

BRIAN STONE, JR.

Associate Professor & Director, Ph.D. Program
School of City and Regional Planning
Georgia Institute of Technology

I. EARNED DEGREES

Ph.D. Georgia Institute of Technology, City and Regional Planning, 2001
M.E.M. Duke University, Environmental Management, 1996
A.B. Duke University, English, 1993

II. EMPLOYMENT HISTORY

Director Ph.D. Program, School of City and Regional Planning, Georgia Institute of Technology, May 2014 to present
Adjunct Professor Department of Environmental Studies, Emory University, 2013
Director Master of City and Regional Planning Program, School of City and Regional Planning, Georgia Institute of Technology, August 2011 to April 2014
Associate Professor Georgia Institute of Technology, School of City and Regional Planning, July 2008 to present
Assistant Professor Georgia Institute of Technology, School of City and Regional Planning, June 2005 to June 2008
Assistant Professor University of Wisconsin-Madison, Department of Urban and Regional Planning (affiliate status in the Nelson Institute for Environmental Studies and the Center for Sustainability and a Global Environment), August 2001 to May 2005
Instructor Georgia Institute of Technology, School of City and Regional Planning, August 1999 to May 2001
Planning Consultant LDF Associates, May 1997 to August 2000

III. HONORS AND AWARDS

Invited Speaker for “Big Ideas” Session, Conference of the Association of Collegiate Schools of Planning, 2014
Outstanding Faculty Award, College of Architecture, Georgia Institute of Technology, 2014

The City and the Coming Climate: Climate Change in the Places We Live (Cambridge University Press, 2012) featured in the *London Review of Books*, May 2013

Travel Award, Extreme Weather, Climate and Health: Putting Science into Practice Symposium, National Institutes of Health, 2013

Outstanding Academic Title of 2012 awarded by *Choice Magazine* to *The City and the Coming Climate: Climate Change in the Places We Live* (Cambridge University Press, 2012)

Quality Teaching Award, Student Planning Association of the School of City and Regional Planning, Georgia Institute of Technology, 2012

Keynote Speaker, National Academy of Sciences Symposium on Urban Meteorology (*Climate Change and Cities of the Future*), 2011

International Eni Award Nominee, 2010

Outstanding Interdisciplinary Activity Award, College of Architecture, Georgia Institute of Technology, 2007

Young Scholars Fellowship, Global Carbon Project, 2006

GIS Fellowship, National Science Foundation, 2000

Science to Achieve Results (STAR) Fellowship, US EPA, 1999-2001

IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES

A. Published Books, Book Chapters, and Edited Volumes (* while at Georgia Tech)

A1. Books

*Stone, Brian. 2012. *The City and the Coming Climate: Climate Change in the Places We Live*. New York: Cambridge University Press.

This book has been reviewed in the following journals (included in Appendix):

- *Journal of the American Planning Association* (2013)
- *Journal of Regional Science* (2012)
- *Journal of Urban Climate* (2012)

A2. Refereed Book Chapters

*Stone, Brian. 2006. Physical Planning and Urban Heat Island Formation: How Cities Change Regional Climates, in *Smart Growth and Climate Change: Regional Development, Infrastructure and Adaptation*, M. Ruth (ed.), Northampton, MA: Edward Elgar, pp. 318-41.

B. Refereed Publications and Submitted Articles

B1. Published and Accepted Journal Articles (student advisees in bold)

***Habeeb, Dana, Vargo, Jason**, Stone, Brian. "Urban heat waves: The increasing vulnerability of US cities to extreme heat." *Natural Hazards*, DOI 10.1007/s11069-014-1563-z.

*Stone, Brian, **Vargo, Jason**, Liu, Peng, **Habeeb, Dana**, DeLucia, Anthony, **Trail, Marcus**, Hu, Yongtao, Russell, Armistead. 2014. "Avoided heat-related mortality through climate adaptation strategies in three US cities." *Plos One*, 9: e100852.

*Stone, Brian, **Vargo, Jason**, Liu, Peng, Hu, Yongtao, Russell, Armistead. 2013. "Climate change adaptation through urban heat management in Atlanta, Georgia." *Environmental Science & Technology*, 47: 7780-86.

***Trail, Marcus**, Tsimpidi, Alexandra, Liu, Peng, Tsigaridis, Kostas, Hu, Yongtao, Nenes, Anathasios, Stone, Brian, Russell, Armistead. 2013. "Impact of future land use change on regional climate and regional air quality in the Southeastern US: Reforestation and crop land conversion." *Journal of Geophysical Research-Atmospheres*, 118: 11577-88.

***Vargo, Jason, Habeeb, Dana**, Stone, Brian. 2013. "The importance of land cover change across urban rural typologies for climate modeling." *Journal of Environmental Management*, 114: 243-52.

*Stone, Brian, **Vargo, Jason, Habeeb, Dana**. 2012. "Managing climate change in cities: Will climate action plans work?" *Landscape and Urban Planning*, 107: 263-71.

***Vargo, Jason**, Stone, Brian, and Glanz, Karen. 2012. "Google walkability: A new tool for local planning and public health research?" *Journal of Physical Activity and Health*, 9: 689-97.

*Peng, Liu, Tsimpidi, Alexandra, Hu, Yongtao, Stone, Brian, Russell, Armistead, Nenes, Athanasios. 2012. "Differences between downscaling with spectral and grid nudging using WRF." *Atmospheric Chemistry and Physics*, 12: 3601-10.

