **Books and Book Chapters**

## **Published**

- **2023 Kim, D.** Undergraduate Urban Planning Students' Motivations for Planning Education and Profession in Danilo, P., Diko, S.K., and Hollstein, L. (eds). *Routledge Companion to Professional Awareness and Diversity in Planning Education*. New York, NY: Routledge.
- Park, J. Kim, D., Park, S., Shin, H., Jung, Y., and Vangsbo, T.N. *The Preview of Future Society*. Seoul, Korea: Murepa Press (in Korean).
- **2020 Kim, D.** Land Use Strategies Responding to Climate Change in Park, J (eds). *Climate Change and National Response Strategies*. Seoul, Korea: Murepa Press. (in Korean)

### **Peer-Reviewed Journal Articles**

# **Published**

2024 Jun, H., Kim, D., Kim, J., and Huh, J. Detection of Infill Development and Contributing

- Factors Using Deep Learning and Multilevel Modeling. *Cities* <a href="https://doi.org/10.1016/j.cities.2024.105019">https://doi.org/10.1016/j.cities.2024.105019</a> (published on-line)
- Kim, J., **Kim, D.**, Jun, H., and Huh, J. The Detection of Residential Developments in Urban Areas: Exploring the Potentials of Deep-learning Algorithms. *Computer, Environment, and Urban Systems*. <a href="https://doi.org/10.1016/j.compenvurbsys.2023.102053">https://doi.org/10.1016/j.compenvurbsys.2023.102053</a> (published online)
- Kim, S. and **Kim, D**. Climate Change and Cooling Equity: Spatial Dynamics of Vulnerable Populations. *Growth and Change: Journal of Urban and Regional Policy, 55(1): 1-14*
- **2023 Kim, D.**, Baek, S., Garcia, B., Vo, T., and Wen, F. The Influence of ADU Policy on the Contributing Factors to ADU Development: A Case of Los Angeles. *Journal of Housing and the Built Environment*, 38: 1585-1599.
  - **Kim, D.** and Park, K. Analysis of Potential Collisions between Pedestrians and Personal Transportation Devices in a University Campus: An Application of Unmanned Aerial Vehicles. *Journal of American College Health*, 71(7): 2272-2279.
- **2022 Kim, D.,** Shim, J., Park, J., Cho, J., and Kumar, S. Predicting Residential Infill Development in the City of Los Angeles: Supervised Machine Learning Approaches. *Journal of Urban Planning and Development*, 148(1): 04021060 (Selected for Editor's Choice Paper)
- **2021 Kim, D.** and Ahn, Y. The Contribution of Tree and Greenspace to Asthma Emergency Room Visits: An Application of Advanced Spatial Data. *Journal of Environmental Research and Public Health*, *18*(7): 3487.
- **2020 Kim, D.** and Cho, D. Population Allocation at the Building Level for Microlevel Urban Simulation: A Case of Jeonju, Korea. *Asian Journal of Innovation and Policy*, 9 (2): 223-239.
  - **Kim, D.**, Park, J., Bae, C., and Wen, F. The Aging Society from the Perspective of Urban Infrastructure and Community Environment: Searching for Policy and Technological Innovation. *Asian Journal of Innovation and Policy*, 9 (1): 79-94.
  - **Kim, D**. Pedestrian and Bicycle Volume Data Collection Using Drone Technology. *Journal of Urban Technology*, 27(2): 45-60.
- **2019 Kim, D**. The Transportation Safety of Elderly Pedestrian: Modeling Contributing Factors to Elderly Pedestrian Collisions. *Accident Analysis and Prevention*, 131: 268-274.
  - Ahn, Y. and **Kim, D**. The Prevalence of Asthma and Severe Asthma in Children Influenced by Transportation Factors: Evidence from Spatial Analysis in Seoul, Korea, *Cities*, 85: 30-37.
  - **Kim, D.** Transportation Contributing Factors to Asthma Morbidity: The Case of Los Angeles County. *International Journal of Urban Science*, 23(1): 16-29.
- **2018 Kim, D** and Chanchlani, H. The Influence of the Built Environment on Spatiotemporal Variation of Pedestrian Collisions in Seoul: An Application of Big Data. *Transportation Research Record*, 2672(35): 90-100.
  - **Kim, D.** and Ahn, Y. Built Environmental Contributing Factors to the Asthma Morbidity of the Elderly: A Case Study of Seoul, Korea. *Journal of Transport and Health*, 8: 91-99.
  - **Kim, D.,** Park, J., and Hong, A. The Role of Destination's Built Environment on Nonmotorized Travel Behavior: A Case of Long Beach, California. *Journal of Planning Education and Research*, 38(2): 152–166.
- **2016 Kim, D.**, Ahn, Y., Choi, S., and Kim, K. Sustainable Mobility: Longitudinal Analysis of Built Environment on Transit Ridership. *Sustainability*, *8*(10): 1016-1030.
- 2015 Kim, D., Lee, J., and Choi, S. Balancing Mobility and CO2 Reduction by an Optimal Mode

