

CURRICULUM VITAE

SUBHRAJIT GUHATHAKURTA

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Education:

Ph. D. City and Regional Planning, University of California, Berkeley December 1991
MCRP Community and Regional Planning, Iowa State University, Ames, August 1987
B.Arch. Architecture, Jadavpur University, Calcutta, India March 1985

Academic Appointments:

July 2011- Director of Center for Geographic Information Systems and Professor of City and Regional Planning, Georgia Institute of Technology

2010- Jun 2011 Associate Director (in charge of Urban Planning), School of Geographical Sciences and Urban Planning

2007-Jun 2011 Professor, School of Geographical Sciences and Urban Planning and School of Sustainability, Arizona State University (*split 50/50 between the two units*)

Aug 08- Apr 09 DFG (German National Science Foundation) Mercator Guest Professor (C4), Technische Universität Kaiserslautern, Germany.

2005-2007 Associate Professor, Global Institute of Sustainability, Arizona State University (*50/50 split appointment shared with School of Planning*)

2000-2007 Associate Professor, School of Planning, Arizona State University

Feb, 01-Jun, 01 Visiting Faculty, School of Geographical Sciences and Planning, University of Queensland, Brisbane, Australia

Oct, 00-Jan, 01 Visiting Faculty, Indian Institute of Information Technology, Bangalore, India

1994-2000 Assistant Professor, School of Planning and Landscape Architecture, Arizona state University

- 1993-94 Research Associate, Center for Real Estate and Urban Economics and also at the Institute of Urban and Regional Development, University of California, Berkeley.
- 1992-93 Assistant Professor of Community and Regional Planning, Iowa State University, Ames.

Significant Honors and Awards

- 2015-2017 High-End Expert Visiting Faculty. Tongji-UNEP Institute for Environmental Sustainability, Tongji University, Shanghai
- 2010 Senior Sustainability Scientist, Arizona State University
- 2007 Deutsche Forschungsgemeinschaft (German National Science Foundation) Mercator-Gastprofessor
- 2007 Founding Faculty North American Center for Transborder Studies
- 2006 Selected as Exemplary Faculty Member at College of Design, ASU (Convocation, May 2006)
- 1999 Chester Rapkin Award for the best paper in the *Journal of Planning Education and Research*, volume 18 (1998-99)
- 1991-1992 American Institute of Indian Studies, Chicago, Fellowship for Dissertation Research in India
- 1991 Newhouse Foundation Fellowship Award for international scholars at U. C. Berkeley
- 1988 American Institute of Certified Planners Award for Extraordinary Performance in the study of planning
- 1988 Outstanding Graduate Teaching Award, Department of City and Regional Planning, University of California Berkeley
- 1987 Iowa State University, College of Design Award for teaching excellence

Principal Investigator on Projects

- 2016 DeKalb Industrial Land and Economy Study. Co-PI (with PI Nancey Green Leigh). Decide DeKalb Development Authority. \$64,788.
- 2015-2017 Partnership in Community Health -- Fulton County, Georgia. Co PI (with PI Dr. Nisha Botchwey). U S Centers for Disease Control. \$454,248.
- 2015-2017 Application of a networked infrastructure model in policy simulations for the Atlanta metropolitan region. Principal Investigator (with Co-PIs Marilyn Brown, Ram Pendyala, and Bistra Dilkina). Georgia Tech Strategic Energy Institute. \$78,000.
- 2014-2015 Freight Impact of Small Urban and Rural Areas. Co-PI (Lead PI Catherine Ross). Budgeted amount for my portion: \$38,354.
- 2014-2017 RIPS Type 2: Participatory Modeling of Complex Urban Infrastructure Systems (PM-CUIS). Co-PI (Lead PI John Crittenden). National Science Foundation. \$2.8 million.
- 2013-2015 Establishing a U.S. -- Afghanistan University Partnership with Kabul Polytechnic on GIS course materials and delivery. Co-PI (Lead PI Javier

- Irrizary). U.S. State Department from a subcontract from Southern Polytechnic. \$143,921.
- 2013-2017 Interdisciplinary Center on Technologies to Support for Successful Aging with Disability (RERC TechSAge). Co-PI (Lead PI-Jon Sanford). National Institute on Disability and Rehabilitation Research. \$4,600,000 for 5 years.
- 2013-2014 Tracking the Atlanta Streetcar (With Tony Giarrusso). Funded by AREA Research/ Atlanta Downtown Improvement District. \$44,313.
- 2014-2017 Training and Professional Certificate Program in Geographic Information Systems and Technology (PC-GIST) for Harris Corporation clients in the United Arab Emirates. Harris Corporation, Melbourne, Florida. \$42,000 + ongoing commitment.
- 2012-2013 Georgia SPLOST Database and Clearinghouse for Transportation Finance. Co-PI (PI C. Ross – GT). Robert Wood Johnson Foundation. \$79,988 for 1 year
- 2010-2013 Urban form and energy use explored through dynamic networked infrastructure model (with Prof. Eric Williams). National Science Foundation (Division of Civil, Mechanical, and Manufacturing Innovation Award #1031690). \$350,213 for 3 years.
- 2010-2015 Decision Center for a Desert City II: Urban Climate Adaptation. Co-Investigator (Pat Gober and Charles Redman, directors, together with other Co-Investigators). National Science Foundation: Decision Making Under Uncertainty (award #0951366). \$1,300,000.
- 2010-2011 Microclimatic effects and energy intensities of urbanization patterns: A pilot study of 52 census tracts in Phoenix. Principal Investigator. Funded through ASU's Decision Center for a Desert City I. \$35,000.
- 2009-2010 The Economic Impact of Phoenix Light Rail. Co-PI with Aaron Golub. Maricopa Association of Governments. \$24,852.
- 2009-2010 Water demand scenarios for Phoenix: Integrating research findings at the Decision Center for a Desert City to examine Phoenix water futures. Principal investigator. \$23,781. Funded by NSF through its "Decision Making under Uncertainty" program that instituted ASU's Decision Center for a Desert City.
- 2006—2011 Assessment of Perceptual and Objective Quality of Life Indicators in the U.S.-Mexico Border: Towards a Border-wide Longitudinal Database (San Diego-Tijuana Longitudinal Survey). (\$800,558 over the life of the project: Current 2009-10 funding \$40,532). Lead investigator with Co-principal Investigators David Pijawka and Edward Sadalla. Funded by Southwest Center for Environmental Research and Policy, US Environmental Protection Agency.
- 2005-2014 Visualization of Large and Unstructured Data Sets Applications in Geospatial Planning, Modeling, and Engineering. Lead Personnel with

- International Research Training Group headed by Prof. Hans Hagen, Technische Universität Kaiserslautern. Funded by Deutsche Forschungsgemeinschaft (German National Science Foundation). Approx. 0.67 million EUR / year.
- 2006-2009 Digital Phoenix Project. Lead Principal Investigator and research coordinator of management committee consisting of Principal Investigators Yoshihiro Kobayashi, Janet Holsten, Tim Lant, and Mookesh Patel. Funded through Herberger Foundation. \$1,000,000 over 4 years.
- 2007-2009 Water and Energy Sustainability with Rapid Growth in the Arizona-Sonora Border Region; Co-Principal Investigator with Christopher Scott (lead), Martin Pasqueletti, Gregg Garfin and Robert Varady. \$50,000. Funded by the Arizona Water Institute.
- 2007-2008 Environmental and Economic Impacts of Material Used in Future Urban Development, Co-Principal Investigator with John Crittenden (lead), Anil Sawhney, Brad Allenby, Joseph Fernando, and Charles Perrings. Funded by Arizona Science Foundation. \$339,280.
- 2006-2008 Sustainability Science and Engineering Education. Co-Principal Investigator with B. Allenby (lead), J. Crittenden, J Wu, S van der Leeuw, D. Pijawka, and P. Westerhoff. Contract with Carnegie Mellon University through a National Science Foundation grant No. 0442618. \$150,000.
- 2006 -2008 Transportation Safety Planning: Forecasting the Safety Impacts of Socio-Demographic Changes and Safety Countermeasure Investments. Co-principal investigator with Simon Washington (lead) and Edward Sadalla. Funded by the National Cooperative Highway Research Program, Transportation Research Board. \$400,000.
- 2005-2008 The Impact of Housing Characteristics and Surface Heat Islands on Water Use in Single Family Residences: The Case of Phoenix Metropolitan Area. Lead investigator. Funded through the Decision Center for Desert Cities (National Science Foundation funded) Project. \$15,400.
- 2006-2007 Climate Change and its Implications for US National Security. Co-Principal Investigator with David Jacobson (lead) and Kenneth Abbott. Funded by CoLab, Office of Transnational Initiatives, US Central Intelligence Agency. \$150,000.
- 2005-2006 Assessment of Perceptual and Objective Quality of Life Indicators in the U.S.-Mexico Border: Towards a Border-wide Longitudinal Database (El-Paso—Ciudad Juarez and San Luis Rio Colorado—Somerton). Lead investigator with Co-principal investigators David Pijawka and Edward Sadalla. Funded by Southwest Center for Environmental Research and Policy, Environmental Protection Agency. \$178,653.