*Grabow, Maggie, Spak, Scott, Holloway, Tracey, Stone, Brian, **Mednick, Adam**, and Patz, Jonathan. 2011. "Air quality and health benefits from reduced car travel in the Midwestern United States." *Environmental Health Perspectives*, 120: 68-76.

***Ozbil, Ayse**, Peponis, John, Stone, Brian. 2011. "Understanding the link between street connectivity, land use, and pedestrian flows." *Urban Design International*, 16: 125-41.

*Stone, Brian, Hess, Jeremy, and Frumkin, Howard. 2010. "Urban form and extreme heat events: Are sprawling cities more vulnerable to climate change?" *Environmental Health Perspectives*, 118: 1425-28.

*Stone, Brian. 2009. "Land use as climate change mitigation." *Environmental Science & Technology*, 43: 9052-96.

*Stone, Brian, **Mednick, Adam**, Holloway, Tracey, and Spak, Scott. 2009. "Mobile source CO₂ mitigation through smart growth development and vehicle fleet hybridization." *Environmental Science & Technology*, 43: 1704-10.

*Stone, Brian. 2008. "Climate change and place roundtable." *Places*, 20(2): 68-73.

*Stone, Brian. 2008. "Urban sprawl and air quality in large US cities." *Journal of Environmental Management*, 86: 688-98.

*Stone, Brian. 2007. "Urban and rural temperature trends in proximity to large US cities: 1951-2000." *International Journal of Climatology*, 27: 1801-07.

*Stone, Brian, **Mednick, Adam**, Holloway, Tracey, and Spak, Scott. 2007. "Is compact growth good for air quality?" *Journal of the American Planning Association*, 73: 404-18.

*Stone, Brian and Norman, John. 2006. "Land use planning and surface heat island formation: A parcel-based radiation flux approach." *Atmospheric Environment*, 40: 3561-73.

*Stone, Brian and **Bullen, Jessica**. 2006. "Urban form and watershed management: How zoning influences stormwater volumes." *Environment and Planning: Part B*, 33: 21-37.

***Chi, Guangqing** and Stone, Brian. 2005. "Sustainable transport planning: Estimating the ecological footprint of vehicle travel in future years." *Journal of Urban Planning and Development*, 131: 170-80.

*Stone, Brian. 2005. "Urban heat and ozone formation: An emerging role for planners in the climate change debate." *Journal of the American Planning Association*, 71: 13-25.

Stone, Brian. 2004. "Paving over paradise: How land use regulations promote residential imperviousness." *Landscape and Urban Planning*, 69: 101-13.

Stone, Brian. 2003. "Air quality by design: Harnessing the Clean Air Act to manage metropolitan growth." *Journal of Planning Education and Research*, 23: 177-90.

Stone, Brian and Rodgers, Michael. 2001. "Urban form and thermal efficiency: How the design of cities influences the urban heat island effect." *Journal of the American Planning Association*, 67: 186-98.

Frank, Lawrence, Stone, Brian, Bachman, William. 2000. "Linking land use with household vehicle emissions in the central Puget Sound: Methodological framework and findings." *Transportation Research - Part D: Transport and Environment*, 5: 173-96.

B.2. Conference Presentations with Proceedings (Refereed)

*Stone, Brian. 2006. "Developing Design-Oriented Strategies to Combat Regional Scale Climate Change", in *Geo-Environment and Landscape Evolution*, J. Martin-Duque, C. Brebbia, D. Emmanouloudis, and U. Mander (eds.). *WIT Transactions on Ecology and the Environment*, 89: 195-204.

Stone, Brian. 2002. "Residential Land Use and the Urban Heat Island Effect: How the American Dream is Changing Regional Climate," *Proceedings of the North American Heat Island Summit*, Toronto, Canada.

Stone, Brian. 2000. "A Remote Sensing Analysis of Parcel Design and Urban Heat Island Formation." *Proceedings of the Third Symposium on the Urban Environment*, The American Meteorological Society, Davis, CA.

Stone, Brian. 2000. "A Policy-Relevant Analysis of Residential Land Use, Forest Canopy Cover, and Regional Climate Change." *Proceedings of the Fourth International Conference on Integrating Geographic Information Systems and Environmental Modeling*, University of Colorado, Cooperative Institute for Research in Environmental Science, Boulder, CO.

Frank, Lawrence, Bachman, William, and Stone, Brian. 2000. "Testing Urban Design and Air Quality Relationships in the Atlanta Metropolitan Region." *Proceedings of the Ninth International Symposium on Transport and Air Quality*, Avignon, France.

Frank, Lawrence and Stone, Brian. 1997. "Developing a Regional Database to Measure Land Use Relationships with Transportation and Air Quality." *Proceedings of the Sixth International Symposium on Transport and Air Quality*, Avignon, France.

Frank, Lawrence and Stone, Brian. 1997. "A Methodology to Measure Land Use Impacts on Travel Choice and Vehicle Emissions." *Proceedings of the International Association of Travel Behavior Research: Texas Transportation Institute*, Austin, TX.

