

# THE NATIONAL ACADEMIES

*Advisers to the Nation on Science, Engineering, and Medicine*

## Pathways to Urban Sustainability: Lessons from the Atlanta Metropolitan Region

### Committee Members' Biographical Information

**DENISE STEPHENSON HAWK (Chair)** is Chairman of the Stephenson Group, LLC and a science, policy, and education consultant. She is a former provost of Spelman College and professor at Clark Atlanta University, recently held a position as the NCAR associate director for the Societal-Environmental Research & Education Laboratory (SERE). Through her multifaceted career in academia, government, and the corporate arena, Stephenson Hawk has often worked at the interface between science, education, and policy. She holds a Ph.D. from Princeton University in geophysical fluid dynamics. While at Clark Atlanta, Stephenson Hawk served as founding director of the interdisciplinary Earth Systems Science Program and co-led a program to enhance the mathematics and science achievement of Atlanta public school students. She has served on many NSF, NASA, and NOAA science and education advisory committees, as well as on the NOAA Science Advisory Board and the UCAR University Relations Committee.

**JUDY ADLER** is a Senior Program Officer at the Turner Foundation, where she has managed the strategic direction of the water, energy and air programs since March 2006. Judy worked for the State of Georgia's Sustainability Division from 2000 to 2006 where she managed a team of engineers that helped businesses and institutions across the state reduce their environmental footprint. She also worked as consultant with Metcalf & Eddy, Inc. where she provided environmental services for industrial, municipal and federal clients. Judy received a Bachelor of Engineering from Vanderbilt University in 1993 and a Master of Science in Environmental Engineering from University of North Carolina at Chapel Hill in 1995. She is a licensed professional engineer and a Certified Energy Manager. She serves on the Board of the Institute for Georgia Environmental Leadership and the Georgia Water Wise Council.

**ANNE KELLER** has worked at the USEPA in Atlanta and Athens for 13 years. During that time she has served in a technical capacity for field studies and water quality programs, as a manager in strategic planning, and in the sustainable communities arena – her current focus. She has a background in research with the USFWS/USGS, watershed analysis and protection with the St. Johns River Water Management (Florida), and endangered species assessments during several assignments. Anne earned her Ph.D. from the University of Florida in Aquatic Toxicology. She is currently serving as the Senior Sustainability Advisor at the USEPA in Atlanta, and is the Regional technical contact for the interagency Partnership for Sustainable Communities.

**ED MACIE** is the Southern Region Urban Forestry Group Leader for the USDA Forest Service in Atlanta, Georgia. He has over 25 years of experience in Urban Ecology, having served with the US Forest Service, and as a Urban Forestry Consultant. For the past 20 years, Ed has directed the Southern Regional Urban Forestry Program for the Forest Service, administering grants and educational programs to help states deliver their urban forestry programs, community-based groups plant and maintain trees, and improve the environment where people live work and play. Ed also strongly supports urban forestry research and science delivery, having established the Center for Urban Forestry Research in Athens, Georgia, and the Southern Research Station's Center for Urban Interface Research and Information in Gainesville, Florida. Ed is a Professional Registered Forester in GA, with an educational background that includes a BS in Environmental Horticulture/Arboriculture from the University of California-Davis and a MS in Urban Forest

Ecology from the State University of New York, College of Environmental Science and Forestry at Syracuse University.

**KRISTA MILLS** joined the US Department of Housing and Urban Development (HUD) in 1998. She has served as the Field Office Director for the Kentucky HUD office since 2004; prior to that, she served as the deputy to the field office director. She is responsible for forwarding Secretarial initiatives and achieving the Department's strategic objectives in cooperation with Kentucky's housing industry partners, media, elected officials, and affordable housing advocacy groups. In addition to her role as the field director for the Kentucky HUD office, Ms. Mills served as the co-director of HUD's national task force on workforce housing—America's Affordable Communities Initiative (ACI)—from October 2005 through January 2009. Ms. Mills was also the co-author of the National Call to Action for Affordable Housing through Regulatory Reform (NCA), an initiative subsumed under the ACI umbrella, which enlisted over 175 jurisdictions nationwide to form task forces that evaluated and created action plans to address housing production barriers within their regulatory environments. Prior to joining HUD, Krista directed a private non-profit agency serving homeless women and children; initiated the first Continuum of Care homeless coalition in Central Virginia; and developed the first nationally accredited child care center in Lynchburg, Virginia. Ms. Mills holds a bachelor's degree in English from the University of North Carolina at Wilmington and a master's degree in counseling from Lynchburg College, Lynchburg, Virginia.

**KEVIN MOODY** is the Ecologist for the Federal Highway Association's Resource Center at the U.S. Department of Transportation. Moody has 13 years experience with Federal agencies (Fish and Wildlife Service, Bureau of Reclamation, and Federal Highway Administration) as biologist, program manager, and environmental protection specialist. His expertise includes analytic approaches, modeling, and QA/QC; Natural Resources Management; Risk and Natural Hazards Management; Communications and Environmental Management Systems; and Adapting models for dispute resolution. His professional experience include: modifying regional economic models to enhance transportation related analyses of human migration, economic disparities, congestion, exurban development patterns, and related issues; and identifying transportation datasets and supporting their integration into public and wildlife health models to predict and successfully mitigate secondary outbreaks of disease. Moody is a member of the American Fisheries Society, American Statistical Association, and Ecological Society of America. He received his Bachelor of Science degrees in Environment and Technology from the Clark University and in Forest Ecology from the University of New Hampshire.