- Share Scheme. International Journal of Urban Science, 19(2): 168-181.
- **Kim, D.** and Kim, K. The Influence of Bicycle Oriented Facilities on Bicycle Crashes within Crash Concentrated Areas. *Traffic Injury Prevention*, 16(1): 70-75.
- **2014 Kim, D.** and Hong, J. The Influencing Factors on Bicycle Trips: A Comparison of a Metropolitan City to Suburban Cities. *Korean Journal of Transportation Research*. 21(3): 90-106.
- **2012 Kim, D.** Land Use Scenario Simulation Based on Urban Typologies. *Korean Local Administration Review,* 9(2): 103-120.
  - **Kim, D.** and Catalano, A. A Comparative Study on Physical Environment between Bicyclist and Pedestrian Crash Concentration Zone and Non-Concentration Zone. *Korean Journal of Transportation Research*. 19(4): 63-81.
- **2011 Kim, D**. The Validation of 3D Simulation for Collaborative Urban Design: A Quantitative Approach. *Korean Local Administration Review*, 8(2): 70-86.
  - **Kim, D.** and Baird, N. Bicycle Facility Demanding Analysis using GIS: A Case of Los Angeles County. *An International Journal of Urban and Extra Urban Studies*. 1(2): 1-14.
- **2010 Kim, D.** 3D Visual Urban Simulation: Methods and Applications. *Korean Local Administration Review*, 7(2): 1-20.
- **2009 Kim, D.** Improvement of Pedestrian and Bicyclist Safety: Addressing Environmental Contributing Factors. *Korean Local Administration Review*, 6(1): 245-253.

#### **Under Review**

- **Kim, D.** and Kim, S. The Effects of Micro Urban Space Typologies on Ambient Temperature: A Case Study of Los Angeles, Sustainability (manuscript submitted)
- Kim, S., **Kim, D.,** and Bekkers, P. Multi-family Housing Development in Suburban Communities: Does It Contribute to Housing Affordability and Socioeconomic Diversity? *Cities* (manuscript submitted)
- Baek, S. and **Kim, D**. Transportation Data Utilization in Local Governments' Sustainable Land Use Decisions. *Transportation Policy* (manuscript submitted)

### In Preparation

- **Kim, D.**, Kim, S., and Bekkers, P. Contributing Factors to the Development of Multi-family Housing by Type of Multi-family Housing. (manuscript prepared for Western Regional Science Association Conference 2025)
- **Kim, D.** and Jun, H. Spillover Effects of Accessory Dwelling Unit (ADU) Development: Application of an Spatial Economatrics Approach. (manuscript prepared for Western Regional Science Association Conference 2025)

# **Research Reports**

- **2023 Kim, D**. Zoning in the United States: The City of Los Angeles' zoning reform based on Form-base Code, in Lee, J. and Yoon, H. International Comparison Research of Zoning Regulation Systems and Implementation. Seoul Institute. (in Korean)
  - Baek, S. and **Kim, D**. <u>A Guide to Navigating Existing and Emerging Sources of Local VMT and Travel Data</u>. CSUTC/MTI Project 2232. Mineta Transportation Institute.
- **2021** Park, J., Park, C., Cho, D., and **Kim, D.** Development of the Analysis Platform for the Scenarios of Infrastructure Modernization in Inaccessible Areas. Korea Institute of Civil