B.4. Submitted Journal Articles

***Trail, Marcus**, Tsimpidi, Alexandra, Liu, Peng, Tsigaridis, Kostas, Hu, Yongtao, Nenes, Anathasios, Stone, Brian, Russell, Armistead. "Reforestation and crop land conversion impacts on future regional air quality in the Southeastern US." *Agricultural and Forest Meteorology* (June 2014)

*Liu, Peng, Tsimpidi, Alexandra, Hu, Yongtao, Stone, Brian, Russell, Armistead, Nenes, Athanasios. "Development of a sub-grid approach for the Noah land surface model and evaluation of modeled sub-grid surface temperature with MODIS derived land surface temperature." *Journal of Geophysical Research-Atmospheres* (July 2014)

C. Other Publications and Creative Products

C1. Book Reviews

Stone, Brian. 2004. "Review of *The Politics of Mobility: Transport, the Environment, and Public Policy*, by Geoff Vigar", *Urban Affairs Review*, 39: 398-400.

C2. Research Reports

*Stone, Brian, Obermann, William, and Snyder, Stephanie. 2005. "A New Method for Estimating and Projecting Vehicle Miles of Travel: Linkages to Landscape Change and Ozone Impacts to Northern Forests," in *USDA Forest Service, General Technical Report #NC-253*.

Stone, Brian and Obermann, William. 2004. "A Methodology to Forecast Vehicle Travel Characteristics for Ozone Transport Modeling." Technical report for the USDA Forest Service.

Stone, Brian and Obermann, William. 2003. "Development of Vehicle Travel Characteristics to Model Tropospheric Ozone Formation." Technical report for the USDA Forest Service.

Frank, Lawrence and Stone, Brian. 1998. "Conveying Air Quality and Travel Benefits of Land Based Transportation Control Measures." Technical report for the US Environmental Protection Agency.

Frank, Lawrence and Stone, Brian. 1998. "The Effect of Regional Location and Land Use on Travel and Air Quality in Atlanta." Technical report for the Turner Foundation.

Frank, Lawrence and Stone, Brian. 1997. "Integrating Community Development and Air Quality Modeling Practices." Technical report for the Washington State Department of Ecology.

C3. Other Publications

*Stone, Brian. 2012. What the European heat wave of 2003 reveals about climate change in cities. *European Financial Review*, October 20.

*Stone, Brian. 2012. Atlanta's heat raises red flags. *Atlanta Journal-Constitution*, July 6.

*Stone, Brian. 2012. The City and the coming climate: Climate change in the places we live. Feature article in *Urban Climate News*, International Association for Urban Climate, June.

*Stone, Brian. 2010. Heat waves on the rise in big cities. *CNN*, July.

*Stone, Brian. 2009. Plant a tree, cool the planet. *Forbes*, December 8.

*Stone, Brian. 2009. Beyond Copenhagen: Time to retool our approach to global warming. *Atlanta Journal-Constitution*, December 23.

*Stone, Brian. 2006. Task force plan will only tighten knots. *Atlanta Journal-Constitution*, February 14.

D. Presentations

D1. Invited Lectures

*Green is the New Black: Managing Rising Heat Trends in Dallas. Invited lecture for the Texas Trees Foundation, Dallas, Texas, May 2014.

*Managing Rising Heat Trends in the Atlanta Region. Invited lecture for the Metro Atlanta Chamber of Commerce, Atlanta, Georgia, May 2014.

*Climate Change and the City: Notes from the Front Lines of Climate Change. Invited Lecture for Department of Environmental Studies, Emory University, Atlanta, Georgia, November 2013.

*Urban Climate Change and Public Health. Invited Lecture for Department of Biology, Agnes Scott College, Atlanta, Georgia, November 2013.

*Climate Change and the City. Invited Lecture for the Brook Byers Institute for Sustainable Systems, Georgia Tech, April 2013.

*Climate Change and the City. Invited Lecture for Department of Biology, Agnes Scott College, Atlanta, Georgia, April 2013.

*The City and the Coming Climate: Climate Change in the Places We Live. School of City and Regional Planning Lecture Series, Georgia Tech, November 2012.

*Extreme Heat and Health in Cities: Notes from the Front Lines of Climate Change. Invited lecture for the Department of Environmental Studies, Emory University, Atlanta, Georgia, October 2012.

*Climate Change and Cities of the Future. Invited lecture for the Department of Geography, University of Georgia, Athens, Georgia, February 2012.

*Extreme Heat in Cities: Notes from the Front Lines of Climate Change. Invited lecture for the Department of Planning and Design, University of Colorado, Denver, Colorado, November 2011.

*Extreme Heat in Cities: Notes from the Front Lines of Climate Change. Institute on the Environment, University of Minnesota, Minneapolis, Minnesota, October 2011.

*Extreme Heat in Cities: Notes from the Front Lines of Climate Change. Invited lecture for the School of Public and Environmental Affairs, University of Indiana, Bloomington, Indiana, April 2011.

*Cities, Heat, and Public Health. Guest Lecture to CP 8882: Healthy Cities: Built Environment and Public Health, Georgia Tech, November 2009.

*Transit Oriented Development in Atlanta. Presentation to the Atlanta Neighborhood Development Partnership, Atlanta, Georgia, March 2009.

*How Large US Cities are Amplifying Global Warming and Adaptive Planning Responses. Invited presentation to the US Federal Reserve's Innovation in Economic Development Forum, Atlanta, Georgia, November 2008.

*Urban Planning and Air Quality Management. Invited lecture at the Nicholas School of the Environment, Duke University, Durham, North Carolina, October 2008.