- 2004-2005 Evaluation of Housing Quality in the City of Phoenix. Intergovernmental agreement. Co-principal investigator with Alvin Mushkatel (lead). \$212,000.
- 2004-2005 Decision Support for Urban Development: Air Quality, Social Injustice, material and Energy and the Impact of Social Decision-Making. Co-principal investigator (with John Crittenden (lead), Anil Sawhney, H. J. Joseph, and Nancy Grimm). National Science Foundation Planning Grant No. 0438447. \$114,000.
- 2004-2005 Assessment of Perceptual and Objective Quality of Life Indicators in Calexico-Mexicali: Towards Longitudinal Database for the U.S. Mexico Border (Calexico-Mexicali). Lead Investigator with Co-principal investigators David Pijawka and Edward Sadalla. Funded by Southwest Center for Environmental Research and Policy, Environmental Protection Agency. \$99,059.
- 2003-2004 Building a Dynamic Model for Simulating Land-use and Environmental Change in the Phoenix Metropolitan Area. Principal investigator. Funding received from the Vice President for Research, Arizona State University. Lead investigator with Co-Principal Investigator Goran Konjevod and Ray Quay. Multi-year project with seed funding of \$50,000 (this led to the NSF Planning grant in 2004).
- 2000-2004 Strategic Assessment Modeling for the U.S-Mexico border (Y+20 project). The project is being undertaken by a team from five universities at a cost of about \$250,000/yr. I served as the Principle Investigator from ASU with a specific funding of \$45,000/yr. Funding provided by the Southwest Center for Environmental Research and Policy, Environmental Protection Agency.
- 1999 Apache Boulevard, Tempe, neighborhood redevelopment project. With Mary Kihl and Joe Ewan. Funded by Vice President for Research, Arizona State University. \$8,000 (June-August 1999).
- 1999 New Town for the Village of Moenkopi (Hopi reservation, Arizona). With Ignacio San Martin and Eugene Kupper. Funded by the Village of Moenkopi. \$43,000 (May-September 1999).
- 1999 Augmentation of Watershed Research Program – Atlas Development of the social and bio-physical elements of the San Pedro Watershed. With Ward Brady, Gary Whysong, and Bill Miller. Funded by EPA – Southwest Center for Environmental Research and Policy, Environmental Protection Agency. \$170,000 (1999-2000).
- 1998 The Transborder Watershed Research Program: A Study of the San Pedro Basin. With Ward Brady and Gary Whysong. Funded by EPA-- Southwest Center for Environmental Research and Policy. \$270,000 (1998-2000).

- 1998 Housing Price Effects of Open Space in the City of Phoenix. With Ward Brady and Gary Whysong. City of Phoenix Parks and Recreation Department. \$25,000.
- 1997 Sustainable Model for Watershed Planning: Ecological Suitability and Growth Management Strategies. With Fritz Steiner, Ignacio San Martin and Laurel McSherry. Funded by EPA--Southwest Center for Environmental Research and Policy, Environmental Protection Agency. \$97,000.
- 1996 City of Phoenix, Planning Department. With Ron McCoy, Fritz Steiner and Michael Underhill. \$2,500.
- 1995 Generation and Flows of Hazardous Wastes at the U.S. - Mexico Border with David Pijawka and Suleiman Ashur. Funded by EPA--Southwest Center for Environmental Research and Policy, Environmental Protection Agency. \$87,000.
- 1995 Planning for Growth in Arizona's Metropolitan Areas from Office of Research and Creative Activities, Arizona State University. \$6,400.
- 1994 An Investigation of the Determinants of Employment Change in U. S. Metropolitan Economies from Office of Vice President for Research, ASU. \$16,200.

PUBLICATIONS

Books and Monographs

Guhathakurta, S., D. Pijawka, and E. Sadalla (2010). *The Border Observatory Project: The State of U.S. – Mexico Border Cities*. San Diego: Southwest Center for Environmental Research and Policy. 78 pages.

Steinebach G., S. Guhathakurta, and H. Hagen, (eds.) (2009). *Visualizing Sustainable Planning*. Heidelberg: Springer. 262 pages.

Mushkatel, Alvin, Subhrajit Guhathakurta, and Marilyn Dantico with assistance from Patricia Jones and Kathy Thomas (2005). *Phoenix Housing Condition Evaluation*. Phoenix: City of Phoenix. 177 pages.

Guhathakurta, Subhrajit (ed.). (2003) *Integrated Land Use and Environmental Models: A Survey of Current Applications and Research*. Heidelberg: Springer-Verlag. 271 pages.

Guhathakurta, Subhrajit, Laurel McSherry, and Frederick Steiner, with assistance from John Blair, Elisa Ines Corcuera and Joaquin Marruffo (2000). *A Watershed at a Watershed: Strategies for Sustainability in the Upper San Pedro River Drainage Basin*. Tempe: Herberger Center. 42 pages.

Book Chapters (student coauthors in bold)

Guhathakurta, S. (2015) Examining Urban Sustainability through Urban Models. In Pijawka, D. (ed.) *Sustainability for the 21st Century: Pathways, Programs, and Policies*. Dubuque, IA: Kendall Hunt. Chapter 15, pp. 235-258.

Botchway, Nisha, S. Guhathakurta, **S. Lee**, and **A. Leous** (2015). Quality of Life and Health in Atlanta. In H. Etienne and B. Faga (editors) *Planning Atlanta*. Chicago, IL: Planners Press.

Lee, S and S. Guhathakurta (2013). Bridging Environmental Sustainability and Quality of Life in Metropolitan Atlanta's Urban Communities. In Chapter 9: *Community Quality-of-Life Indicators: Best Cases VI*, pp. 207-232 (edited by R. Phillips, S. Joseph, and D. Rahtz). Heidelberg: Springer.

McAslan, D. **M. Prakash**, D. Pijawka, S. Guhathakurta, and E. Sadalla (2013). Measuring Quality of Life in Border Cities: The Border Observatory Project in the US-Mexico Border Region. In Chapter 7 of *Community Quality-of-Life Indicators: Best Cases VI*, pp. 143-170 (edited by R. Phillips, S. Joseph, and D. Rahtz). Heidelberg: Springer.

Guhathakurta, S., **G. Zhang**, **M. Pangaluru**, and R. Sivakumar (2013). Walk Route: A new methodology to find the optimal walking route in the city of Atlanta. In Chapter 18: *Planning Support Systems for Sustainable Urban Development* (edited by S. Geertman). Heidelberg: Springer.

Pijawka, D., S. Guhathakurta, E. Sadalla, K. Collins, **M. Prakash**, and D. McAslan. (2013). Urban Indicators for Border Areas: Measuring and Tracking Community Conditions in the U.S.-Mexico Border Region. In Chapter 6, *Remaking Metropolis: Global Challenges of the Urban Landscape*. Edited by E. Cook and J. Lara. Routledge. Text. <http://www.routledge.com/books/details/9780415670821/>.

Guhathakurta, S. (2012). Examining Sustainability Through Urban Models. In *Understanding Sustainable Cities: Concepts, Cases and Solutions* (Pijawka, D and M. Gromulat, eds.). Kendall/Hunt Publishing Company.

Guhathakurta, Subhrajit and **Ying Cao** (2011). Variations in objective quality of urban life across a city region: The case of Phoenix. In Chapter 6, Robert W. Marans and Robert Stimson (eds.) *Urban Quality of Life: Implications for Policy, Planning and Research*. Springer.

Guhathakurta, Subhrajit (2009). "Visualizing Planning for a Sustainable World." in Steinebach, G., Guhathakurta, S., and Hagen, H. (eds.) *Visualizing Sustainable Planning*. Heidelberg: Springer.

Guhathakurta, Subhrajit, Y. Kobayashi, M. Patel, J. Holston, T. Lant, J. Crittenden, K. Li, G. Konjevod, and K. Date (2009). "Digital Phoenix Project: A Multidimensional Journey through Time." in Steinebach, G., Guhathakurta, S., and Hagen, H. (eds.) *Visualizing Sustainable Planning*. Heidelberg: Springer.

