THOMAS W. CRAWFORD

Professor and Department Chair Department of Geography Virginia Tech

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ACADEMIC APPOINTMENTS

Professor and Department Chair of Geography, Virginia Tech
Professor and Banpu Chair of Sustainability, Saint Louis University
Associate Professor of Geography, East Carolina University
Assistant Professor of Geography, East Carolina University
August 2009 – 2014
Assistant Professor of Environmental Studies and Geography, Gettysburg College
August 2000 – 2003

EDUCATION

University of North Carolina - Chapel Hill

Ph.D. in Geography August 2000

Dissertation: Human-Environment Interactions and Regional Change in Northeast Thailand

Advisor: Dr. Stephen J. Walsh

M.A. in Geography December 1994

Thesis: Riding Into American on the TransAmerica Bicycle Trail

Advisor: Dr. Wilbur Gesler

Wake Forest University

B.S. in Mathematical Economics May 1988

GRANT ACTIVITY

External Grants

- National Science Foundation Geography & Spatial Sciences, "Coastal Erosion Vulnerability, Monsoon Dynamics and Human Adaptive Response," 2017-2020, Principal Investigator. T. Crawford, S. Curtis, B. Paul, K. Rahman. \$405,868. (with East Carolina University and Kansas State University and Bangabandhu Sheikh Mujibur Agricultural University (Bangladesh).
- National Oceanic and Atmospheric Administration, "A Community-Wide Public Health Risk Assessment of Vulnerable Water Infrastructure in Coastal Cities," 2015-2017, Co-investigator (PI on subaward under South Carolina Sea Grant Consortium), E. Fly, S Lovelace, J. Whitehead, T. Crawford and others, \$25,923; full award \$290,993.
- National Park Service, "Identifying Cultural Resource Sites Affected by Sea Level Rise at Cape Hatteras National Seashore," 2013-2015, Co-investigator. T. Allen, B. Covey, T. Crawford, J. Walsh. \$67,613.
- North Carolina Space Grant Consortium, "Building STEM Linkages from Secondary Education to Higher Education: Integration of Earth and Environmental Science with Geographic Information Science," July 2013-June 2014. Principal Investigator. T. Crawford. \$9,978.
- US-UK Fulbright Commission, Fulbright Scholar Award, "Cross-national Analysis of the Impacts of Urban form on Carbon Dioxide Emissions," Feb 1 Jul 1, 2013. Department of Geography and Environment, University of Aberdeen, UK (Scotland), Principal Investigator. T. Crawford. \$18,000 stipend and five months as visiting researcher.
- Asia-Pacific Network for Global Change Research, "Human Responses to Catastrophic Monsoon Events in South Asia: Designing a Spatially Explicit Model in Low-lying Coastal Areas," 2012-2013. Principal Investigator. T. Crawford, T. Allen, A. Ahmed, D. Bradley, S. Curtis, A. Mishra, A. Mukherji, K. Premalal, A. Salahuddin. \$15,000.

- North Carolina Sea Grant, "Tourism Impacts and Second Home Development in Coastal Communities: A Sustainable Approach," 2010-2012. Co-investigator. P. Long, H. Hao, T. Crawford, C. Landry. \$69,652.
- National Institutes of Health, "Examining the Association Between Obesity and Access to Farmers/Produce Markets Among Low-Income Women," 2011-2012. Co-investigator. S. Jilcott, T. Crawford et al. \$143,315
- Renaissance Computing Institute (RENCI), "Sea Level Rise in North Carolina," 2011-2012. Co-investigator. T. Allen, J. Walsh, D. Corbett, T. Crawford, D. Kain, C. Landry. \$205,740.
- Renaissance Computing Institute (RENCI), "Coastal Erosion Hazards in North Carolina: Spatially Integrated Scientific Measurement, Modeling, and Visualization," 2010-2011. Co-investigator. T. Allen, D. Corbett, T. Crawford, J. Walsh. \$200,000
- Renaissance Computing Institute (RENCI), "Regional Engagement Center for Coastal Systems Informatics and Modeling (C-SIM)," 2009-2010, Co-investigator. T. Allen, D. Corbett, T. Crawford, D. Kain, J. Kruse, C. Landry, N. Murray, C. Smith, E. Reyes, S. Wade, J. Walsh. \$391,627.
- North Carolina Department of Transportation, "Mid-Currituck Bridge Study," 2009-2011. Co-investigator. D.Marcucci, T. Crawford, E. Popke, J. Luckzovich. \$185,000.
- North Carolina Sea Grant, "Linking Demographic Patterns to Landscape Indicators of Coastal Development," 2006-2008. Principal Investigator. T. Crawford, D. Bradley, B. Edwards. \$69,823.
- UNC-General Administration, "North Carolina Coastal Hazards: Economic Implications of Severe Storms and Sea Level Rise," 2008. Co-investigator. T. Allen, D. Corbett, T. Crawford, J. Walsh. \$75,000.
- Renaissance Computing Institute (RENCI), "Natural Hazards and Human Dynamics," 2006-2007. Coinvestigator. J. Kruse, T. Crawford, C. Landry, J. Johnson. \$200,000.
- **Centers for Disease Control**, "The Role of the Physical Environment in the Physical Activity Behaviors of Rural and Urban Children," 2008-2010. Senior personnel. T. Crawford under PI J. Moore. \$24,000.
- Glenmary Research Center, "Diocesan Mapping Project," 2004. Principal Investigator. T. Crawford. \$2,153.
- National Science Foundation, Course Curriculum and Laboratory Improvement, "Integrating Spatial Information Technologies into the Environmental Studies Curriculum," 2000-2003. Principal Investigator. T. Crawford. \$47,796.
- Community-Based Collaboratives Research Consortium, "A Longitudinal and Spatial Analysis of Intermediate Socio-Environmental Impacts of Community-Based Collaborative Planning in Southwest Colorado," 2002-2003. Co-investigator. R. Wilson, T. Crawford. \$10,000.