- Engineering and Building Technology (in Korean)
- Park, J., Park, C., Cho, D., and **Kim, D.** Land Use Alternatives and Infrastructure Location Analysis for the Development of An Industrial City. Korea Institute of Civil Engineering and Building Technology (in Korean)
- **Kim, D.**, Baek, S., and Garcia, B. Accessory Dwelling Unit (ADU) Potential in the Southern California Association of Governments (SCAG) Region. Southern California Association of Governments (SCAG).
- **2020 Kim, D.**, Shim, J., and Park, J. Big Data Research: A Machine Learning Approach to Forecasting Infill Housing Development. Southern California Association of Governments (SCAG).
- 2018 Park, M., Kim, H., Kang, M., Kim, D., and Kwon, K. <u>Calculation and Application of Location Housing Affordability Index</u>. Report 18-06. Korea Research Institute for Human Settlements. (in Korean)
  - **Kim, D.** Analysis of Pedestrian Collisions at Mid-Blocks and Intersections. Southern California Association of Governments (SCAG).
- **2017** Zhang, Y and **Kim, D**. Advanced Research on the Built Environment and Collisions. Southern California Association of Governments (SCAG).
  - **Kim, D**. *Travel Behavior of Millennials in Southern California*. Metro Gold Line Foothill Extension Construction Authority.
  - Kwon, Y., Min, S., **Kim, D**., Park, J., Ha, S., Lee, Y., Kim, G., Shin, D., and Chun, S. Strategies for Job Creation and Improvement in Critical Infrastructure Service Industries. Report 17-06. Korea Research Institute for Human Settlements. (in Korean)
  - Pyeon, J. and **Kim, D.** *Transportation Construction Work-Zone Safety Impact on Time-Related Incentive Contracting Projects*. Mineta Transportation Institute. Report WP 12-11.
- **2016 Kim, D.** and Willson, R. *The Foothill Gold Line and Cal Poly Pomona: Travel Patterns Millennials' Preferences, and Transit Advocacy*. Metro Gold Line Foothill Extension Construction Authority.
  - **Kim, D.**, and Lee, J. *Environmental Justice Analysis for the City of Seoul*. Seoul Institute. (in Korean)
- 2015 Kwon, Y., Kim, S., Ha, S., Jung W., Han, J, Bae, J., Ahn., Y, and Kim, D. Policy Directions of Improving Comprehensive National Territorial Plan for Leading the Future Territory of Korea, Report 15-13. Korea Research Institute for Human Settlements. (in Korean)
- **2014** Willson, R., Kodama, M., Emerson, N., Burkenheim, L., Murphy, D., Rifkin, A., Scherr, R., Duran, T., and **Kim, D**. *Eco-Rapid Transit Transit-Oriented Development Guidebook: Southern Corridor*. Eco-Rapid Transit.
- **2012** Kuzmyak, R., Walters, J., Hu, H., Espie, J., and **Kim, D**. *Travel Behavior and Built Environment: Exploring the Importance of Urban Design at the Non-Residential End of the Trip*. Lincoln Institute of Land Policy. Working Paper WP12RK1.
  - **Kim, D.**, Choi, S., and Park, J. A *Case Study on Long Range Transportation Planning and Land Use Planning Applying the Urban Place Types in U.S.A*. Research Paper 2011-16. Korea Research Institute for Human Settlements. (in Korean)
- **2011** Reibel, M. and **Kim, D**. *SB375 Toolkit Outreach and Training Development*. Leonard Transportation Center Research Report.
- **2010 Kim, D**. The Improvement of Bicyclists and Pedestrians Safety in Riverside County:

- Focusing on Environmental Contributing Factors to Bicyclists and Pedestrian Crashes. Leonard Transportation Center Research Report.
- **2006** Bejleri, I, **Kim, D**, and Yang, X. *New Database Framework for Florida's Transportation Planning: Integrating Work Program, Multimodal Transportation Networks, Planning and Environmental Database*. Florida Department of Transportation Report #BD545-11.

# **Non-Peer-Reviewed Articles and Monographs**

- **2023 Kim, D.** The Perspective on Urban Planning in Korea. *Urban Information Service*. 490, pp. 3-4. (in Korean)
- **2022 Kim, D.** The Reality and Direction of Digital Twin. *Murepa Critical Opinions*. 10. (in Korean) https://murepa.com/forum/view/625941
- **2019 Kim, D.** Public Data in the Era of Big Data. *Murepa Critical Opinions*. 6. (in Korean) <a href="https://murepa.com/forum/view/274254">https://murepa.com/forum/view/274254</a>
  - **Kim, D.** Shared Economy and Ethics. *Murepa Critical Opinions*. 4. (in Korean) https://murepa.com/forum/view/210989
- **2006 Kim, D.** and Bejleri, I. Visualizing the Future. *Government Matters*, winter.

# **Conference Proceedings and Presentations**

- 2024 Association of Collegiate Schools of Planning Conference, November 7-9, Seattle, WA.
  - Smart Growth in Suburban Communities: A Paradox of Rental Housing Growth (with Kim,
     S.) (abstract accepted)

Western Regional Science Association Conference, February 11-14, Monterey, CA.