*Urban Climate Change. Invited lecture at the Rollins School of Public Health, Emory University, Atlanta, Georgia, September 2008.

*How Large US Cities are Amplifying Global Warming and Adaptive Planning Responses. Invited paper presented to the U.S. Centers for Disease Control and Prevention, Atlanta, Georgia, July 2008.

*Urban and Rural Temperature Trends in Proximity to Large U.S. Cities: 1951 – 2000. Invited presentation to the US EPA Heat Island Reduction Initiative, Atlanta, Georgia, April 2008.

*Are Cities Warming Faster than the Planet as a Whole? Invited presentation to the Georgia Tech Faculty Speaker Series, Atlanta, Georgia, April 2008.

*Heat Stress in Hotlanta: How Large Cities are Amplifying Global Warming. Invited presentation to the Healthy Places Research Group, CQGRD, Atlanta, Georgia, March 2008.

*The Impact of Land Use Policies on Urban Stormwater Runoff. Invited presentation to the Georgia Water Professionals Association, Atlanta, Georgia, November 2006.

*The History of Sprawl in Three Parts. Invited presentation to the Rollins School of Public Health, Emory University, Atlanta, Georgia, November 2006.

*Land Use-Based Approaches to Air Pollution Control. Invited lecture at the Nicholas School of the Environment, Duke University, Durham, North Carolina, October 2006.

*Neighborhood Change and Environmental Management: Why Trees are Green. Invited presentation to the Inman Park Tree Watch, Atlanta, Georgia, September 2006.

*Research on Pedestrian Planning. Guest lecture for the Ph.D. Program, College of Architecture, Georgia Tech, April 2006.

*Urbanization and Climate Change. Guest lecture for the Ph.D. Program, College of Architecture, Georgia Tech, September 2005.

Urban Environmental Land Use Planning. Guest lecture for the Institute for Environmental Studies, University of Wisconsin-Madison, April 2004.

A Remote Sensing Analysis of Land Use and Surface Heat Island Formation in Atlanta, GA. Invited presentation to the National Aeronautics and Space Administration (NASA), Huntsville, Alabama, March 2001.

D2. Invited Conference Presentations

*Green is the New Black: Adapting to Extreme Heat in Cities. Ontario Climate Change Consortium Research Symposium, London, Ontario, May 2014.

*Urban Heat Islands and Climate Change: Planning for Extreme Heat in Cities. USEPA Webcast on Urban Heat Islands, August 2012.

*Extreme Heat and Health: Warming Trends and Climate Action Planning in Large U.S. Cities. US National Climate Assessment, Southeastern United States, Health Sector Meeting, Charleston, South Carolina, February 2012.

*Smart Growth in Cities: What are the Implications for Climate Change? USEPA Symposium on Climate Change Planning, Impacts, and Adaptation, Philadelphia, Pennsylvania, March 2011.

*Smart Growth in Cities: What are the Implications for Climate Change? USEPA Office of Transportation and Air Quality Meeting on Land Use, Transportation, and Air Quality, Washington, DC, May 2010.

*Greening the Land: What Oranges and Rabbits tell us about Climate Change in Cities. Conference of the Congress for New Urbanism, Atlanta, Georgia, May 2010.

*Imagine Downtown: Design, Climate, and Public Health. Invited presentation to the Congress of New Urbanism, Atlanta, Georgia, January 2010.

*Projecting the Effects of Land Use and Technology Change on Future Air Quality. Atlanta Air Quality Workshop, Georgia Tech, Atlanta, Georgia, February 2009.

*Projecting the Effects of Land Use and Technology Change on CO₂ Emissions in the Upper Midwest. Transportation Research Board Conference, Washington, DC, January 2009.

*Projecting Land Use and Transportation Impacts on Air Quality in the Upper Midwestern United States. US EPA STAR Conference, RTP, North Carolina, October 2008.

*Urban Form and Stormwater Management: Zoning for Low Impact Development. Invited presentation to the Georgia Association of Water Professionals, Atlanta, Georgia, May 2008.

*Projecting the Impact of Land Use and Transportation on Future Air Quality. Invited presentation for the U.S. Environmental Protection Agency, Washington, DC, November 2005.

D3. Conference Presentations

*Avoided Heat-Related Mortality through Climate Adaptation Strategies in Atlanta, Philadelphia, and Phoenix. Conference of the Association of Collegiate Schools of Planning, Philadelphia, Pennsylvania, October 2014.

*Climate Adaptation in Cities: How Planners Change the Weather. Conference of the American Planning Association, Atlanta, Georgia, April 2014.

*The Urban Heat Island Effect: Understanding Climate Change at the Scale of Cities. Conference of the American Meteorological Society, Atlanta, Georgia, February 2014.

*Regional Greening for Urban Climate Management. Conference of the Association of Collegiate Schools of Planning, Cincinnati, Ohio, October 2012 (with **Jason Vargo**).

*Hot Cities: Are Cities becoming more Vulnerable to Extreme Heat? Conference of the Association of Collegiate Schools of Planning, Cincinnati, Ohio, October 2012 (with **Dana Habeeb**).

*Ensemble Simulations to Study the Impact of Land Use Change in Atlanta on Regional Climate. Conference of the American Geophysical Union, San Francisco, California, December 2012 (with Peng Liu and others).