Middle, Ariane, S. Guhathakurta, H. Hagen, **P. Olech**, and **F. Höpel** (2009). "Visualizing Future 3-Dimensional Neighbourhoods in Phoenix: An Application Incorporating Empirical Methods with Computational Graphics." In Batty, M., and Lin, H., (eds.) *Virtual Geographic Environments*. Marrickville, Australia: Science Press.

Guhathakurta, Subhrajit, David Jacobson and **Nicholas Delsordi** (2007). "End of Globalization? The impact of migration on state, society and economy." In George

Ritzer (ed.) *Blackwell Companion to Globalization*. Malden, MA: Blackwell Publishing, pp. 201-215.

Guhathakurta, Subhrajit and Balaji parthasarathy (2007). "The Role of World Markets and International Networks in the Evolution of India's High-tech Clusters: Riding the coat tails or bucking the trend?" In A. Shaw (ed.) *Indian Cities in Transition*. New Delhi: Orient Longmans.

Guhathakurta, S. (2005) "Telling Stories with Models: Reflecting on land use and ecological trends in the San Pedro Watershed." In Peter Fisher and David Unwin (eds.) *Re-Presenting GIS*. New York, NY: John Wiley & Sons, pp. 257-274.

Sadalla, E., S. Guhathakurta, and Susan Ledlow (2005) "Environment and Quality of Life: A Conceptual Analysis and Review of Empirical Literature." In E. Sadalla (ed.) *The U.S.-Mexican Border Environment: Dynamics of Human-Environment Interactions*. San Diego, CA: San Diego State University Press, pp. 29-79.

Guhathakurta, S. and E. Sadalla (2005) "Modeling the Impact of Environment on Quality of Life." In E. Sadalla (ed.) *Anticipating Future Human- The U.S.-Mexican Border Environment: Dynamics of Human-Environment Interactions*. San Diego, CA: San Diego State University Press, pp. 229-253.

Sadalla, E. S. Ledlow and S. Guhathakurta (2005) "Using System Dynamics Models of the Environment to Teach Sustainability Science: The Bordor+20 Model as a Pedagogical Device." In E. Sadalla (ed.) *Anticipating Future Human- The U.S.-Mexican Border Environment: Dynamics of Human-Environment Interactions*. San Diego, CA: San Diego State University Press, pp. 185-204.

Guhathakurta, Subhrajit (2003). "Advances in Urban and Environmental Modeling: Surveying the terrain and demarcating frontiers". In S. Guhathakurta, (ed.), *Integrated Land Use and Environmental Models: A Survey of Current Applications and Research*. Springer-Verlag.

Pijawka, David, Subhrajit Guhathakurta, Sarah Liebidnik, John Blair and Suleiman Ashur (2001). "Environmental Stigma, Social Amplification and Equity in Central Cities: Case Study of South Phoenix, Arizona." In J. Flynn, P. Slovik, and H. Kuneuther (eds.) *Risk, Media, and Stigma: Understanding Modern Challenges to Modern Science and Technology*. London: Earthscan. Chapter 11, pp. 187-201.

Journal Articles (Student coauthors in bold)

Chun BumSeok and Subhrajit Guhathakurta (forthcoming) The Impacts of Three Dimensional Surface Characteristics on Urban Heat Islands over the Diurnal Cycle. *The Professional Geographer*.

Zhang, Wenwen, Subhrajit Guhathakurta, and Catherine Ross (forthcoming). "Trends in Automobile Energy Use and GHG emissions in Suburban and Inner City Neighborhoods: Lessons from Metropolitan Phoenix, USA." *Energy Procedia*.

Ross, Catherine, **Elliot Sperling**, and Subhrajit Guhathakurta (forthcoming). "Adopting a New Energy Economy in the United States." *Energy Procedia*.

Chun, Bumseok, and Subhrajit Guhathakurta. "Daytime and Nighttime Urban Heat Islands Statistical Models for Atlanta." *Environment and Planning B: Planning and Design*, 2015, 0265813515624685.

Zhang, Wenwen, Subhrajit Guhathakurta, Jinqi Fang and Ge Zhang (2015). Exploring the impact of shared autonomous vehicles on urban parking demand: An agent-based simulation approach. *Sustainable Cities and Society* **19**: 34-45.

Guhathakurta, Subhrajit and Eric Williams (2015). Impact of Urban Form on Energy Use in Central City and Suburban Neighborhoods: Lessons from the Phoenix Metropolitan Region. *Energy Procedia* **75**: 2928-2933.

Ray, Indro and Subhrajit Guhathakurta (2015). The impact of housing submarkets and urban form on the foreclosure crisis in U.S. counties. *Housing Policy Debate* **25** (3): 549-573

Zhang Ge, Subhrajit Guhathakurta, **Susannah Lee**, **Amy Moore** & Lijiao Yan (2014). Grid-based land-use composition and configuration optimization for watershed stormwater management. *Water Resources Management*. DOI 10.1007/s11269-014-0642-y

Karan, Ebrahim P., Ramachandra Sivakumar, Javier Irizarry, M. ASCE, and Subhrajit Guhathakurta (2013). Digital modeling of construction site terrain using remotely sensed data and Geographic Information Systems analyses. *ASCE journal of CEM*.

Middel, Ariane C., **Kathrin Häb**, Anthony J Brazel, Chris Martin, and Subhrajit Guhathakurta (2013). Impact of urban form and design on mid-afternoon microclimate in Phoenix local climate zones. *Landscape and Urban Planning*.

Zhang Ge, S. Guhathakurta, G. Dai, L. Wu, and L. Yan. 2013. The control of land-use patterns for stormwater management at multiple spatial scales. *Environmental Management* **51**(3).

Engel, Daniel, Sebastian Petsch, Hans Hagen, and Subhrajit Guhathakurta. 2012. "Neighborhood Relation Diagrams for Local Comparison of Carbon Footprints in Urban Planning." *Information Visualization* (January 12). doi:10.1177/1473871611433714. <http://ivi.sagepub.com/content/early/2012/01/12/1473871611433714>.

Aggarwal, R. M., S. Guhathakurta, S. Grossman-Clarke, and **V. Lathey**. 2012. "How Do Variations in Urban Heat Islands in Space and Time Influence Household Water Use? The Case of Phoenix, Arizona." *Water Resources Research* **48** (6): W06518.

Golub, A. S. Guhathakurta, and **B. Sollapuram** (2012). Spatial and temporal capitalization effects of light rail in Phoenix: from conception, planning, and construction to operation. *Journal of Planning Education and Research* (**32**, 4): 415-429.

Frijia, Stephane, Subhrajit Guhathakurta, and Eric Williams. 2011. "Functional Unit, Technological Dynamics, and Scaling Properties for the Life Cycle Energy of Residences." *Environ. Sci. Technol.* **46** (3): 1782-1788. doi:10.1021/es202202q.

Guhathakurta, Subhrajit, and Hans Hagen. 2011. From the Guest Editors. *Journal of*

Urban Technology. Special Issue on “Planning Support Toolkits for Building Sustainable Communities”. 18 (4): 1–3. doi:10.1080/10630732.2011.648430.

Petsch, S., S. Guhathakurta, **L. Heischbourg**, K. Müller, and H. Hagen. 2011. “Modeling, Monitoring, and Visualizing Carbon Footprints at the Urban Neighborhood Scale.” *Journal of Urban Technology* 18 (4): 81–96.

Myint, S., **J. Jain**, and S. Guhathakurta (2010). Patterns and Rates of land Use and Land Cover Change: A Case Study of Ambos Nogales (Arizona and Sonora) 1985-2004. *Journal of Latin American Geography* 9 (3): 245-274.

Guhathakurta, Subhrajit and Patricia Gober (2010). Linking Urban Heat Islands to Water Use in Phoenix: A Path Analysis. *Journal of Planning Education and Research*. 30 (1) 40-51.

Lathey, Vasudha, S. Guhathakurta, and R. Aggarwal (2009). The Impact of Sub-regional Variations in Urban Sprawl on the Prevalence of Obesity and Related Morbidity. *Journal of Planning Education and Research* 29 (2) 127-141.

Mushkatel, Alvin, Subhrajit Guhathakurta, **Jacqueline D. Thompson**, and Michael Franczak (2009) Housing Choice, Outcomes, and Neighborhood Characteristics in Seriously Mentally Ill/ Homeless Housing Programs: Analysis of a Phoenix Survey of SMI / Homeless Population. *International Journal of Public Administration* 33: 481-519.