• Multi-family Housing Development in Suburban Communities: Does It Contribute to Housing Affordability and Socioeconomic Diversity? (with Kim, S.)

Transportation Research Board Meeting, January 7-11, Washington D.C.

- Transportation Data Utilization in Local Governments' Sustainable Land Use Decisions (with Baek, S)
- **2023 Western Regional Science Association Conference**, February 15-18, Big Island, HI. The Effects of Micro Urban Space Typologies on Ambient Temperature: A Case Study of Los Angeles (with Kim, S.)
- 2022 Association of Collegiate Schools of Planning Conference, November 3-6, Toronto, Canada
  - Identifying Residential Infill Development and Its Factors: A Deep-learning Image Detection Approach (with Jun, H., Huh, J., and Kim, J.)
  - Local Governments' Demands of VMT and Travel Data (with Baek, S.)

Western Regional Science Association Conference, February 17-20, Scottsdale, AZ.

- Climate Change and Changing Spatial Dynamics of Vulnerable Populations (with Kim, S.)
- **2021** Korean-American Scientists and Engineers Association (KSEA) Conference, December 15-18, Garden Grove, CA.
  - The Applications of Unmanned Aerial Vehicle (UAV) to Active Transportation Planning and Beyond

Association of Collegiate Schools of Planning Conference, October 13-20, Virtual

- The Influence of ADU Policy on the Contributing Factors to ADU Development: A Case of Los Angeles (with Baek, S., Garcia, B., Vo, T., and Wen, F.)
- An Affordable Housing Policy that Works: A Review of the Accessory Dwelling Unit

- Ordinance in Southern California (with Garcia, B., Baek, S., and Wen, F.)
- Roundtable: Urban Planning and Anti-Asian Racism (panelist)
- **2020** Association of Collegiate Schools of Planning Conference, November 5-8, Virtual
  - The Analysis of Near-Miss Collision between Pedestrians and Personal Transportation Vehicles: An Application of Unmanned Aerial Vehicles (UAV) (with Park, K.)
  - Roundtable: Advancing Diversity in Undergraduate Planning Programs (panelist) International Conference on Transportation & ITS Policy, October 16-17, Virtual
  - Bridging Micro Land Use Simulation and Transportation Planning
- 2019 Association of Collegiate Schools of Planning Conference, October 24-27, Greenville, SC.
  - The Characteristics of First and Last-Mile Trips to/from Bus Stops in a Suburban Environment
  - Roundtable: Recruiting for Diverse Planning Programs (panelist)
  - I Congreso Internacional de Sistemas Inteligentes de Transporte, June 24-25, Lima, Peru.
  - Data Driven Regional Transportation Decision Making
- **2018** Association of Collegiate Schools of Planning Conference, October 25-28, Buffalo, NY.
  - The Transportation Safety of Elderly Pedestrian: Modeling Contributing Factors to Elderly Pedestrian Collisions. (Session organizer: Transportation and Vulnerability)
  - Roundtable: Technology Revolution & the Network of Spaces (panelist)
  - Western Regional Science Association Conference, February 11-14, Pasadena, CA.
  - Built Environment Contributing Factors to a Dominant Collision Type at Intersection Level (with Vo, T. and Chanchlani, H.)

Transportation Research Board Meeting, January 7-11, Washington D.C.

- The Influence of the Built Environmental on Spatiotemporal Variation of Pedestrian Collisions in Seoul: An Application of Big Data (with Chanchlani, H.)
- 2017 Association of Collegiate Schools of Planning Conference, October 12-15, Denver, CO
  - Built Environmental Contributing Factors to the Spatiotemporal Patterns of Pedestrian Collisions: An Application of Big Data

Western Regional Science Association Conference, February 15-18, Santa Fe, NM.

- Transportation Contributing Factors to Children Asthma Morbidity: A Case of the City of Seoul (with Ahn, Y.)
- 2016 Association of Collegiate Schools of Planning Conference, November 3-6, Portland, OR.
  - The Contributing Factors to Asthma Morbidity of Elderly Population: A Case Study of Seoul, Korea (with Ahn, Y.)

ESRI International User Conference, June 27–July 2, San Diego, CA

- Environmental Justice (EJ) Communities in the City of Seoul (with Lee, J.)
- Urban Affairs Association Conference, March 16-19, San Diego, CA.
- The Inequality of Built Environment from the Perspective of Environmental Justice (with Choi, S.)