Internal Grants/Fellowships

- ECU Division of Research and Graduate Studies, "Storm-related Risk and Emergency Communication in the Coastal Zone," 2006-2007, Senior personnel. T. Crawford under PI C. Smith. \$39,074.
- ECU Coastal Maritime Council, "Assessing the Environmental Implications of Later Life Migration in Coastal North Carolina: Linking People to Place Using Parcel Data and Spatial Sampling," 2006. Coprincipal investigator. D.Bradley, T. Crawford, B. Edwards. 0.25 FTE summer stipend.
- ECU Faculty Senate Research and Creative Activity Grant, "Spatial Analysis of Community-Based National Forest Planning in Southwest Colorado," 2006 (spring). Principal Investigator. T. Crawford. Course release.

- ECU Division of Research and Graduate Studies, "Spatial, Environmental and Behavioral Determinants of Valuation of Coastal Erosion Risk," 2005-2006. Co-investigator. O. Bin, T. Crawford, J. Kruse, C. Landry. \$30,000.
- ECU Student Computing and Technology Innovative Project, "Establishment and Enhancement of Distance Education in Geographic Information Science," 2005-2007. Principal Investigator. T. Crawford. \$10,000.
- **Gettysburg College Presidential Research Fellowship,** "Spatial Analysis of Coupled Natural and Human Systems in Coastal Maine," 2002-2003. Co-investigator. J. Commito, T. Crawford, R. Wilson. \$10,000.
- Pre-doctoral Fellowship, Carolina Population Center, University of North Carolina-Chapel Hill, 1997-1999.
- Smith Graduate Research Grant, 1999. University of North Carolina-Chapel Hill, \$500

PUBLICATIONS

- Allen, T., **T. Crawford**, B. Montz, S. Lovelace, J. Whitehead, & G. Kearney. (in press). Linking water infrastructure, public health, and sea level rise: integrated assessment for flood resilience in coastal cities. *Public Works Management & Policy*.
- **Crawford, T.**, & M.K. Rahman. (2018). Settlement patterns. In, S. Walsh (Ed.) Comprehensive Remote Sensing, Vol. 9: *Remote Sensing Applications for Societal Benefits*, pp. 106-122, Elsevier.
- Dawson, T., J.S. Onesimo Sandoval, V. Sagan, & **T. Crawford**. (2018). A spatial analysis of the relationship between vegetation and poverty. *ISPRS International Journal of Geo-Information*, 7, 83; doi:103390/ijgi7030083.
- Boettge, B., D.M. Hall, & **T. Crawford**. (2017). Assessing the bicycle network in St. Louis: a place-based user-centered approach. *Sustainability*, 9, 241; doi:103390/su9020241.
- Rahman, M.K., **T. Crawford**, & T. Schmidlin. (2017). Spatio-temporal analysis of road traffic accident fatality in Bangladesh integrating newspaper accounts and gridded population data. *GeoJournal*, doi:10.1007/s10708-017-9791-x.
- **Crawford, T.** (2015). Finding the Real America on the TransAmerica Bicycle Trail: landscape meaning of a contemporary secular pilgrimage. In, S. Brunn (Ed.) *The Changing World Religion Map: Sacred Places, Identities, Practices and Politics*, pp. 855-873. Springer.
- **Crawford, T.**, S. Jilcott-Pitts, J. McGuirt, T. Keyserling, A. Ammerman. (2014). Conceptualizing and comparing neighborhood and activity space measures for food environment research. *Health & Place*, 30:215-25.
- Munroe, R., **T. Crawford**, & S. Curtis. (2014). Geospatial analysis of ENSO forced precipitation distributions in the Gulf of Mexico. *Professional Geographer*, 66:91-101.
- McGuirt, J., S. Jilcott-Pitts, R. Ward, **T. Crawford**, T. Keyserling, & A. Ammerman. (2014). Examining the influence of price and accessibility on willingness to shop at farmers' markets among low income NC women. *Journal of Nutrition Education and Behavior*, 46: 26-33
- **Crawford, T.**, A. Salahuddin, S. Curtis, A. Ahmed, T. Allen, D. Bradley, A. Mishra, A. Mukherji, & K. Premalal. (2013). Scoping workshop: human responses to catastrophic monsoon events in South Asia: designing a spatially explicit model in low-lying coastal areas. *APN Science Bulletin* March Issue 3: 125-27.
- Crawford, T., D. Bradley, & D. Marcucci. (2013). Impacts of in-migration and coastal amenities on housing