Ke Li, Peng Jhang, John Crittenden, Subhrajit Guhathakurta, Anil Sawhney, Harindra Fernando, Peter McCartney, Nancy Grimm, **Himanshu Joshi**, Goran Konjevod, Yu-jin Choi, **Sonja Winter**, Daniel Gerrity, **Ramzy Kahhat**, Yongsheng Chen, Braden Allenby and Paul Torrens (2007). Development of a Metamodel for More Informed Sustainable Urban Development: Preliminary Results. *Environmental Science and Technology*, 41 (14): 5130-5136.

Guhathakurta, Subhrajit and Patricia Gober. (2007) Impact of Urban Heat Island on Residential Water Use in the city of Phoenix. *Journal of American Planning Association* 73 (3): 317-329.

Stimson, Robert and Subhrajit Guhathakurta (2007). What is Driving the Growth of New ‘Sun-Belt’ Metropolises? Quality of Life and Urban Regimes in Greater Phoenix and Brisbane-South East Queensland. *International Planning Studies* 12 (2): 129-152.

Dantico, M., S. Guhathakurta and Alvin Mushkatel (2007) “Housing Quality and Neighborhood Redevelopment: A Study of Neighborhood Initiatives in Phoenix, Arizona” in *International Journal of Public Administration, Symposium on Social Equity and Public Policy* 30, 1: 23-45.

Bush, J., S. Guhathakurta, J. Dworkin, and J. Keane (2006) “Examination of Phoenix Regional Water Supply for Sustainability and Economic carrying Capacity.” in *Natural Resources Journal* 46 (4): 925-958.

Joshi, Himanshu, Subhrajit Guhathakurta, Goran Konjevod, John Crittenden and Ke Li (2006). Assessment of Impacts of the Light Rail on Urban Growth in the Phoenix

Metropolitan Region Using UrbanSim Modeling Environment. *Journal of Urban Technology* **13**, 2: 91-111.

Bardhan, Ashok and Subhrajit Guhathakurta (2004). "Globalization of Sub-national Regions: Exports and international social and business networks." *Journal of Contemporary Economic Policy* **22** (2): 225-236.

Guhathakurta, Subhrajit (2002). "Urban Modeling as Storytelling: Using Simulation Models as a Narrative." *Environment and Planning B* **29**: 895-911.

Guhathakurta, Subhrajit and Alvin Mushkatel (2002). "Race and the Impact of Section 8 Housing Clients' Location on Housing Quality." *Urban Affairs Review* **37** (4): pg. 521-542.

Guhathakurta, Subhrajit, David Pijawka and **Suleiman Ashur** (2000). "Planning for Hazard Mitigation in the U.S.-Mexican Border Region: An Assessment of Hazardous Waste Generation Rates for Transportation." *Journal of Borderlands Studies* **15** (2).

Corcuera, Elisa, Frederick Steiner, and Subhrajit Guhathakurta (2000). Potential Use of Land Trust Mechanism for Conservation on the Mexican Border." *Journal of Borderlands Studies* **15** (2).

Steiner, Frederick. R., **John Blair**, Laurel McSherry, Subhrajit Guhathakurta, **Joaquin Marrufo**, and **Matthew Holm** (2000) "Designing an Environmentally Sensitive Area Protection System for the Upper San Pedro Drainage Basin (Mexico and USA)." *Landscape and Urban Planning* **49** (3/4): 129-148.

Guhathakurta, Subhrajit and Alvin Mushkatel (2000). "Does Locational Choice Matter? A Comparison of Different Subsidized Housing Programs in Phoenix, Arizona." *Urban Affairs Review* **35** (4): 520-540.

Guhathakurta, Subhrajit (1999). "Urban Modeling and Its Relation to Contemporary Planning Theory: Is There a Common Ground?" *Journal of Planning Education and Research* **18**: 281-292.

Blair, John, David Pijawka, Subhrajit Guhathakurta and **Sarah Liebidnik** (1999). "Environmental Contamination, Equity and Property Values in a Disadvantaged Urban Area: A Case Study of South Phoenix, Arizona." *Journal of Planning Education and Research* **18**: 113-123.

Guhathakurta, Subhrajit and **Michele Wichert** (1998). "Who Pays for Growth in the City of Phoenix: An Equity Based Perspective on Suburbanization." *Urban Affairs Review* **33**: 813-838.

Guhathakurta Subhrajit, and Balaji Parthasarathy (1997). "An Indian Technopole and the Transformation of Urban Space: Global imperative and local realities in the Bangalore Metropolitan Area." In V. Prakash (ed.) *Theatres of Decolonization -- Architecture, Agency, Urbanism: Proceedings*. Seattle: University of Washington, pp. 213-246.

Guhathakurta, Subhrajit and Edward J. Blakely (1995). "Military Base Closures and Regional Economies: Assessing the San Francisco Bay Area." *Lusk Review of Real Estate and Urban Transformation* **1**: 8-21.

Guhathakurta, Subhrajit with Michael Smith-Heimer and John Landis (1994). "California Housing Markets During the 1990s." *Mortgage Banking* **54**: 46-67.

Guhathakurta, Subhrajit (1994). "Electronics Policy and the Television Manufacturing Industry: Lessons from India's Liberalization Efforts," *Economic Development and Cultural Change* **42**: 845-868.

Guhathakurta, Subhrajit (1993). "Economic Independence through Protection? Emerging Contradictions in India's Small-scale Sector Policies," *World Development* **21**: 2039-2054.

Guhathakurta, Subhrajit (1992). "Regulation of Firm Size in Industrial Development: The Experience of Two Manufacturing Sectors in India," *Berkeley Planning Journal* **7**: 76-97.

Book Reviews:

A Review of "Heat Islands: Understanding and Mitigating Heat in Urban Areas" Lisa Gartland.(2011). London, UK: Routledge. 208 pages. \$64.95 (paperback). In *Journal of American Planning Association* **79** (3): 256-257.

Guhathakurta, Subhrajit (2007). Review of "With Speed and Violence" by Fred Pierce (Beacon Press, 2007). In The The KnowledgePortal: Global Climate Change and National Security Network. August - September, 2007 - Vol 1, Issue 1.

Guhathakurta, Subhrajit (2003). Review of "Land Market Monitoring for Smart Urban Growth" edited by Gerrit J. Knaap. Cambridge. MA: Lincoln Institute of Land Policy. *Journal of American Planning Association* **69** (2) 212-213.

Guhathakurta, Subhrajit (2006). Review of *Sustaining Urban Networks: The Social diffusion of large technical systems*. Oliver Coutard, Richard E. Hanley, and Rae Zimmerman, editors. New York: Routledge for the *Journal of Urban Technology* **12** (2): 101-111.

Reports / Working Papers

Guhathakurta, Subhrajit (2008). "Contemplating Planning in the Era of Climate Change." In The The KnowledgePortal: Global Climate Change and National Security Network. February - March, 2008 - Vol 1, Issue 4.

Collins, K., S. Guhathakurta, D. Pijawka, E. Sadalla, J. L. Garcia, and A. Renfla (2005). "The Border Observatory: Assessment of Perceptual and Objective Quality of Life Indicators in the U.S.-Mexico Border". A research report to the Southwest Center for Environmental Research and Policy (87 pages).

Sadalla, Edward, Subhrajit Guhathakurta, & Susan Ledlow. (2002) "Integrated Assessment of Human-Environmental Systems in the U.S. - Mexico Border Region" Monograph prepared for Southwest Center for Environmental Research and Policy.