Western Regional Science Association Conference, February 14-17, Waikoloa Village, HI

- The Influence of Built Environment on Asthma Hotspots (with Choi, S., and Koo, C.)
- 2015 ESRI International User Conference, July 20-24, San Diego, CA
  - Spatial Analysis on the Conditions of Environmentally Vulnerable Communities in Los Angeles County (with Choi, S., and Koo, C.)

Transportation Research Board Meeting, January 11-15, Washington D.C.

- Does Transit-Oriented Development Create a Bicycle and Pedestrian Safe Environment? (with Rojas, D.)
- **2014** Association of Collegiate Schools of Planning Conference, October 30-November 2, Philadelphia, PA.
  - Automobile Drivers' Perception of Bicyclists' Behavior: A Pilot Study (with Melkonian, A.) **University of California Transportation Center Research Conference**, April 17-18, Pomona, CA.
  - The influence of TOD on Bicycle and Pedestrian Safety (with Rojas, D.)

Western Regional Science Association Conference, February 16-19, San Diego, CA.

- Balancing Mobility and CO2 Reduction by an Optimal Mode Share Scheme (with Lee, J., and Choi, S.)
- Population Aging and Land Use (with Choi, S.)

**Transportation Research Board Meeting**, January 12-16, Washington D.C.

- Longitudinal Analysis of the Influence of Socio-Demographic and Land Use Features on Transit Ridership (with Ahn, Y., Choi, S., and Kim, K.)
- **2013** North American Meetings of the Regional Science Association International, November 13-16, Atlanta, GA.
  - Modeling Optimal Mode Share Scheme for Greenhouse Gas Reduction: The Case of Los Angeles (with Lee, J. and Choi, S.)

**Korean Public Administration Conference**, November 13-16, Sejong, Korea.

- The Impacts of Bikesharing Program in Changwon: A Comparison Study **University of California Transportation Center Research Conference**, March 1-2, Los Angeles, CA.
- The Influence of Environment Features on Pedestrian and Bicycle Crashes
- **2012** International Conference on Regional Disaster Management, November 9, Choonchun, Korea
  - Greenhouse Gas Emission (GHG) Reduction Policies in U.S.: Reducing Automobile Dependency

Association of Collegiate Schools of Planning Conference, November 1-4, Cincinnati, OH

- A Spatial Analysis of Bicycle Facilities in Los Angeles County Do Bicycle Facilities Support Utilitarian Trips?
- The Role of Destination on Active Travel in Long Beach, California: A Nested Logit Modeling Approach (with Park, J., and Hong, A.)

International Conference on Transportation and Logistics, August 23-25, Busan, Korea

• Study on Bikesharing Programs of Korea and Japan: Current Status and Future Challenges (with Lee, J., Kwon, Y., and Aoki, H.A)

ESRI International User Conference, July 23-27, San Diego, CA

- Assessing Impacts of Land Use Patterns on Non-Motorized Trips.
- Micro-Level Land-Use Simulation for Estimating Demands on Urban Infrastructure (with Hu, H, and Choi, S.)

Transportation Research Board Meeting, January 22-26, Washington D.C.

• A Comparison Study on Two Bikesharing Programs in Korea (with Lee, J., Kwon, Y., and Ha, S.)

**2011** Association of Collegiate Schools of Planning Conference, October 13-16, Salt Lake City,

UT

- The Analysis of Environmental Contributing Factors to Bicyclist and Pedestrian Crashes **The Korea Local Administration Conference**, July 1–2, Hongsung, Korea
- The Principles and Applications of Scenario Planning: The Case of U.S.
- **2010** International Spaces and Flows Conference, December 4-5, Los Angeles, CA.
  - Bicycle Facility Demanding Analysis using GIS: A Case of Los Angeles County (with Baird, N.)

Jack R. Widmeyer Transportation Research Conference, November 4, San Bernardino, CA

- What If Crash Data Does Not Mean for Mapping: Lessons Learned from Crash Mapping for Riverside County
- Integrated Land Use and Transportation Planning to Fight Climate Change: Compliance Approaches and Tools (with Reibel, M.)