- Thomas W. Crawford, p. 4
- Growth in Coastal North Carolina, USA. *Population, Space and Place* 19: 223-38.
- **Crawford, T.**, D. Marcucci, & A. Bennett. (2013). Impacts of residential development on vegetation cover for a remote coastal barrier in the Outer Banks of North Carolina, USA. *Journal of Coastal Conservation* 17:431-33.
- **Crawford, T.**, Bin, O., Landry, C., & J. Kruse. (2013). On the importance of time for GIS view measures and their use in hedonic property models. *Transactions in GIS*, 18:234-52.
- Allen, T., Wang, Y., & **T. Crawford.** (2013). Remote sensing of land cover dynamics. In, J Shroder (Ed.) *Treatise in Geomorphology*, pp. 80-102, Elsevier.
- Jilcott Pitts S.B., Q. Wu, J.T. McGuirt, **T.W. Crawford**, T.C. Keyserling, & A.S. Ammerman. (2013). Associations between access to farmers' markets and supermarkets, shopping patterns, fruit and vegetable consumption and health indicators among women of reproductive age in eastern North Carolina, USA. *Public Health Nutrition*, 16:1944-52.
- Jilcott-Pitts, S., L. Carr, J. Brinkley, L. Byrd, **T. Crawford**, & J. Moore. (2013). Associations between neighborhood amenity density and health indicators among rural and urban youth. *American Journal of Health Promotion*, 28(1):e40-e43.
- Moore, J.B., J. Brinkley, **T. Crawford**, K.A. Evenson, & R.C. Brownson. (2013) Association of the built environment with physical activity and adiposity in rural and urban youth. *Preventive Medicine* 56: 145-148.
- Weitz, J. & T. Crawford. (2012). Where the jobs are going: job sprawl in U.S. metropolitan regions, 2001-2006. *Journal of the American Planning Association* 78 (1): 53-69.
- **Crawford, T.W.**, & D. Mageean, (2011). A coupled natural and human systems approach towards biodiversity: reflections from social scientists. In Cincotta, R.P, and L.J. Gorenflo (eds.), *The Demography and Geography of Homo Sapiens and Their Influences on Biological Diversity*. Springer-Verlag, p. 225-238.
- Jilcott, S., T. Keyserling, **T. Crawford**, J. McGuirt, & A. Ammerman. (2011). Examining associations among obesity and per capita farmers' markets, grocery stores/supermarkets, and supercenters in US counties. *Journal of the American Dietetic Association* 111(4): 567-572.
- Wilson, R., A. Bigler, & **T. Crawford.** (2010). Looking east for the New West? Characterizing rural change in Adams County, PA", In Dick Winchell, Doug Ramsey, Rhonda Koster, Guy Robinson (eds.) *Geographical Perspectives on Sustainable Rural Change*. Brandon, Manitoba Canada: Brandon University Rural Development Institute.
- **Crawford, T. W.** (2009). Analytical scale. *International Encyclopedia of Human Geography, 1st Edition*. Elsevier. p. 29-33.
- Vaughn, S., & **T.W. Crawford**. (2009). A predictive model of archaeological potential: an example from northwestern Belize. *Applied Geography* 29(4): 542-555.
- Luchette, J. L., & **T.W. Crawford**, (2008). A public participation GIS application for citizen based watershed monitoring in the Pamlico-Tar River Basin, North Carolina. *Southeastern Geographer* 48(2): 184-200.
- Wilson, R., & **T.W. Crawford**. (2008). Tracking collaboration: forest planning and local participation on the San Juan National Forest, Colorado. *Local Environment* 13(7): 609-625.
- Bin, O., **T.W. Crawford**, J. Kruse, J., & C. Landry. (2008). Viewscapes and flood hazard: coastal housing market response to amenities and risk. *Land Economics* 84: 434-448.
- **Crawford, T.W.** (2007). North Carolina's final coastal frontier: land cover change in the Inner Banks, 1996-2001. *The North Carolina Geographer* 15: 37-52.
- **Crawford, T. W.** (2007). Where does the coast sprawl the most? Trajectories of residential development and sprawl in coastal North Carolina, 1971-2000. *Landscape and Urban Planning* 83 (4), 294-307.