**ANDREA PINABELL** joined the Home Depot Foundation in August 2009 as the Sustainable Community Development Program Manager with over 15 years of experience in the sustainable natural resources and community development fields. In this role, Andrea oversees the Foundation's city and community level initiatives including the Sustainable Cities Institute as well as the other sustainable community grantee work and initiatives. Most recently, Andrea served as the Sustainable Development and Green Infrastructure Project Manager & Practice Lead at Kimley-Horn and Associates, Inc. (KHA) in Atlanta, GA where she was responsible for the development, growth and management of her practice areas including sustainable development consulting (for economic, social and environmental viability), "green screening" for community development and integration of sustainable elements, LEED program management, green infrastructure and stormwater water quality (LID). While at KHA, Andrea managed the only LEED for Neighborhood Development (LEED-ND) Pilot project in the City of Atlanta and co-authored a regional water quality protocol for stormwater Best Management Practices. Andrea has a Bachelor of Science degree in Chemical Engineering with a focus on Environmental Studies from Iowa State University of Science and Technology. She holds several accreditations

including being a LEED Accredited Professional (May 2006) and a Certified Professional in Erosion and Sediment Control (Feb 2008); and is frequently featured as a speaker and author on sustainable development, water quality and sustainable communities.

**DALE QUATTROCHI** is a Senior Research Scientist with the NASA Marshall Space Flight Center in Huntsville, Alabama and has over 23 years of experience in the field of Earth science remote sensing research and applications. He received his Ph.D. degree from the University of Utah, his M.S. degree from the University of Tennessee, and his B.S. degree from Ohio University, all in geography. Dr. Quattrochi's research interests focus on the application of thermal remote sensing data for analysis of heating and cooling patterns across the diverse urban landscape, which form the dome of elevated air temperatures over cities known as the urban heat island effect. He is also conducting research on the applications of geospatial statistical techniques, such as fractal analysis, to multiscale remote sensing data. Dr. Quattrochi is the recipient of the NASA Exceptional Scientific Achievement Medal, NASA's highest science award. He is the co-editor of two books: *Scale in Remote Sensing and GIS* (with Michael Goodchild) published in 1997 by CRC/Lewis Publishers, and *Thermal Remote Sensing in Land Surface Processes* (with Jeffrey Luvall) published in 2003 by Taylor & Francis.

**CATHERINE L. ROSS** has extensive experience in both the public and private sector. She is the first endowed faculty member in Georgia Tech's College of Architecture where she serves as Harry West Professor and directs the Center for Quality Growth and Regional Development (CQGRD). Dr. Ross has held several positions at Georgia Tech including that of Vice Provost. She was also the first Executive Director of the Georgia Regional Transportation Authority (GRTA). Dr. Ross served as Senior Policy Advisor on the Executive Committee of the Transportation Research Board of the National Academy of Sciences, on the boards of the Eno Foundation and the Metropolitan Atlanta Rapid Transit Authority (MARTA), and has held several other national leadership positions including President of the National Association of Collegiate Schools of Planning (ACSP). Dr. Ross is an Urban Land Institute Fellow, a National Science Foundation ADVANCE Professor, and has recently been named a member of the National Academy of Public Administration (NAPA). She was selected in July 2009 to advise the Obama Administration on the first ever White House Office of Urban Affairs. Dr. Ross has published extensively, including two books: *The Inner City: Urban Poverty and Economic Development in the Next Century* (January 1997) and the newly released *Megaregions: Planning for Global Competitiveness* (July 2009). Dr. Ross attended Kent State University for her undergraduate degree, completed the Master's of Regional Planning Program and Doctoral Degree at Cornell University, and conducted post-doctoral work at the University of California-Berkeley.

**TOM WEYANDT** is Director of Comprehensive Planning for the Atlanta Regional Commission (ARC) where he manages planning for transportation, the environment and land use as well as demographic and economic research and the regional Transportation Demand Management Program. Prior to joining ARC in 2000, he was Senior Associate in the Policy Research Center (PRC) in the Andrew Young School of Policy Studies at Georgia State University and Executive Director of Research Atlanta, Inc. Tom received a B.S.F.S. from the School of Foreign Service, Georgetown University and has studied in Germany and Switzerland. He has over thirty years of experience in urban planning and development having served as Planning Director and Commissioner of Planning and Development for the City of Atlanta and as Director of Transportation for the Atlanta Regional Commission. Tom also served as President of the Downtown Dayton (Ohio) Partnership, a public-private effort to rejuvenate an urban downtown. Tom was Director of Transportation for the Atlanta Paralympic Organizing Committee where he was responsible for the development and operation of all transportation services for the Xth

Paralympic Games - the second largest sporting event in the world. Tom has been active in several civic organizations. He chaired the Public Finance Committee for Blueprint Midtown and currently serves on the Grady Health Systems Board of Visitors and the Board of Directors of the Piedmont Park Conservancy.