Association of Collegiate Schools of Planning Conference, October 7-10, Minneapolis, MN

- Land Use Scenario Simulation Based on Transect Planning Theory
- **ESRI International User Conference**, July 12 –16, San Diego, CA
- Place Type-Oriented Land-Use Simulation for Land Use/Transportation Decision Making
- **2009** Jack R. Widmeyer Transportation Research Conference, November 6, San Bernardino, CA
  - The Impacts of Transit Oriented Development: From Regional Land Use Perspective
- 2007 Conference for Healthy Community Makeover, August 27-30, Orlando, FL
  - Bicycle and Pedestrian Safety Analysis: Brevard County as a Case Study for Integrating Technical Analysis with Improved Community Design

Transportation Research Board Meeting, January 21-25, Washington D.C.

- GIS Methods and Tools for Bicycle and Pedestrian Crash Mapping and Analysis (with Bejleri, I., Steiner, R.)
- **2006 Urban and Regional Information Systems Association Conference**, September 25–28, Vancouver, Canada
  - A Multimedia Spatial-web Application on Historic Structures for Three Florida Cities (with Papajorgji, J.)

National Conference of the American Planning Association, April 22-26, San Antonio, TX.

- Visual Urban Simulation: Development and Application of Three- Dimensional Urban Models in Urban Planning (with Bejleri, I.)
- 2005 Association of Collegiate Schools of Planning Conference, October 27-30, Kansas City, MO
  - The Evaluation of 3D Simulation for Collaborative Urban Design: A Quantitative Approach
     Urban and Regional Information Systems Association Conference, October 9–12, Kansas
     City, MO
  - A Real-time 3D GIS Simulation Tool for Participatory Urban Design (with Bejleri, I.) **ESRI International User Conference**, July 25–29, San Diego, CA
  - The Development of a 3D GIS Simulation Tool for Urban Design (with Bejleri, I.)
- **2004** Public Participation GIS Conference, July 18–20, Madison, WI.
  - A 3D GIS Database Framework for Facilitating Public Participation in Urban Planning and Design (with Bejleri, I.)
- **2003** ESRI International User Conference, July 7–11, San Diego, CA
  - Improving Geocoding of Traffic Crashes Using a Custom ArcGIS Address Matching Application (with Steiner, R., Bejleri, I., and Yang, X.)

# **Symposium/Seminars/Workshops Presentations**

**2024 Southern California Association of Governments (SCAG) Toolbox Tuesday**, March 26, Virtual

A Guide to Navigating Existing and Emerging Sources of Local VMT and Travel Data (with Baek, S)

**2023 Platform Governance for Sustainable Community Development**, Sungkyunkwan University, February 22, Virtual

The Urban Built Environment from the Perspective of the Making of Communities: A Comparison of Korea and The U.S.

2022 Al and Smart City Platforms Conference, Sungkyunkwan University, December 9, Virtual The Detection of Residential Infill Development: Exploring the Potentials of Deep-learning Algorithms (with Kim, J.)

**Global Smart City Research Workshop,** Seoul National University, Graduate School of Environmental Studies, January 5, Virtual (Discussant)

**2021 Southern California Association of Governments (SCAG) Toolbox Tuesday**, May 18, Virtual

Trending Accessory Dwelling Units within the SCAG Region (with Baek, S. and Garcia, B.) International Symposium for the 40<sup>th</sup> Anniversary of Environmental Planning Institute, Seoul National University, January 21-22, Virtual

The Contribution of Neighborhood Greenspace to Asthma Emergency Room Visits: An Application of Advanced Spatial Data in Los Angeles County (with Ahn, Y.)

2020 Hanyang Urban Forum, November 19, Virtual

Urban and Regional Planning Education: Balancing Knowledge and Practical Skillsets **Association of Collegiate Schools of Planning Conference**, November 4-9, Virtual Pre-doctoral workshop for students of color

**2019 Webinar: Accessing and Using Data to Evaluate Traffic Safety,** September 17, Los Angeles, CA

Using Drones to Collect Pedestrian and Bicycle Traffic Data' A Pilot Study

Hanyang Urban Forum, May 24, Seoul, Korea

Transportation - Land Use Scenario Planning

ACSP Administrators' Conference, March 15-16, Minneapolis, MN.

Crafting a Diversity Statement (with Giusti, C.)

Best Practices in Diversity and Inclusion (with Giusti, C.)

2018 Daegu Sustainable Planning Symposium, March 19. Daegu, Korea

The Application of Dig Data to Sustainable Transportation

Southern California Association of Governments (SCAG) Regional Planning Symposium, February 15. Los Angeles, CA

To Big or Not To Big: Big Data Experience with Pedestrian Traffic

**2017** ACSP Administrators' Conference, March 11-12, Reston, VA.

The Success of Diverse Student

2016 Alternative Transportation Conference, November 17-18, Pomona, CA

Travel Behavior of Cal Poly Pomona Community

Foothill Gold Line State of the Project 2016, October, 14, Claremont, CA

The Foothill Gold Line and Cal Poly Pomona (with Willson, W.)