- Curtis, S., **T.W. Crawford**, & S.A. Lecce. (2007). A comparison of TRMM to other basin-scale estimates of rainfall during the 1999 Hurricane Floyd flood. *Natural Hazards* 43: 187-198.
- **Crawford, T.W.,** J.A. Commito, & A.M. Borowik. (2006). Fractal characterization of *Mytilus edulis* L. spatial structure in intertidal landscapes using GIS methods. *Landscape Ecology* 21: 1033-1044.
- O'Sullivan, D, Manson, S.M., Messina, J.P., & **T.W. Crawford.** (2006). Space, place, and complexity science (guest editorial). *Environment and Planning A* 38: 611-617.
- **Crawford, T.W.** (2006). Polygon-to-polygon spatial accessibility using different aggregation approaches: a case study of national forests in the US Mountain West region. *Transactions in GIS* 10(1): 121-140.
- **Crawford, T.W.** (2005). Spatial fluctuations as signatures of self-organization: a complex systems approach to landscape dynamics in Rondonia, Brazil. *Environment and Planning B* 32: 857-875.
- **Crawford, T.W.**, J.P. Messina, D. Manson, & D. O'Sullivan. (2005). Complexity science, complex systems, and land use research (guest editorial). *Environment and Planning B* 32: 792-798.
- **Crawford, T.W.**, & R.K. Wilson. (2005). Multi-scale analysis of collaborative national forest planning contexts in the rural US Mountain West. *Population and Environment* 26: 397-426.
- **Crawford, T.W.** (2005). Stability and change on the American religious landscape: a centrographic analysis of major U.S. religious groups. *Journal of Cultural Geography* 22(2): 51-86.
- Walsh, S.J., K. A. Crews-Meyer, **T.W. Crawford**, & W. F. Welsh. (2004). Population and environment interactions: spatial considerations in landscape characterization and modeling. In, *Scale and Geographic Inquiry: Nature, Society and Methods*, edited by R. McMaster and E. Sheppard. Blackwell Publishers, p. 41-65.
- **Crawford, T.W**. (2002). Spatial modeling of village functional territories to support population-environment linkages in northeast Thailand. In, *Linking People, Place, and Policy: A GIScience Approach*, edited by S.J. Walsh and K.A. Crews-Meyer. Norwell, MA: Kluwer Academic Publishers, pp. 91-111.
- Rindfuss, R.R., B.E. Entwisle, S.J. Walsh, P. Prasakurtl, Y. Sawangdee, **T.W. Crawford**, & J. Reade. (2002). Continuous and discrete: where they have met in Nang Rong, Thailand. In, *Linking People, Place, and Policy: A GIScience Approach*, edited by S.J. Walsh and K.A. Crews-Meyer. Norwell, MA: Kluwer Academic Publishers, pp. 7-37.
- Walsh, S.J., **T.W. Crawford**, W.F. Welsh, & K.A. Crews-Meyer. (2001). A multi-scale analysis of LULC and NDVI variation in Nang Rong district, northeast Thailand. *Agriculture, Ecosystems, and Environment* 85: 47-64.
- Walsh, S.J., K.A. Crews-Meyer, **T.W. Crawford**, W.F. Welsh, & R.R. Rindfuss. (2001). Patterns of change in land use, land cover, and plant biomass: separating intra- and inter-annual signals in monsoon-driven northeast Thailand. In, *GIS and Remote Sensing and Applications in Biogeography and Ecology*, edited by A.C. Millington, S.J. Walsh, and P.E. Osborne, Boston: Kluwer Academic Publishers, pp. 91-108.
- **Crawford, T.W.**, K.A. Crews-Meyer, & S.J. Walsh. (1999). Instructional technologies and the Internet: Options and possibilities for geographic information science education. *Geocarto International* 14(2): 75-82.
- **Crawford, T.W.** (1999). A comparison of region building methods used to examine human-environment interactions in Nang Rong District, Northeast Thailand. *Papers and Proceedings of the Applied Geography Conferences* 22: 366-373.
- Gesler, W. M., S. J. Walsh, **T.W. Crawford**, P. S. Wittie, & T. C. Ricketts. (1995). Analysis of hospital service areas in Charlotte-Mecklenburg region of North Carolina, USA through GIS approaches. *Proceedings, CREDES, Hospitals and the Geography of Health Care*, Paris, France, 85-99.