- Guhathakurta, Subhrajit. 2002. "Technology Strategies in Manufacturing: Implementing Enterprise Systems in India's Auto and Petroleum Industries". *Research Report*. Indian Institute of Information Technology, Bangalore.
- Guhathakurta, Subhrajit, Joseph Ewan and Mary Kihl (2000). *Transforming Apache Boulevard*. Tempe: Herberger Center for Design Excellence, Arizona State University.
- Guhathakurta, Subhrajit and Ashok K. Bardhan (2000). "Immigration, NAFTA, and Arizona's Exports in the 1990s." *Herberger Center Working Paper*. Tempe, AZ: Arizona State University.
- Guhathakurta, Subhrajit (2000). Acceptance speech for the Chester Rapkin Award for Best Article in JPER. *Journal of Planning Education and Research* **19**: 321.
- Guhathakurta, Subhrajit (1996). "Growth Character – Based on the Growth Character Charrette Team Discussions and Review." *North Sonoran Land-Use Charrette*. (Tempe: Herberger Center for Design Excellence, Arizona State University).
- Guhathakurta, Subhrajit and Michele Wichert (1998). "The Suburban Subsidy: Another Engine of Growth in Phoenix." *Herberger Center Working Paper No. 3*. Tempe, AZ: Arizona State University.
- Landis, John, Subhrajit Guhathakurta, William Huang and Ming Zhang (1995). "Rail Transit Investments, Real Estate Values, and Land Use Change: A Comparative Analysis of Five California Rail Transit Systems." *University of California Transportation Center Working Paper No. 285* (Berkeley: University of California).
- Landis, John, Subhrajit Guhathakurta and Ming Zhang (1994). "Capitalization of Transit Investments into Single-Family Home Prices: A Comparative Analysis of Five California Rail Transit Systems." *Institute of Urban and Regional Development Working Paper 619* (Berkeley: University of California, July).
- Guhathakurta, Subhrajit and Edward Blakely (1994). "From Military Bases to New Industries and Stronger Regional Economies: Assessing the Potential in the Bay Area." *Center for Real Estate and Urban Economics Working Paper No. 94-221* (Berkeley: University of California, April).
- Guhathakurta, Subhrajit (1992). "Electronics Policy and the Television Manufacturing Industry: Lessons from India's liberalization efforts," *Institute of Urban and Regional Development Working Paper, WP-571* (Berkeley: University of California, April).
- Hall, Peter, Michael Bernick, Subhrajit Guhathakurta, Jason Munkrez, and Asha Jadeja (1992). "The New Emphasis on Transit Based Housing Throughout the United States," *National Transit Land Use Center Working Paper* (Berkeley: University of California, April).
- Landis, John, Subhrajit Guhathakurta, et al. (1991). "California Real Estate Opportunities in the 1990s: Is California Still a Good Place to Invest?" (Berkeley: Center for Real Estate and Urban Economics, September).

Landis, John, Subhrajit Guhathakurta, and Victor Rubin (1991). "Public Sector Employment in Oakland." *University-Oakland Metropolitan Forum Working Paper, WP-021* (Berkeley: University of California, July)

Landis, John, Subhrajit Guhathakurta, and Elissa Brown (1990). "Business Perceptions of Oakland's Business Climate." *University-Oakland Metropolitan Forum Working Paper, WP 017* (Berkeley: University of California, June).

Guhathakurta, Subhrajit (1989). *Solano County Profile*. Fairfield: Solano Economic Development Corporation.

Landis, John and Subhrajit Guhathakurta (1989). "The Downsized Economy: Employment and Establishment Trends in Oakland, 1981-1986." *University Oakland Metropolitan Forum Working Paper - WPO08*, (Berkeley: Institute of Urban and Regional Development, January).

Conference Papers

- 2014 Wenwen Zhang, Subhrajit Guhathakurta, Jingqi Fang, Ge Zhang. Exploring the Impact of Shared Autonomous Vehicles on Urban Parking Demand. ACSP 54th Annual Conference, October 30- November 2, Philadelphia, PA, 2014.
- 2014 Lee, Y., & Guhathakurta. S. (2014, November). How do households economize on travel during periods of high gasoline prices? An examination of trip chaining behavior in Atlanta. Paper presented at the meeting of the Association of Collegiate Schools of Planning, Philadelphia, PA.
- 2014 Guhathakurta, S., E. Williams, and Wenwen Zhang. Urban Form and Energy Use in New and Old Residential Areas in the Phoenix Metropolitan Region. 11th Symposium of International Urban Planning and Environment Association – IUPEA, La Plata, Argentina, Sept 16-19, 2014.
- 2014 Guhathakurta, S., E. Williams, and Wenwen Zhang. The impact of neighborhood urban form on household energy use: A case study of Phoenix, Arizona, USA. 2nd International Conference on Urbanization and Global Environmental Change. Taipei, Taiwan. November 6-8, 2014.
- 2012 The Impact of Housing Submarkets and Urban Form on the Foreclosure Crisis in U.S. Urban Counties. Presentation at the North American Regional Science Conference. Ottawa, Canada. November 9.
- 2012 Planning at Crossroads. Presentation at the Association of Collegiate Planning Schools of Planning Conference. Cincinnati. November 1.
- 2012 Planning at Crossroads: Charting a path through post-normal theory and practice. Paper presented at the Association of European Schools of Planning Conference. Ankara, Turkey. July 15.

- 2012 Impact of different urban residential subdivisions on energy use and greenhouse gas emissions. Paper presented at the National Conference of the American Planning Association. Los Angeles. April 14.
- 2011 The Impact of Subregional Variations in Urban Sprawl on the Prevalence of Obesity and Related Morbidity. Paper presented at the Center for Disease Control – GIS day. November 16.
- 2010 Modeling and Simulating Carbon Footprints for Household Travel Behavior: Application to Maricopa County, AZ. Paper presented at the First International Symposium on Advances in Transport Sustainability. November 19.
- 2010 Estimating and Visualizing Carbon Footprints for Travel Behavior at the Household Level. Paper presented at International Conference on Global Environmental Change. International Human Dimensions Programme on Global Environmental Change. Tempe, AZ. October 16.
- 2009 Residential Land Use, the Urban Heat Island, and Water Use in Phoenix: A Path Analysis. Presentation / Paper at the North American Regional Science Council Annual Meeting. San Francisco. November 21.
- 2009 Modelling, Monitoring, and Visualizing Carbon Footprints at the Urban Neighbourhood Scale. (Petsch, S., Heischbourg, L., Müller, K., Guhathakurta, S., and Hagen, H.) UPE 8 (8th International Conference on Urban Planning and Environment, March 23rd- 26th).
- 2009 Monitoring und Visualisierung von Carbon Footprints im urbanen Raum (Petsch, S., Heischbourg, L., Müller, K., Guhathakurta, S., and Hagen, H.), REAL CORP (April 22th - 25th).
- 2009 Visualizing indicators of suburbanizations by using surfaces and flexible structures. (Petsch, S., Heischbourg, L., Müller, K., Guhathakurta, S., and Hagen), CUPUM 2009, June 16th-18th.
- 2009 Indicators of Urban Sprawl - A three-dimensional visualization (Poster). (Petsch, S., Heischbourg, L., Müller, K., Kamel, N., Guhathakurta, S., and Hagen, H.). UPE 8 (8th International Conference on Urban Planning and Environment, March 23rd- 26th)
- 2008 Visualizing Urban Sprawl (Poster). (Petsch, S., Heischbourg, L., Müller, K., Kamel, N., Guhathakurta, S., and Hagen, H.). IEEE VIS Conference, Ohio, USA.
- 2008 Visualizing future 3-dimensional neighborhoods in Phoenix: An application of incorporating empirical methods with computational graphics (with A. Middel, H. Hagen, P. Olech, and F. Höpe). Virtual Geographic Environments Conference. The Chinese University of Hong Kong, January 8, 2008.

- 2008 Assessment of Perceptual and Objective Quality of Life Indicators in the U.S.-Mexico Border: Towards a Border-wide Longitudinal Database (with K. Collins, E. Sadalla, D. Pijawka, and J. Ley). Conference on: Finding the Path to Sustainable Development: Measuring Development and Quality of Life in the U.S.-Mexican border. Autonomous University of Baja California, Mexicali, February 28.
- 2007 Impact of Urban Heat Island on Residential Water Use. Presentation at the Annual Conference of North American Regional Science Council, Savannah, GA, November 8.
- 2007 Security Impacts of Global Climate Change: Implications for planning. Presented at Association of Collegiate Schools of Planning Conference, Milwaukee, October 18.
- 2007 The Digital Phoenix Project: A multidimensional journey through time. Coauthored. Presented at the Computer Use in Urban Planning and Urban Management Conference, Iguasso Falls, Brazil. July 10.
- 2006 Planning Methods for Sustainable Communities: A Transdisciplinary Framework. Coauthored with David Pijawka and Timothy Beatley. Paper presented at World Planning Congress, Mexico City, July 11-15.
- 2005 Deconcentrating the Poor: The Effects of Housing Vouchers in Phoenix during President George Bush's First Term. Coauthored with Alvin Mushkatel. Paper presented at the Association of Collegiate Schools of Planning Conference at Kansas City, MO. October 26-30.
- 2005 Impact of Urban Heat Island on Residential Water Use. Coauthored with Patricia Gober. Paper presented at North American Regional Science Council. November 10-12.
- 2005 Informed Decision Making towards a More Sustainable Urban Development. Coauthored paper presented at International Society for Industrial Ecology Conference at Stockholm. June 12-15.
- 2005 Simulating and Visualizing Phoenix Urban Futures with UrbanSim Modeling Environment. Poster presentation at International Society for Industrial Ecology Conference at Stockholm. June 12-15.
- 2005 Simulating Impact of Urban Growth in phoenix: An application of the UrbanSim modeling environment. Coauthored paper presented at Computer Use in Urban Planning and Urban Management Conference, University College London. June 29-July 1.