*The Influence of Urban Growth Patterns on Regional Scale Climate Change and Human Health. Conference of the Association of Collegiate Schools of Planning, Salt Lake City, Utah, October 2011 (with **Jason Vargo**).

*Managing Climate Change in Cities: Will Climate Action Plans Work? Conference of the Association of Collegiate Schools of Planning, Salt Lake City, Utah, October 2011 (with **Jason Vargo** and **Dana Habeeb**).

*Are Residents of Sprawling Metropolitan Regions more Vulnerable to Climate-Induced Health Effects? Annual Conference of the American Public Health Association, Denver, Colorado, November 2010.

*Assessing the Influence of Urban Form on Climate Change-Induced Health Factors. Conference of the Association of Collegiate Schools of Planning, Minneapolis, Minnesota, October 2010 (with **Dana Habeeb**).

*Increasing Frequency of Extreme Heat Events in Sprawling US Cities. National Environmental Public Health Conference, Atlanta, Georgia, October 2009.

*Urban and Rural Temperature Trends in Proximity to Large U.S. Cities: 1957-2006. 2nd International Conference on Countermeasures to Urban Heat Islands, Berkeley, California, September 2009.

*Urban Amplification of Climate Change: Setting a Baseline for Adaptation. Annual Conference of the Association of Collegiate Schools of Planning, Milwaukee, Wisconsin, October 2007.

*Is Smart Growth Good for Air Quality? Annual Conference of the Association of Collegiate Schools of Planning, Fort Worth, Texas, November 2006.

*Conducting Long-Term, Tract-Level Population Projections for “Business as Usual” Growth Scenarios over a Multi-State Region. Annual Conference of the Association of Collegiate Schools of Planning, Fort Worth, Texas, November 2006 (with **Adam Mednick**).

*Urban Heat Island Mitigation as a Global Climate Change Management Strategy. First International Conference on Carbon Management at Urban and Regional Levels: Connecting Development Decisions to Global Issues, Mexico City, September 2006.

*Developing Design-Oriented Strategies to Combat Regional Scale Climate Change. Conference on Geo-Environmental and Landscape Evolution, Rhodes, Greece, June 2006.

*Climate Change and Air Quality in Cities: Assessing the Role of Urban Heat Island Formation in Annual Ozone Alerts. Annual Conference of the Association of Collegiate Schools of Planning, Kansas City, Missouri, October 2005.

Climate Change in Cities: Why Ambient Heat will be the Most Significant Air Pollutant of the 21st Century. Annual Conference of the Association of Collegiate Schools of Planning, Portland, Oregon, October 2004.

Municipal Development Policies and Stormwater Runoff: How Zoning Regulations Degrade Urban Watersheds. Sixth Meeting of the International Urban Planning and Environmental Association, Louisville, Kentucky, September 2004.

Residential Parcel Design and Impervious Surface Density: Developing an Agent-Based Approach to Environmental Impact Assessment. Annual Conference of the Association of Collegiate Schools of Planning, Baltimore, Maryland, November 2002.

Residential Land Use and the Urban Heat Island Effect: How the American Dream is Changing Regional Climate. North American Urban Heat Island Summit, Toronto, Canada, May 2002.

Air Quality by Design: Harnessing the Clean Air Act to Manage Metropolitan Growth. Conference of the Association of Collegiate Schools of Planning, Cleveland, Ohio, November 2001.

How Urban Decentralization Promotes Regional Climate Change. Environmental Protection Agency's Urban Heat Island Pilot Project Group, Madison, Wisconsin, September 2001.

Measuring the Impact of Community Design on Urban Heat Island Formation. Conference of the Association of Collegiate Schools of Planning, Atlanta, Georgia, November 2000.

Examining the Impact of Suburban Sprawl on Urban Deforestation and Climate Change. Fifth Annual STAR Graduate Fellowship Conference, Washington, DC, July, 2000.

A Remote Sensing Analysis of Parcel Design and Urban Heat Island Formation. Third Symposium on the Urban Environment, Annual Conference of the American Meteorological Society, Davis, California, August 2000.

Urban Form and Thermal Efficiency: How the Design of Cities Influences the Urban Heat Island Effect. Annual Conference of the Association of Collegiate Schools of Planning, Chicago, Illinois, October 1999.

Establishing the Link between Urban Form and Air Quality: A Methodology to Derive Vehicle Emissions Estimates from Panel Survey Data. Annual Conference of the American Society of Civil Engineers, Portland, Oregon, May 1998.

E. Grants and Contracts

E1. As Principal Investigator

Title: *Development of a Heat Management Plan for Louisville, Kentucky*
Role: *Principal Investigator (with T. Russell, Georgia Institute of Technology)*
Sponsor: *Louisville Metro Government*
Dates: *January 2014 – June 2015*
Purpose: *Development of the first urban heat adaptation plan for a US city.*

Title: *Climate, Urban Land Use, and Excess Mortality Study (CULE)*
Role: *Lead Principal Investigator (with T. Russell, Georgia Institute of Technology and A. DeLucia, East Tennessee State University)*
Sponsor: *US Centers for Disease Control and Prevention*
Dates: *October 2009 – September 2012*
Purpose: *To measure the influence of heat island mitigation strategies on air pollution and heat-related health effects.*

Title: *Measuring the Role of the Built Environment as an Effect Modifier of Climate Change and Mortality*
Role: *Principal Investigator*
Sponsor: *US Centers for Disease Control and Prevention*
Dates: *August 2009 – July 2010*
Purpose: *To measure the influence of urban form on extreme heat events, air quality, and excess mortality in large US cities.*