- Walsh, S. J, W. M. Gesler, P. H. Page, & **T.W. Crawford**. (1995). Health care accessibility: Comparison of networks and indices of hospital service areas. *Proceedings, LIS/GIS '95*, Nashville, TN, 2: 994-1005.
- Palka, E. J., & **T.W. Crawford**. (1994). North Carolina: Natural nidus for Rocky Mountain Spotted Fever. *The North Carolina Geographer* 3(summer): 1-16.

OTHER PUBLICATIONS

- Curtis, S., **T. Crawford**, M.K. Rahman, & B. Paul. (2017). Monsoon dynamics in the Ganges-Brahmaputra-Meghna Basin. *Conference Proceedings of 1st International Electronic Conference on Hydrological Cycle* (CHyCle-2017), 12-16 November 2017; Sciforum Electronic Conference Series, Vol. 1, 2017.
- **Crawford, T.** (2013). Human population. Chapter in *The State of the Sounds 2012: An Assessment of the Albemarle Pamlico Ecosystem*. Raleigh, NC, Albemarle Pamlico National Estuary Partnership 10 pages. http://portal.ncdenr.org/web/apnep
- **Crawford, T**. & S. Terziotti. (2013). Land use. Chapter in *The State of the Sounds 2012: An Assessment of the Albemarle Pamlico Ecosystem*. Raleigh, NC, Albemarle Pamlico National Estuary Partnership. 10 pages. http://portal.ncdenr.org/web/apnep
- **Crawford, T**, J. Whitehead, & A. Morgan. (2010). North Carolina Sea Level Rise Risk Management Study Final Methodology, Task 4 Future Land Use and Development Scenarios (37 pages).
- Ericson, R., **T. Crawford**, J. Johnson, & C. Riley-Tillman. (2010). A Challenge Question: Understanding, Analysis, and Management of Catastrophic Risks. *NSF Social, Behavioral and Economic Sciences White Papers* (*SBE 2020: White Papers*), a solicited white paper identifying grand challenges in the social sciences for the next decade. Available online via NSF website.

SCHOLARLY PRESENTATIONS

- **Crawford, T.**, K. Rahman, S. Curtis, & B. Paul. (2018). Resilience thinking and panarchy in the Ganges-Brahmaputra-Meghna delta. Annual Meeting of the Association of American Geographers, New Orleans.
- Rahman, M.K., & **T. Crawford**. (2018). Modeling the Rohingya influx to Bangladesh: a socio-ecological study of adaptive cycle. Annual Meeting of the Association of American Geographers, New Orleans.
- Montz, B., T. Allen, & **T. Crawford**. (2018). Climate change at the coast: a participatory perspective on public health. Annual Meeting of the Association of American Geographers, New Orleans.
- Rahman, K., T. Crawford, S. Curtis, & B. Paul. (2017). Annual resolution shoreline change and spatial uncertainty in coastal Bangladesh. Southeastern Division of the Association of American Geographers, Starkville, MS.
- Flynn, M., T. Allen, & **T. Crawford**. (2017). Sea level rise associated vulnerability assessment to support planning along Cape Hatteras National Seashore. Coastal GeoTools '17. North Charleston, South Carolina.
- Allen, T., & T. Crawford. (2017). Geospatial modeling for coastal community water infrastructure. Coastal GeoTools '17. North Charleston, South Carolina.
- Allen, T.R., **T. Crawford**, & G. Mcleod. (2017). Sea level rise and multi-hazard flooding risks to coastal community water infrastructure. Annual Meeting of the Association of American Geographers, Boston, MA.
- **Crawford, T.**, & M. Rahman. (2017). Space-time characterization of shoreline change in coastal Bangladesh. Annual Meeting of the Association of American Geographers, Boston, MA.