- 2004 Urban modeling as a pedagogic enterprise: Traversing the path from deterministic models to models of self-organization. Paper presented at the Association of European Schools of Planning Conference, Grenoble, France, July 1-3.
- 2003 The Role of World Markets and International Networks in the Evolution of India's High-Tech Clusters: Riding the coat tails or bucking the trend? Paper presented at the Joint ACSP-AESOP Congress at Leuven, Belgium, July 12, 2003. Coauthored with Prof. Balaji Parthasarathy.
- 2002 What is Driving the Growth of New Sun-belt Metropolises: Quality of life and Urban Regions in Greater Phoenix and Brisbane-South East Queensland. With Prof. Bob Stimson. Presented at the North American Regional Science Conference at Puerto Rico. November 15, 2002
- 2002 The Impact of Neighborhood on Supported Housing and Supervised Independent Living Programs. With Prof. Alvin Mushkatel. Presented at the Annual Arizona Council to End Homelessness Meeting, October 2, 2002. Phoenix, AZ.
- 2001 Globalization of Sub-national Regions: Exports and international social and business networks (with Ashok Bardhan). Paper presented at the First World Planning Congress. Shanghai, China, July 10-13.
- 2001 Urban Modeling as Storytelling: Using Simulation Models as a Narrative. Paper presented at the First World Planning Congress. Shanghai, China, July 10-13.
- 2000 Race, Ethnicity and the Location Decisions of Section 8 Housing Clients in Phoenix, AZ. (Co-authored with Alvin Mushkatel). Paper presented at the Association of Collegiate Schools of Planning Conference at Atlanta, November.
- 2000 Modeling as Story-telling: Reconstructing the past and the possible future of a bi-national watershed region (Co-authored with Taruna Tayal and Michael Kidd). Paper presented at the Association of Collegiate Schools of Planning Conference at Atlanta, November 2000.
- 2000 Social and Economic Factors Driving Land Use Change in the Upper San Pedro Watershed (Co-authored with Taruna Tayal and Michael Kidd). Presented at the Southwest Center for Environmental Research and Policy Technical Conference, Juarez, Mexico, October 2000.
- 1999 Impact of Assisted Housing Units on Phoenix Neighborhoods (co-authored with Alvin Mushkatel). Paper presented at the Association of Collegiate Schools of Planning Conference at Chicago, October 1999.
- 1996 Using GIS in Risk Assessment of Transporting Hazardous Wastes in the U.S.- Mexico Border Region: Arizona Sonora Case Study (co-authored with Suleiman Ashur, K. David Pijawka, and Hadi Baaj) Presented at the Southwest Center for Environmental Research and Policy Technical Conference, San Diego, September.

- 1995 Who Pays for Growth in the City of Phoenix? An Equity Based Perspective on Suburbanization
Presented at the 38th annual Association of Collegiate Schools of Planning Conference at Toronto, Canada, July.
- 1995 Re-examining Theories of Structural Change in Regional Economies: Separating Myth from Reality. Presented at the 37th annual Association of Collegiate Schools of Planning Conference
Detroit, Michigan, October.
- 1995 Indian Technopoles and the Transformation of Urban Space: Global Imperative, Local Realities (with Balaji Parthasarathy). Presented at the Theatres of Decolonization Conference, Chandigarh, India, January.
- 1994 From Military Bases to Bases for High Technology: The Potential in Alameda County Naval Installations
Presented at the 36th Annual Association of Collegiate Schools of Planning Conference Tempe, Arizona, November.
- 1992 Regulation of Firm Size in Industrial Development: The experience of two manufacturing sectors in India
Presented at the 34th annual Association of Collegiate Schools of Planning Conference, Columbus, Ohio, October.
- 1991 Electronics Policy and the Television Industry: Lessons from India's Liberalization Efforts
Presented at the first joint American and European Planning Congress, Oxford, U. K., July.

Invited Lectures and Presentations

- 2014 Invited Keynote Address: Leveraging GeoSpatial Technologies in Planning for Sustainable Urban Futures. Keynote delivered at 33rd International Conference on Semantic and Conceptual Modeling. Atlanta. November.
- 2014 Invited lecture at RCEES, Chinese Academy of Science. The Big Squeeze and the New Normal. June 4.
- 2014 Presentation at the Computational Sustainability Workshop, Georgia Tech. Application of Geospatial Technologies for Enhancing Urban Mobility, Community Health, and Quality of Life. April 17.
- 2013 Invited lecture at Auburn University (Jointly organized by Department of Urban Planning and School of Geology and Geographical Sciences). Confronting an Uncertain Future. September 19.
- 2013 Invited Keynote Address: The big Squeeze and the New Normal: Implications for planning. UNHABITAT-Partner University Initiative. Tampa. May 10.
- 2012 Invited lecture at Department of Geography, University of Georgia on "Confronting an Uncertain Future Planning in the era of Climate Change and other global crises." September 14.

- 2012 Invited lecture at College of Architecture Research Forum, Georgia Tech on “Confronting an Uncertain Future Planning in the era of Climate Change and other global crises.” August 30.
<https://smartech.gatech.edu/bitstream/handle/1853/44683/guhathakurta.mp4?sequence=1>
- 2012 Presentation at the Sino-US Workshop on Environmental Protection and Urban Sustainable Development, Tianjin University, China, on “Impact of different urban residential subdivisions on energy use and greenhouse gas emissions.” June 14.
- 2010 Invited presentation at University of South Florida on “Confronting an Uncertain Future: Planning in the Era of Climate Change and other Global Crises”. Sponsored jointly by Department of Sociology and School of Global Sustainability. October 26.
- 2010 Invited presentation at the Greater Phoenix Chamber of Commerce forum on Eco-Nomics: Sustainability and Your Bottom Line for a presentation on “Alternative Energy in Arizona”. March 5.
- 2009 Invited presentation at Council for Scientific and Industrial Research, Pretoria, South Africa on “Modeling, monitoring and visualizing sustainability indicators”. July 7.
- 2009 **Keynote Address.** “Confronting an Uncertain Future: Planning as if Climate Change Matters”: Urban Planning and Environment Conference, Kaiserslautern, Germany. March 23.
- 2008 Invited presentation at the Center for Advanced Spatial Analysis (CASA), University College London on “Modeling, Visualizing, and Monitoring Sustainable Urban Futures: The Digital Phoenix Project.” October 7.
- 2008 Invited Presentation at Planning Africa Congress, Johannesburg, South Africa. The Digital Phoenix Project: A Multidimensional Analysis of Phoenix’s Futures. April 15.
- 2008 Invited presentation at the Workshop conducted by Council for Scientific and Industrial Research, Pretoria, South Africa. Discussion on the modeling and simulation of cities and regions as social ecological systems in support of integrated development planning. Maropeng Hotel. Cradle of Mankind, North of Johannesburg. April 16.
- 2007 Invited lecture at Carlton University, Department of Computer Science. The Digital Phoenix Project: A multidimensional journey through time. June 20.