Title: *Urban Sprawl and Excessive Heat Events in Large US Cities: 1956-2005*
Role: *Principal Investigator*
Sponsor: *US Centers for Disease Control and Prevention*
Dates: *June 2008 – August 2009*
Purpose: *To quantify the average annual number of excessive heat events attributable to the urban heat island effect in large urbanized regions and to associate with alternative land development patterns.*

Title: *An Analysis of Land Use and Climate Change in Large US Cities*
Role: *Principal Investigator*
Sponsor: *Georgia Tech Foundation*
Dates: *July 2007 – June 2008*
Purpose: *To develop a methodology to measure urban heat island magnitude across large US cities through the use of satellite imagery.*

Title: *Modeling the Effects of Land Use and Technology Change on Future Air Quality in the Upper Midwestern United States*
Role: *Lead Principal Investigator (with T. Holloway, UW-Madison)*
Sponsor: *US Environmental Protection Agency (STAR Program)*
Dates: *June 2005 – May 2008*
Purpose: *To assess effectiveness of “smart growth” land use strategies and hybrid vehicle technologies in mitigating ozone and fine particulate pollution across a six state region by 2050.*

Title: *Measuring the Effects of Urban Development Practices on Urban Heat Island Formation*
Role: *Principal Investigator*
Sponsor: *University of Wisconsin-Madison*
Dates: *June 2004 – May 2005*
Purpose: *To quantify the influence of urban development patterns on surface heat island formation.*

Title: *Modeling the Effects of Landscape Change on Regional Vehicle Travel, Ozone Formation, and Remote Forest Effects*
Role: *Principal Investigator*
Sponsor: *USDA Forest Service*

Dates: *August 2003 – July 2004*
Purpose: *To assess the impacts of urbanization on mobile source air pollution and remote forest ecosystem health in the Upper Midwestern US.*

Title: *Urban Design and Ecosystem Stress: Quantifying the Relationship between Development Design Standards and Impervious Land Cover in Madison, Wisconsin.*

Role: *Principal Investigator*

Sponsor: *US Department of Agriculture*

Dates: *September 2002 – August 2004*

Purpose: *To quantify the influence of land development regulations on stormwater runoff in an urban setting.*

Title: *Modeling the Relationship between Landscape Change and Tropospheric Ozone Formation*

Role: *Principal Investigator*

Sponsor: *USDA Forest Service*

Dates: *June 2002 – July 2003*

Purpose: *To develop a methodology for quantifying the influence of land use on vehicle travel and regional air quality.*

E2. As Co-Principal Investigator

Title: *Urban Heat Island Network (RCN-SEES)*

Role: *Co-Principal Investigator (with P. Snyder (Lead), University of Minnesota, and others)*

Sponsor: *National Science Foundation*

Dates: *January 2013 – December 2015*

Purpose: *To establish a national data sharing and educational network focused on urban heat island formation.*

Title: *Atlantic Station Employee Health Study: Measures of the Built Environment*

Role: *Co-Principal Investigator (with K. Glanz, Emory University and C. Zimring, Georgia Institute of Technology)*

Sponsor: *Georgia Cancer Coalition & US Centers for Disease Control*

Dates: *January 2008 – September 2009*

Purpose: *To assess the influence of built environment attributes on employee travel behavior prior to and following a move to a mixed use setting for the employment location.*

E3. As Senior Personnel or Contributor

Title: *Scenarios of Landscape Change Effects on Tropospheric Ozone Risk to Forests in the Midwest*

Role: *Investigator (with W. Heilman (Lead), US Forest Service, and others)*

Sponsor: *USDA Forest Service*

Dates: *June 2003 – May 2005*

Purpose: *To assess the impacts of landscape change in the form of urbanization and agriculture on regional air pollution and remote forest ecosystem health in the Upper Midwestern US.*

VI. SERVICE

A. Professional Contributions

Associate Editor, *Urban Climate*, 2014-present

Member, Editorial Board for the *International Journal of Biometeorology*, 2014-present

Member, Editorial Board for the *Journal of Planning Education and Research*, 2010-13, 2014-present

Manuscript Reviewer (2002 to 2014):

Environmental Health Perspectives

Environment International

Environmental Science & Technology

Geophysical Research Letters

Journal of the Air and Waste Association

Journal of the American Planning Association

Journal of Applied Meteorology and Climatology

Journal of Climate and Development

Journal of Environmental Management

Journal of Environmental Planning and Management

Journal of Environmental Pollution

Journal of Geophysical Research-Atmospheres

Journal of Industrial Ecology

Journal of Planning Literature

Journal of Planning Education and Research

Journal of Urban Climate

Journal of Urban Forestry and Urban Greening

Journal of Urban Technology

Landscape and Urban Planning

Science

Science of the Total Environment

Urban Forestry and Urban Greening

Chapter Editor, 2nd Assessment Report of the Urban Climate Change Research Network, March 2014

Proposal Team Member, Application by Emory University for Observer Status to the United Nations Framework Convention on Climate Change, October 2013

Invited Reviewer, Working Group II, 5th Assessment Report, Intergovernmental Panel on Climate Change (IPCC), 2012

Scientific Advisor, WeForest, 2010 to present (<http://www.weforest.org/scientific-and-expert-advisors>)