- Rahman, M., & **T. Crawford**. (2017). Space time patterns of recent natural and human disasters in Bangladesh. Annual Meeting of the Association of American Geographers, Boston, MA.
- **Crawford, T.**, & M. Rahman. (2016). Space-time characterization of shoreline change in coastal Bangladesh. Southeastern Division of the Association of American Geographers, Columbia, SC.
- Rahman, M., **T. Crawford**, & T. Schmidlin. (2016). Geospatial analysis of road traffic accidents in Bangladesh. Southeastern Division of the Association of American Geographers, Columbia, SC.
- Allen, T., T. Crawford, B. Montz, & G. Kearney. (2016). Geospatial modeling of flooding threats to coastal community water infrastructure. Southeastern Division of the Association of American Geographers, Columbia, SC.
- Allen, T., **T. Crawford**, & B. Montz. (2016). Multi-model spatial threats to coastal community water infrastructure. 39th Applied Geography Conference, Louisville, KY.
- Allen, T., **T. Crawford**, & B. Montz. (2016). Geospatial vulnerability assessment of coastal water infrastructure. NOAA Social Coast Forum, Charleston, SC.
- Flynn, M., T. Allen, B. Montz, **T. Crawford**, & J.P. Walsh (2016). Vulnerability of landmarks at Cape Hatteras National Seashore. NOAA Social Coast Forum, Charleston, SC.
- Allen, T. J. Whitehead, B. Montz, **T. Crawford** & et al. (2016). Geospatial vulnerability assessment of coastal water and waste water infrastructure. NC Water Resources Institute Annual Meeting, Raleigh, NC.
- **Crawford, T.**, S. Curtis, B. Paul, and M. Rahman. (2016). Riverbank erosion in coastal Bangladesh: a spatially explicit approach towards understanding resilience for a coupled natural-human system. Annual Meeting of the Association of American Geographers, San Francisco, CA.
- **Crawford, T.**, & S. Curtis. (2015). Coupling of south Asian monsoon dynamics to local-scale coastal erosion and human system dynamics. Annual Meeting of the Association of American Geographers, Chicago, IL.
- **Crawford, T**. (2015). Coupling of south Asian monsoon dynamics to local-scale riverbank erosion, risk perceptions, and adaptive response. Southeastern Division of the Association of American Geographers, Pensacola, FL.
- **Crawford, T**. (2014). Urban form as a technological driver of carbon dioxide emissions: a structural human ecology analysis of on road and residential sectors in the conterminous U.S.. 2nd Annual Urbanization and Global Environmental Change (UGEC) Conference: Urban Transitions & Transformations, Synthesis & Policy, Taipei, Taiwan.
- **Crawford, T.**, T. Allen, C. Harmin, & Z. Oyer. (2014). Residential septic system vulnerability to sea level rise in coastal North Carolina. Annual Meeting of the Association of American Geographers, Tampa, FL.
- **Crawford, T.** (2013). Urban form as a technological driver of carbon dioxide emissions: a structural human ecology Analysis of on road and residential sectors in the in the conterminous U.S. Southeastern Division of the Association of American Geographers, Roanoke, VA.
- **Crawford, T.** (2013) Impacts of urban form on CO₂ emissions in metropolitan areas of the conterminous U.S.. Conference of Irish Geographers, Galway, Ireland.
- **Crawford, T**. & A. Bennett. (2012). Shoreline erosion hazard vulnerability of US Atlantic barrier islands. Annual Meeting of the Association of American Geographers, New York, New York.
- Munroe, R., **T. Crawford**, & S. Curtis. (2012). Geospatial analysis of ENSO forced precipitation distributions in the Gulf of Mexico. Annual Meeting of the Association of American Geographers, New York, New York.