- 2006 Invited lecture at the United States Agency for International Development, U.S. Embassy in Mexico City. The Border Observatory: Monitoring Quality of Life in the U.S.-Mexico Border Region. July 14, 2006.
- 2005 Invited lecture at Jornada Basin Long Term Ecological Research site, New Mexico State University. Simulating and Visualizing Phoenix Urban Futures with URBANSIM Modeling Environment. December 2.
- 2005 Invited lecture at UFZ Center for Environmental Research, Leipzig, Germany. Simulating and Visualizing Phoenix Urban Futures with URBANSIM Modeling Environment. June 17.
- 2004 Invited presentation to All Scientists Meeting at the Center for Environmental Studies on Simulating and Visualizing Phoenix Urban Futures with URBANSIM Modeling Environment. October 18.
- 2004 Invited seminar to Maricopa Association of Governments. Simulating and Visualizing Phoenix Urban Futures with URBANSIM Modeling Environment. September 24.
- 2004 Invited guest lecture: The Pedagogy of Modeling: Space, Time and Dynamic Simulation in Land Use Change Models. At the Center for Advanced Spatial Analysis, University College London, July 15.
- 2003 Invited lecture on “Modeling as a theoretical endeavor: Exploring the pedagogical and narrative structures of spatial simulation” at Ecosystems Engineering Seminar, Arizona State University. April 9.
- 2002 Invited Lecture at Ph.D. program in Environmental Planning and Design, College of Architecture and Environmental Design, Arizona State University titled “Dynamic Spatial Models in Urban and Regional Planning” September 5, 2002.
- 2002 Invited Lecture at University of Queensland, Australia on “Dynamic Spatial Models in Urban and Regional Planning” May 1, 2002
- 2001 Invited Lecture at Indian Institute of Information Technology titled “Development and Application of Dynamic Spatial Simulation Models of the Urban Environment: A Pedagogic Approach. November 24, 2001.
- 2001 Invited to participate in a seminar organized by Economic and Social Research Council of United Kingdom titled “Spatial and Temporal Representation in a Digital Geography”. August 30 - September 2, 2001.
- 2001 Invited by Dr. Rakesh Mohan, Economic Advisor, the Ministry of Finance, Govt. of India, to present our work on the state of Information Technology Industry in India as well as the project on technology diffusion on December 20th, 2001.

- 2000 Invited lecture at Center for Advanced Spatial Analysis, University College, London, titled "Development and Application of Dynamic Spatial Simulation Models of the Urban Environment: A Pedagogic Approach" on September 27th, 2001.
- 1999 Keynote Inaugural Lecture of GIIIC (Gujarat Infrastructure Investment Corporation) Faculty Chair in Infrastructure Finance and Development titled "Promoting Information Technology Industries in India: Lessons from Bangalore and Around the World." Ahmedabad Management Association, Ahmedabad, January 5.
- 1999 Promoting Information Technology Industries in India: Lessons from Bangalore and Around the World. An invited seminar presented at the Indian Institute of Management, Calcutta, January 13.
- 1998 Technopole – Bangalore. An invited seminar presentation at the School of Urban and Regional Planning, University of Southern California, January 30.
- 1994 A Reassessment of India's Small Industry Policies. An invited seminar presented at the Indian Institute of Management, Calcutta, India, January.

Teaching Experience

At Georgia Institute of Technology

Urban and Regional Development Theory (CP6032): A course exploring the interaction between space and economic behavior. It provides a framework for understanding the use and value of land in the context of competing demand for space and locational advantage in urban regions.

Urban and Regional Development Theory (CP8300): A doctoral course examining principal urban-regional economic and spatial theories for understanding economic, social and physical forces influencing location, growth and decline of cities and regions.

At Arizona State University (ordered by frequency of teaching the class)

Advanced Planning Methods (PUP622); an advanced quantitative methods course for graduate students. This is a course I taught from 1994 till 2008 except for 2002 and 2009.

Average score on Q22: *Overall the Quality of the Course is High* 1.61
(1= excellent, 5=unsatisfactory)

Land Economics (PUP642); a graduate course in land and housing markets, location theory, and urban land-use change. I taught this course from 1994 to 2000 and from 2002 to 2004.

Average score on Q22: *Overall the Quality of the Course is High* 1.43

(1= excellent, 5=unsatisfactory)

Urban Economics (PUP434); an undergraduate urban economics course. I taught this course three times (2002-2004).

Average score on Q22: *Overall the Quality of the Course is High* 1.78

(1= excellent, 5=unsatisfactory)

Land Use Planning (PUP598; later PUP544); a graduate course in planning land allocation, land management, and zoning. Resurrected this course in 1996 and continued to teach it in 1997 and 2000.

Average score on Q22: *Overall the Quality of the Course is High* 1.15

(1= excellent, 5=unsatisfactory)

Graduate Thesis Seminar (PUP591); a graduate seminar aimed at helping students in developing a thesis proposal. It focuses on developing valid research questions and a rigorous research methodology for answering those questions. I taught it in 1994 and 1995. The course has been discontinued following the changes in capstone requirement for MEUP degree (Masters Thesis is no longer a requirement but an option).

Interdisciplinary Research Seminar (EPD700); a course in the intellectual foundations of methods of inquiry for doctoral students in Environmental Planning and Design. This course was developed and taught for the first batch of Ph.D. students in 1996.

Average score on Q22: *Overall the Quality of the Course is High* 1.0

(1= excellent, 5=unsatisfactory)

Introduction to Urban Planning (PUP301); an introductory urban planning course for upper division undergraduate students. I taught it once in 1997.

Average score on Q22: *Overall the Quality of the Course is High* 1.9

(1= excellent, 5=unsatisfactory)

Planning Theory and Processes (PUP520); a graduate seminar in planning theory. I taught it once in 2005

Average score on Q22: *Overall the Quality of the Course is High* 1.56

(1= excellent, 5=unsatisfactory)

International Planning (PUP598); a graduate seminar in the global aspects of planning and development. 2007.

Average score on Q22: *Overall the Quality of the Course is High* 1.2

(1= excellent, 5=unsatisfactory)

Planning Methods I: Planning Research (PUP524); a first course in research methods for first year graduate students. I taught this course in 2002 and 2009. 1.8

(1= excellent, 5=unsatisfactory)

Planning Methods Using Computers (PUP322); an undergraduate course in the use of computers to solve problems in planning applications. Includes spreadsheets, statistics, and GIS. I taught this course once in 1996

Sustainable Urban Dynamics (SOS 323); an undergraduate course developed for the students in the School of Sustainability. Taught 2009 Fall and 2010 Spring.

Sustainable Urban Dynamics (SOS523): A graduate course taught in Spring 2008. 1.1
(1= excellent, 5=unsatisfactory)

Modeling and Simulating Urban Environments (PUP598): A graduate course taught Spring 2010. 1.1
(1= excellent, 5=unsatisfactory)

At University of Queensland in Brisbane, Australia

Analytical Planning and Research Techniques (PLAN4002): A course introducing research methods to undergraduate students in Planning.

At Iowa State University

Planning Theory (CRP383; co-taught); an undergraduate introductory course in planning theory

Planning Methods (CRP520); a graduate introductory course in planning methods

Planning Analyses and Techniques (CRP271; co-taught); an undergraduate course in quantitative planning methods.

Planning Theory (CRP561); a graduate seminar in planning theory

At the University of California-Berkeley

Microeconomic Theory for Planning Practice (CP113; co-taught); undergraduate course in microeconomic theory.

Graduate (Masters and Ph.D.) Theses Chaired

Michelle Wichert, Planning, Arizona State University (*completed 1996*)

Thesis title: Who pays for growth? An analysis of housing in the city of Phoenix

Coleen Charsky, Planning, Arizona State University (*completed 1997*)

Thesis title: Recreational facility planning: a community-based investment in youths

Nitra Adams, Planning, Arizona State University (*completed 1999*)

Thesis title: Residential segregation: an examination of the Phoenix Metropolitan Valley

Jane Ploeser, Planning, Arizona State University (*completed 1999*)

Thesis title: Home as workplace: concept and planning implications

Stacy Anderson, Planning, Arizona State University (*completed 1999*)

Thesis title: The role of small manufacturing firms within Maricopa County (1987 to 1994)

Dan Sirois, Planning, Arizona State University (*completed 1999*)

Thesis title: Patterns of office development: the case of Metropolitan Phoenix

Joe D'Onofrio, Planning, Arizona State University (completed 1999)

Thesis title: An examination of the effect of hazardous waste generator regulation on small non-manufacturing businesses

Mark Moury, Planning, Arizona State University (completed 2000)

Thesis title: Sports stadium costs and benefits: What can be learned from the instant replay?

Harcourt Morgan, Planning, Arizona State University (completed 2000)

Thesis title: Suburban parking utilization: a comparative analysis of work sites in southern and northern California

Brian Calvert, Planning, Arizona State University (completed 2000)

Thesis title: The financial and social effects of historic designation in Phoenix, Arizona

Chris Andres, Planning, Arizona State University (completed 2001)

Thesis title: Chip-chasing: evaluating high-tech industrial investment incentives in Arizona and Oregon

Christopher Scott, Planning, Arizona State University (completed 2001)

Thesis title: Modeling Opportunity: Employment Accessibility and the Economic Performance of Metropolitan Phoenix Neighborhoods

Taruna Tayal, Planning, Arizona State University (completed 2001)

Thesis title: Optimization of network alignment for light rail transit: Phoenix

Christine Howard, Professional Project in Planning, Arizona State University (completed 2004)

Project Title: A Neighborhood Stress Index for Mesa, Arizona

Himanshu Joshi, Planning, Arizona State University (completed 2004)

Thesis title: Assessment of the impacts of the light rail on urban growth in the Phoenix region using UrbanSim

Jan Bush, Planning, Arizona State University (completed 2005)

Thesis title: Residential carrying capacity of regional water supply as a framework for decision-making.