Session Discussant, Local Climate Action and Adaptation Planning, ACSP Conference, 2012

Invited Reviewer, National Climate Assessment, US Global Change Research Program, 2012

Member, Climate Change and Health Proposal Review Team, National Institutes of Health, 2011

Session Discussant, Planning for Climate Change Impacts, ACSP Conference, 2011

Invited Contributor, SE Regional Technical Report to the National Climate Assessment, US Global Change Research Program, 2011

Proposal Reviewer, MacArthur Foundation, 2010

Instructor, AICP Exam Preparation, 2010-2011

Proposal Reviewer, Social Sciences and Humanities Research Council of Canada, 2008

Testimony to the Atlanta City Council Community Development Committee, March 2006

Proposal Reviewer, Georgia Regional Transportation Administration, 2006

Member, Leadership in Energy and Environmental Design Neighborhood Development (LEED-ND) Correspondence Committee, 2006-2012

Proposal Reviewer, National Science Foundation, 2003

Proposal Reviewer, Midwest Region Urban Transportation Center, 2002-2003

Member, Environmental Protection Agency Urban Heat Island Pilot Project Group, 2002 to 2012

Member, Project ATLANTA, National Aeronautics and Space Administration (NASA), Atlanta, Georgia, 1997 to 1999

B. Public and Community Service

Board positions

Member, Board of Directors, The Children's School, 2014

Member, Board of Directors, Trees Atlanta, 2013 to present

Member, Trees Atlanta Advisory Board, 2012

Member, Board of Directors, Olmsted Linear Park Alliance, Atlanta, Georgia, 2006 to 2009

Member, Georgia Conservancy's Blueprints for Successful Communities Partnership, 2007

Member, College Board of the Georgia Brain Train Project, 2006

Member, MG&E Co-generation Facility Advisory Group, Madison, Wisconsin, 2003 to 2005

Member, Board of Directors, University Arboretum Committee (University of Wisconsin-Madison), 2004

Member, Friends of Responsible Energy, Madison, Wisconsin, 2002 to 2005

Member, Board of Directors, Friends of the Arboretum, Madison, Wisconsin, 2003 to 2004

Member, Board of Directors, Partnership for a Smog-Free Georgia, Atlanta, Georgia, 2001

Member, Environmental Justice Working Group, Strategies for the Metropolitan Atlanta Region's Transportation and Air Quality (SMARTRAQ), Atlanta, Georgia, 2000 to 2001

Member, Cool Communities Task Force for the State of Georgia, Atlanta, Georgia, 1999 to 2001

Media and other outreach

Work featured in, "Hotter heat waves deadly, but cities can use tricks for cooling off," *Scientific American*, July 10, 2014.

Work featured in, "Hot spots make mercury rise in Louisville," *Louisville Courier-Journal*, June 27, 2014.

Work featured in, "Georgia Tech study suggests ways to ease climate change's deadly effects," *Atlanta Journal-Constitution*, June 26, 2014.

Interviewed on "Think," *National Public Radio* affiliate KERA, Dallas, TX, May 21, 2014.

Work featured in, "Study to examine Louisville's trees," *Louisville Courier-Journal*, May 7, 2014.

Interviewed on "All Things Considered," *National Public Radio*, May 5, 2014.

Work featured in, "Tech study finds suburbs contribute to a warmer Atlanta," *Atlanta Journal-Constitution*, October 25, 2013.

Work featured in, "Louisville gets grant to study and manage urban heat," *Louisville Courier Journal*, September 12, 2013.

Interviewed for, "Hot, Wet, and Nasty (but not in a good way): Superstorm Sandy and the New York of Tomorrow," *Brooklyn Magazine*, September 3, 2013.

Interviewed on "Here and Now," *National Public Radio*, June 25, 2013.

Work featured in, "There are few trees in Louisville, America's Fastest Warming City," *Next City*, May 8, 2013.

Work featured in, "Energy-guzzling cities changing weather 1,000 miles away," *LiveScience*, January 27, 2013.

Work featured in, "Louisville starts efforts to adapt to harsher climes," *Louisville Courier-Journal*, October 14, 2012.

Interviewed on *Talk Radio Europe*, September 12, 2012.

Work featured in, "Cooling down urban heat islands," *Discovery News*, September 10, 2012.

Work featured in, "Heat: A bridge to climate consensus?" *The Huffington Post*, September 12, 2012.

Interviewed on “Morning Edition,” *National Public Radio*, September 4, 2012.

Work featured in, “Air pollution control district calls for action on local heat,” *National Public Radio* affiliate WFPL, Louisville, KY, August, 15, 2012.

Work featured in, “As temperatures rise cities getting hotter faster,” *Grist*, July 27, 2012.

Work featured in, “Many US cities unprepared for future heat waves,” *Washington Post* (online edition), July 26, 2012.

Interviewed on “Talk of the Nation,” *National Public Radio*, July 18, 2012.

The City and the Coming Climate reviewed in the *Minneapolis Star Tribune*, July 16, 2012.

Work featured in, “Trees: Canopy concerns,” *The Louisville Courier-Journal*, July 16, 2012.

Work featured in, “Suburban life gets, hot, hot, hotter,” *Kansas City Star*, July 12, 2012.

Work featured in, “Heat’s health threat to cities may be most problematic in Louisville, KY,” *Climatewire*, July 9, 2012.