- **Crawford, T.**, T. Allen, L. Gedminas, D. Kain, & N. Murray. (2012). A comparison of hurricane advisory map performance using eye-tracking and biometric measures. Visualization Technologies to Support Research on Human-Environment Interactions Workshop, NSF National Socio-Environmental Synthesis Center (SESYNC), Annapolis, MD.
- **Crawford, T.**, T. Allen, L. Gedminas, D. Kain, & N. Murray. (2012). A comparison of hurricane advisory map performance using eye-tracking and biometric measures. 2012 NCEM-ECU Hurricane Workshop, Greenville, NC.
- **Crawford, T.**, D. Marcucci, & A. Bennett. (2012). Impact of policy and parcel development on barrier island vegetation patterns in North Carolina, USA. International Association of Landscape Ecology, Newport, Rhode Island.
- **Crawford, T.**, S. Jilcott, J. McGuirt, T. Keyserling, & A. Ammerman. (2012). Associations between urban-rural status, perceived neighborhood size, travel behavior, and weight status among low-income women in eastern North Carolina. International Society for Behavioral Nutrition and Physical Activity, Austin, Texas.
- Jilcott, S., T. Keyserling, J. McGuirt, **T. Crawford,** & A. Ammerman. (2012). Association between weight status, blood pressure, and use of farmer's markets and supermarkets among low-income women in eastern North Carolina. International Society for Behavioral Nutrition and Physical Activity, Austin, Texas.
- Moore, J., J. Brinkley, **T. Crawford**, K. Evenson, & R. Brownson. (2012). Association of the built environment with physical activity and adiposity in rural and urban children. American College of Sports Medicine Annual Meeting, San Francisco, California.
- **Crawford, T.** (2012). Impacts of urban form on transportation CO₂ emissions in metropolitan areas of the conterminous U.S. Southeastern Division of the Association of American Geographers, Asheville, NC.
- Hill, B., & **T. Crawford.** (2012). Spatial Analysis of NCAA Conference realignment: the role of TV market demographics. Southeastern Division of the Association of American Geographers, Asheville, NC.
- **Crawford, T.**, D. Marcucci, & A. Bennett. (2011). Linkages of coastal policy with patterns of land development and impacts on vegetation cover for a remote barrier island in North Carolina, USA. Annual Meeting of the Association of American Geographers, Seattle, Washington.
- Gedminas, L., T. Allen, **T. Crawford**, N. Murray, & D. Kain. (2011). A study of hurricane advisory maps using eye-tracking and biometric measures. Annual Meeting of the Association of American Geographers, Seattle, Washington.
- Wilson, R., & **T. Crawford**. (2011). Characterizing collaborative resource management in the Intermountain West. Annual Meeting of the Association of American Geographers, Seattle, Washington.
- **Crawford, T.W.**, & D. Marcucci. (2010). Patterns and impacts of demographic and land use change in coastal North Carolina. Shape of the Coast, UNC Law School Continuing Education Conference, New Bern, NC.
- Wilson, R., **T. Crawford**, & M. Catalano. (2010). Collaborative conservation and rural change in the Intermountain West. Annual Meeting of the Association of American Geographers, Washington, DC.
- Bennett, A., **T. Crawford**, & D. Marcucci. (2009). Sand castles in the Banks. Annual Meeting of the American Planning Association, Minneapolis, Minnesota.
- Allen, T., **T. Crawford**, J. Walsh, R. Corbett, & S. Sanchagrin. (2009). Spatial modeling and visualization for the North Carolina Coastal Hazards Decision Portal (NCCOHAZ). Coastal GeoTools '09. Myrtle Beach, South Carolina.
- **Crawford, T.W.** (2009). A sprawl pattern assessment tool applied to residential development in coastal North Carolina. Coastal GeoTools '09. Myrtle Beach, South Carolina.

Crawford, T.W. (2009). Mountains of light: classification and visualization of the urban to rural continuum for the conterminous U.S. Southeastern Division of the Association of American Geographers, Knoxville, Tennessee.

Crawford, T.W. (2009). Pixels, polygons, and scale: geospatial considerations for land use modeling in coastal North Carolina. NOAA Workshop: NC Sea Level Rise Project, Beaufort, North Carolina.

Walsh, J., T. Allen, **T. Crawford**, S. Sanchagrin, & S. Wade. (2009). Modeling and visualization for the North Carolina Coastal Hazards Decision Portal. North Carolina GIS Conference 2009. Raleigh, North Carolina.

Crawford, T.W., & D. Bradley. (2008). How do retirement, migration and tourism impact residential development in coastal North Carolina? Southeastern Division of the Association of American Geographers, Greensboro, North Carolina.

Allen, T. A., **T. Crawford,** Y. Wang, M. O'Driscoll, & R. McClendon. (2008). Mapping and modeling coastal flooding vulnerability from impervious runoff on the Outer Banks, NC. Annual Meeting of the Association of American Geographers, Boston, Massachusetts.

Wilson, R.K., **T.W. Crawford**, & A. Bigler. (2008). Whither the New East? Comparing rural change in southern Pennsylvania and southwestern Colorado. Annual Meeting of the Association of American Geographers, Boston, Massachusetts.