Wenwen Zhang, School of City and Regional Planning (Completed 2013)

Masters Thesis title: The Effects of Compact Development on Motorized Travel, Energy Consumption and GHG Emission for Phoenix Metropolitan Area.

Joonwon Joo, Ph.D. in Environmental Design and Planning, Arizona State University (Completed 2008)

Dissertation title: Modeling Sustainable Urban Development by Cellular Automata and Genetic Algorithms

Vasudha Lathey, Ph.D. in Environmental Design and Planning, Arizona State University (Completed 2008)

Dissertation title: Urban Sprawl and Public Health: A Global Perspective

Ariane Middel (Ph.D. in Planning; co-advisor as part of German IRTG program)

Dissertation title: Procedural 3D Modeling of Cityscapes of the Future (completed 2009)

Stephane Frijia (MUEP with Thesis option. Completed 2010)

Sebastian Petsch (Ph.D. in Planning; co-advisor as part of German IRTG program)
Visualizing sustainability indicators of future environments (2011)

Indro Ray (Ph.D. in Environmental Design and Planning). *Community resilience, economic diversity and their impact on U.S. metropolitan region foreclosure rates* (Completed 2012)

Wewen Zhang, School of City and Regional Planning, Georgia Institute of Technology
 (continuing)

Yongsung Lee, School of City and Regional Planning, Georgia Institute of Technology
 (continuing)

Ph.D. Committees and External Reviewer (last 5 years)

Jeong Il Park, School of City and Regional Planning, Georgia Institute of Technology

Arathi Rao, School of City and Regional Planning, Georgia Institute of Technology

Thomas Douthat, School of City and Regional Planning, Georgia Institute of Technology

Carlos Licon, Environmental Planning and Design, ASU. *Completed 2005.*

Christopher James Petit, School of Planning, Architecture and Geography, University of Queensland. *Completed 2004*

Carol Palombo, School of Geographical Sciences, ASU. *Completed 2007*

Shawn Conrad, Environmental Planning and Design, ASU. *Completed 2011*

Aparna Thatte, Environmental Planning and Design, ASU. *Completed 2011*

Ray Quay, Environmental Planning and Design, ASU. *Completed 2011*

Won Kyung Kim, School of Geographical Sciences, ASU. *Completed 2011.*

Liou Xie, School of Sustainability, ASU. *Completed 2012.*

Jason Kelley, Environmental Planning and Design, ASU. *Completed 2013.*

Wen-Ching Chuang, School of Sustainability, ASU. *Continuing.*

Bjoern Hagen, Environmental Planning and Design, ASU. *Continuing.*

Offices Held

2012 Member of Special Committee Appointed by the University Senate on drafting Open Access Policy for (publications) Georgia Tech

2012 Chair, Search Committee for Transportation Planning Faculty at School of City and Regional Planning, Georgia Tech

2010 Chair, PAB Accreditation Self-Study Committee

2010 Chair, Faculty Search Committee for Urban Economic Faculty Hire

2010-cont. Executive Committee Member, GeoDa Center for Geospatial Analysis and Computation

2009 Graduate Committee, School of Sustainability, Arizona State University

2009 Executive Committee, School of Geographical Sciences and Urban Planning, Arizona State University

- 2009 Computer Committee, School of Geographical Sciences and Urban Planning, Arizona State University
- 2007-2008 Chair, Personnel Committee, School of Planning, Arizona State University
- 2007-2008 Appointed to Executive Committee, Global Institute of Sustainability, Arizona State University.
- 2003-2009 Director, Urban Simulation and Modeling Lab, College of Architecture and Environmental Design, Arizona State University
- 2006-2008 Appointed to Executive Committee of the Center for Asian Research, Arizona State University
- 2006-current Named Founding Research Faculty of North American Center for Transborder Studies, Arizona State University
- 2006-2007 Appointed to Planning Advisory Committee for Global Institute of Sustainability
- 2003-2005 Appointed to Advisory Council, Center for Environmental Research (International Institute of Sustainability), Arizona State University
- 2004-2005 Executive Committee for School of Global Studies, Arizona State University, and Program Coordinator of the Natural Resources, Urban Systems, and Development Group
- 2004 Chair, Search Committee for Associate Dean for Research and Director of Herberger Center for Design Research
- 2003-2005 College of Architecture and Environmental Design Personnel Committee Arizona State University (three member committee where I represented School of Planning)
- Since 2000 School of Planning Personnel Committee (Arizona State University)
- Since 2000 College of Architecture and Environmental Design Computer Committee (Arizona State University)
- 2000-2001 Program Coordinator for the Bachelor of Science in Planning program, School of Planning and Landscape Architecture, College of Architecture and Environmental Design (This was the year when Bachelor of Science in Planning received its first accreditation visit from Planning Accreditation Board; accreditation was awarded in 2002)
- 2000 Conference Chair, Symposium on Integrated Land use and Environmental Models: A survey of current application and research. College of Architecture and Environmental Design, Arizona State University. October 20-21, 2000
- 1996-2000 Executive Committee of the Environmental Planning and Design Doctoral Program at the College of Architecture and Environmental Design, Arizona State University

- Since 1994 Member of Master of Environmental Planning Graduate Admissions Committee, Arizona State University
- Since 1994 Member of Master of Environmental Planning Curriculum Committee, Arizona State University
- Since 1994 Member of Bachelor of Environmental Planning Curriculum Committee, Arizona State University
- 1996-1997 Member, faculty search committee for the position of urban history/ theory.
- 1996 Member of the search committee for the Director of Ph.D. programs at the College of Architecture and Environmental Design, Arizona State University
- 1996-1997 Coordinator for conference on “Coping with Growth”, sponsored by Harberger Center for Design Excellence
- 1996 Coordinator of Departmental Invited Lecture Series, School of Planning and Landscape Architecture, Arizona State University
- 1988-1989 Doctoral student representative in faculty/ departmental affairs, Department of City and Regional Planning, University of California, Berkeley
- 1986-1987 Senator, Graduate Student Senate, Department of Community and Regional Planning, Iowa State University, Ames, Iowa
- 1988-1990 Student Representative, American Planning Association, Iowa State University, Ames, Iowa

Outreach and Other Professional Duties

- 2011-2016 Co-Editor, Journal of Planning Education and Research
- 2013 - *Advisory Board appointments:*
 Neighborhood Nexus
 Center for Data Analytics, Georgia Tech
 Atlanta Regional Commission
 Association of Bay Area Governments
- 2009-2011 Appointed International Scientific Advisor to Council for Scientific and Industrial Research (CSIR), South Africa by the Ministry of Science and Technology for the *Integrated Planning, Development, and Modeling Project (IPDM)*.
- Editorial Board:
 2008-current *Journal of American Planning Association*
- Member of:
Association of Collegiate Schools of Planning
American Planning Association
Regional Science Association

Special Issue Editor for Journal of Urban Technology (with Hans Hagen). Special issue on Planning Support Toolkits for Building Sustainable Communities. Volume 18, Issue 4, 2011.

Referee for:

Urban Affairs Review
Environment and Planning B
Journal of Planning Education and Research
Environmental Management
World Development
Journal of American Planning Association
International Journal of Geographical Information Science
Human Ecology Review
Journal of Zhejiang University SCIENCE
Housing Policy

1993-94 Visiting Research Fellow; Center for Real Estate and Urban Economics, and Institute of Urban and Regional Planning, University of California at Berkeley.

Projects:

1. Analysis of the potential for industrial reuse of Alameda county naval installations.
2. Studying the effect of transit investments or highway access on adjacent property values.

1990-1992 Research Associate, Center for Real Estate and Urban Economics, University of California at Berkeley

Projects:

1. Analysis of the transformation of the Southern California economy; especially the effect of job losses through cuts in defense spending.
2. Analyzing census and survey data for projecting residential, commercial and industrial growth in California by regions as well as metropolitan areas to the year 2000.
3. Study of jobs- housing balance in Metropolitan areas of California.

1990-1991 Consultant to Oakland -- Sharing the Vision

Tasks included research and writing portions of Oakland's long-range plan document, especially sections on Oakland's economy and transportation networks.