Interviewed on “The Daily Circuit,” *Minnesota Public Radio*, July 2, 2012.

Interviewed on “At Issue with Ben Merens,” *Wisconsin Public Radio*, June 13, 2012.

Interviewed on *The City and the Coming Climate* by *National Public Radio* affiliate WPPR, Demorest, Georgia, June 8, 2012.

Work featured in, “Fighting warming with trees in Louisville.” *Revmodo*, June 7, 2012.

Interviewed on urban climate and tree canopy by *National Public Radio* affiliate, WFPL, Louisville, Kentucky, June 4, 2012.

Work featured in, “Louisville will replace many of downtown's dead or dying trees: About 300 have died in past five years,” *Louisville Courier-Journal*, May 28, 2012.

Work featured in, “Louisville to lead U.S. in heat deaths, study says,” *Louisville Courier-Journal*, May 24, 2012.

Work featured in, “A study shows Louisville may be getting hotter at a faster rate than other large U.S. cities: One Agency has its own plan to counter the heat island,” *Louisville Courier-Journal*, May 6, 2012.

Work featured in, “Study: Sprawling cities experience hotter summer temperatures,” *USA Today*, June 2010.

Work featured in, “Urban sprawl could make cities hotter: Deforestation may exacerbate the impact of global warming,” *U.S. News and World Report* (online edition), June 2010.

Work featured in, “Study: Sprawling cities feel more heat,” *Atlanta Business Journal*, June 2010.

Interviewed on sprawl and extreme heat study by *The Weather Channel*, June 2010.

Interviewed on Copenhagen Climate Conference by *CBS* Radio, December 2009.

Interviewed on Copenhagen Climate Conference by *CNN* Radio, December 2009.

Interviewed on cities and climate change by *National Public Radio* affiliate WABE, Atlanta, GA, November 2009.

Interviewed on urban climate change by *GPBS Georgia Weekly*, August 2008.

Interviewed on green roofs and climate change by *CNN*, July 2008.

Work featured in “Atlanta loses a leading advocate for trees at crucial time,” *Atlanta Journal Constitution*, March 6, 2006.

Interviewed for Earthwatch Radio, *National Public Radio*, July 2003.

C. Institute Contributions

Chair, SCaRP PhD Program Committee, 2014

Member, Olmsted Chair Search Committee, 2013-14

Member, SCaRP Mentor Committee (Dr. Tim Welch), 2013-14

Chair, SCaRP Mentor Committee (Dr. Perry Yang), 2012-14

Chair, SCaRP Master of City and Regional Planning Program Committee, 2011-14

Member, SCaRP Research, Promotion, and Tenure Committee, 2012-14

Member, Institute Strategic Planning Committee on Energy, 2011-12

Chair, Healthy Communities Planning Faculty Search Committee, 2010-11

Member, SCaRP PhD Program Committee, 2009-11

Member, Institute Trimester Committee, 2009-11

Faculty Associate, Center for Innovation in Local Government, Georgia Tech, 2009-10

Member, SCaRP Master of City and Regional Planning Program Committee, 2008-09

Member, SCaRP Program Website Committee, 2008-09

Academic Senate, Georgia Institute of Technology, 2007-09

Chair, Urban Design Faculty Search Committee, 2007-08

Member, CRP Program Director Search Committee, 2007-08

Member, Advisory Committee, College of Architecture, 2006-09

Member, Panel on Restructuring the Institute for Sustainable Technology and Development (ISTD), Office of the Vice Provost for Research, 2006-07

Member, CRP Program Faculty Search Committee, 2006-07

Member, Ph.D. Program Faculty Search Committee, 2006-07

Member, Department of Landscape Architecture Curriculum Committee (University of Wisconsin-Madison), 2004-05

Member, Air Resources Management Curriculum Committee, Nelson Institute for Environmental Studies (University of Wisconsin-Madison), 2004-05

Chair, Department of Urban and Regional Planning IT Committee (University of Wisconsin-Madison), 2003-05

Presentation to the Board of Visitors, College of Agriculture and Life Sciences (University of Wisconsin-Madison), 2003

Member, Department of Urban and Regional Planning Curriculum Committee (University of Wisconsin-Madison), 2002-05

Member, Department of Urban and Regional Planning Exit Exam Committee (University of Wisconsin-Madison), 2002-05

Member, Department of Urban and Regional Planning Student Orientation Committee (University of Wisconsin-Madison), 2002-05

Faculty Affiliation, Midwest University Regional Transportation Center (University of Wisconsin-Madison), 2002-05

Faculty Affiliation, Transportation Management and Policy Program, Institute of Environmental Studies (University of Wisconsin-Madison), 2002-05

Member, Interdisciplinary Transportation Management and Policy Curriculum Committee, Institute of Environmental Studies (University of Wisconsin-Madison), 2002-05

Member, Creating a Collaborative Learning Environment, Dept. of Civil Engineering (University of Wisconsin-Madison), 2002-03

Member, Department of Urban and Regional Planning Search Committee for Community Development (University of Wisconsin-Madison), 2002-03

Member, Urban Ecology Cluster Search Committee, Department of Landscape Architecture, College of Agriculture and Life Science (University of Wisconsin-Madison), 2002-03

Faculty Affiliation, Air Resources, Institute of Environmental Studies (University of Wisconsin-Madison), 2001-05