- 2013 SCAG-KRIHS Workshop, November 8, Los Angeles, CA
  - Strategies of Sustainable Metropolitan Development. (Discussant)
  - Korean Bicycle Federation Seminar. July 8, Seoul, Korea
  - The Influences of Built Environments on Bicycle and Pedestrian Crashes in Crash Hotspots
- **2012 BK21 Expert Seminar**, Chungbook National University, November 14, Chungjoo, Korea. Land Use Simulation and Public Participation
  - College of Environmental Design Bicycle Symposium. January 19, Pomona, CA.
  - What Attracts Bicycle Trips? Land Use Factors of Bicycle Trips
- **2011** Korean Society of Transportation Bicycle Expert Seminar. July 15, Seoul, Korea.
  - Analysis on the Relationship between Bicycle Facilities and Non-Recreational Trips Using GIS: The Case of Los Angeles
  - Making Transit Works in Suburbia Symposium. April 8, Irvine, CA.
  - Measuring the Importance of Land Use at Transit Stations: The Case of Metrolink Orange county Line
- **2010 SCAG Regional Expert Seminar**. November 10, Los Angeles, CA.
  - Land Use Scenario Simulation Using Urban Typologies
- **2006 Urban and Regional Information Systems Association Conference**. September 25–28, Vancouver, Canada
  - 3D Geospatial: Project Implementation Methods and Best Practices. Workshop Session (with Case, T.)
- **2005 Urban and Regional Information Systems Association Conference**. October 9–12, Kansas City, MO
  - 3D Geospatial: Project Implementation Methods and Best Practices. Workshop Session (with Case, T.)
- **2004** Conference of Florida Chapter of the American Planning Association. October 13-16, Gainesville, FL
  - Introduction to 3D Visualization for Planning and Urban Design. Workshop Session (with Bejleri, I.)
- **2002** Visualization/Simulation (G2V2) Seminar. November 6, Gainesville, FL
  - 3D Modeling and Visualization in Urban Design. Geometry, Graphics, Vision (with Bejleri, I.)

**Graduate and Professional Student Forum**. April 4, Gainesville, FL.

Computer-Aided Urban Design

#### **Invited Lectures**

- 2023 A Lecture Series on Spatial Data and Analysis for Urban Planning, Hubei University of Technology, Virtual, March 12 21
  - Urban Planning Job Session, University of California, Riverside, March 6, Virtual.
- Predicting Residential Infill Development in the City of Los Angeles: Supervised Machine Learning Approaches, Seoul Institute. August 12, Seoul, Korea.
- 2021 Sustainable Transportation and Urban Form, Sungkyunkwan University, May 17, Virtual
- How to Prepare Ph.D. Study and Academia Position, College of Design, Construction, and Planning, University of Florida, October 26, Virtual
  - Sustainable Transportation: Reducing Automobile Dependency, Sungkyunkwan University, May 3, Virtual

- Public Participation as Conflict Prevention in Transportation Planning Process, January, 20, Pomona, CA
- **2019** Land Use Scenario Models Responding to Climate Change, Seoul National University, September, 17, Seoul, Korea.
  - Conflict Prevention Through Public Participation, Kyunghee University, June, 3, Seoul, Korea.
  - Modeling Contributing Factors to Elderly Pedestrian Collisions, Ulsan National Institute of Science and Technology (UNIST), May 29, Ulsan, Korea
  - The Transportation Safety of Elderly Pedestrians, Hongik University, May 22, Seoul, Korea.
- Big Data Applications to Urban Planning. Korea Research Institute for Human Settlements (KRIHS), June 18, Sejong, Korea.
  - The Influence of the Built Environmental on Spatiotemporal Variation of Pedestrian Collisions in Seoul. Seoul Institute. March 23, Seoul, Korea.
  - Public Participation in Planning Decision Making. Myungji University. March 21, Seoul Korea.
  - Land Use Scenario Planning. Chungang University. March 20, Seoul Korea.
- 2017 Big Data Application to Pedestrian Safety Analysis. Southern California Association of Governments (SCAG). March 23, Los Angeles, CA.
- The Inequality of Transportation within Communities with Environmental Justice Issues.

  Ulsan National Institute of Science and Technology (UNIST), October 28, Ulsan, Korea.

  Inequality of Urban Built Environment from the Perspective of Environmental Justice.

  Kwangwon National University Lecture, October 21, Choonchun, Korea.
- 2012 Urban Simulation: Modeling and Visualization. Deajeon Development Institute, November 14, Deajeon, Korea.
- **2006** Futuristic Technologies for Preserving Historic Structures. Alachua County Historic Preservation Committee. September 13, Gainesville, FL
- 3D Visualization for Public Participation in Urban Design. Community Design Center Guest Lecture Series. January 23, Gainesville, FL. (with Ilir Bejleri)

## Awards, Honors, and Scholarship

2018	President's Certificate of Achievement
2013	College of Environmental Design Outstanding Advisor of Year Award
2011	American Planning Student Association the Faculty of the Year Award
	College of Environmental Design Council the Faculty of the Year Award
2004	Central Florida Builders Exchange Fund Scholarship
2003	Central Florida Builders Exchange Fund Scholarship
	ESRI International User Conference Student Assistantship
	Carl Feiss Urban and Environmental Design Award
2002	Graduate and Professional Student Forum 3rd Place Winner

### **Professional Service Activities**

### Journal Editorial Board

**2023 - Present** Frontiers in Environmental Science (Editorial board member)

**2020 – Present** Asian Journal of Innovation and Policy (Associate editor)

2011 - Present Korean Local Administration Review (Editorial board member)

## **Professional Committee**

**2019 - Present** Campus Representative for Transportation Research Board (TRB)

2017 - 2021 The ACSP Committee on Diversity2017-2018 SCAG Open Data/Big Data Committee

2014 - Present Transportation Research Board (TRB) Committee on Pedestrians (ANF10)
 2010 - 2020 Southern California Association of Governments (SCAG) Transportation

Scholarship Selection Committee

# Referee Service for Peer-Reviewed Journals

American Journal of Epidemiology

An International Journal of Urban and ExtraUrban Studies

BMJ Open

Cities

**Environment & Behavior** 

Environment and Planning B: Urban Analytics and City Science

International Journal of Sustainable Transportation

International Journal of Geo-Information

International Journal of Urban Sciences

Journal of Landscape and Urban Planning

Journal of Public Health

Journal of Urban Health

Journal of Urban Technology

**Preventive Medicine Reports** 

Sustainability

**Traffic Injury Prevention** 

Transportation Research Record

Transportation Research Part A: Policy and Practice

Transportation Research Part D: Transport and Environment

Asian Journal of Innovation and Policy

Journal of Korean Regional Science Association

Korean Comparative Government Review

Korean Local Administration Review

### **Program Supervisor**

**2012, 2015** Minority Student Fellows Program, Transportation Research Board

#### **Conference Workshop Instructor**

**2005 – 2006** Conference of the Urban and Regional Information Systems Association

**2004** Florida Chapter of the American Planning Association Conference

# **Academic Committee Service**

#### California State Polytechnic University, Pomona

**2024 – Present** Center for GIS Research Advisory Board

2024 - Present	University Retention, Tenure, and Promotion Committee
2020 - Present	Science, Technology, and Society (STS) Curriculum Committee
2009 – 2015	Campus GIS Council / GIS Minor Program
2012 - Present	Center for Community Service-Learning faculty
2014 – 2015	Graduate Studies Development Committee
2013 – 2016	Extended Graduate Council
2012 – 2013	Faculty Affairs Committee of the Academic Senate
2011	Taskforce for University Transportation Center

# **College of Environmental Design**

2021 – 2022	Diversity Assessment and Plan of Action Committee (chair of curriculum sub-
	committee)
2020 - Present	Curriculum Committee
2020 - 2024	Retention, Tenure, and Promotion Committee
2009 - Present	Technology Committee
2016 - Present	Assessment Committee
2016 - 2018	Safety Committee
2016 – 2018	International Studies
2014 – 2015	ENV Outstanding Advisor Selection Committee
2009 - 2014	Archive Committee

# **Department of Urban and Regional Planning**

2023 - 2024	Faculty Search Committee
2022 - 2023	Faculty Search Committee (chair)
2018 – 2019	Faculty Search Committee
2020 - Present	Curriculum Committee (chair)
2014 – 2016	Department Retention, Tenure, and Promotion Committee
2013 - Present	Student Club Advisor
2012 – 2018	Curriculum Review Committee
2012 – 2018	Semester Conversion Committee
2013 – 2015	Graduate Program Committee
2022 - 2024	
2012	Department Chair Selection Committee