Crawford, T.W. (2007). Mapping the urban-to-rural continuum: remote sensing, city lights and exurban sprawl patterns in coastal North Carolina. Southeastern Division of the Association of American Geographers, Charleston, South Carolina.

Ward, H., C. Smith, D. Kain, **T. Crawford**, & J. Howard. (2007). Emergency communication and risk perception in the coastal zone of eastern North Carolina. Coastal Zone '07, Portland OR.

Crawford, T.W., D. Bradley, and B. Edwards. (2007). Linking demographic profiles to residential land use patterns in coastal North Carolina. Coastal GeoTools '07, Myrtle Beach, SC.

Crawford, T.W. (2007). North Carolina's final coastal frontier: land cover change analysis for the Inner Banks, 1992-2001. Annual Meeting of the Association of American Geographers, San Francisco, CA.

Crawford, T.W. (2007). Signals of land cover change for North Carolina's Inner Banks, 1992-2001. 2007 NC GIS 10th Anniversary Conference, Winston-Salem, NC.

Crawford T.W. (2006). Relocation of retirees. Making Tourism Work for You II Conference, Hilton Hotel, Greenville, NC.

Crawford, **T.W.** (2006). Inland coastal boom? Random and systematic land cover transitions in the Inner Banks, 1992-2001. Annual Meeting of the Association of American Geographers Southeastern Division, Morgantown, WV.

Bin, O., **T.W. Crawford**, J. Kruse, & C. Landry (2006). Valuing spatially integrated amenities and risk in coastal housing markets. The Third World Congress of Environment and Resource Economists, Kyoto, Japan.

Crawford, T.W. (2005). Time-space characterization of residential development in a coastal setting. Annual Meeting of the Association of American Geographers Southeastern Division, West Palm Beach, FL.

Bradley, D., & **T.W. Crawford**. (2005). Exploring the potential impacts of later-life migration in coastal regions: land use in New Hanover County, North Carolina. Annual Meeting of the Gerontological Society of America, Orlando, FL.

Bradley, D, and **T.W. Crawford**. (2005). Changing coastal demographic profiles and the creation of multiple use zones. Conference on Social Science Issues, Traditional Fishing Communities: Past, Present, and Future, Greenville, NC, March 18.

Crawford, T.W. (2005). Fractal characterization of suburban residential development in Montgomery County, Maryland, 1950-2000. Annual Meeting of the Association of American Geographers, Denver, CO.

Crawford, T.W. (2004). Coastal exposure estimation using viewshed analysis techniques. Poster presented at Annual Meeting of the Association of American Geographers Southeastern Division, Biloxi, MS.

Crawford, T.W., & R.K. Wilson. (2004). County-level measures of spatial accessibility to national forests in the US Mountain West. Poster presented at Annual Meeting of the Association of American Geographers, Philadelphia, PA.

Wilson, R.K., and **T.W. Crawford.** (2004). Tracking collaboration: a longitudinal assessment of community-based planning on the San Juan National Forest, Colorado. Annual Meeting of the Association of American Geographers, Philadelphia, PA.

Wilson, R.W., & **T.W. Crawford**. (2003). A longitudinal and spatial analysis of intermediate socio-environmental impacts of CBC planning in SW Colorado. Community-Based Collaboratives Research Consortium Conference, SnowBird Resort and Conference Center.

Crawford, T.W. (2003). Signatures of complexity: Spatio-temporal dynamics of land cover patterns for coupled natural-human systems. Annual Meeting of the Association of American Geographers, New Orleans, LA.

Borowik, A., & **T. W. Crawford**. (2003). Multi-scale characterization of mussel bed structure in coastal Maine: a GIS approach. Poster presented at 32nd Annual Benthic Ecology Meeting, Groton, CT.

Crawford, T.W. (2002). Spectral analysis of forest cover patterns in Rondonia, Brazil: Evidence for biocomplexity in a coupled natural-human system. Annual Meeting of the Association of American Geographers Southeastern Division, Richmond, VA.

Crawford, T.W. (2002). Conceptualizing and quantifying land use complexity. Annual Meeting of the Association of American Geographers, Los Angeles, CA.

Crawford, T.W. (2001). Spatial complexity, pattern metrics, and land use. Annual Meeting of the Association of American Geographers Southeastern Division, Lexington, KY.

Crawford, T.W. (2001). Spatially explicit indicators of landscape fragmentation. Poster presented at Annual Meeting of the Association of American Geographers, New York, NY.

Crawford, T.W. (2001). Teaching GIS, teaching with GIS, and bringing spatial data into the classroom. Instructional Technology Support Conference, Gettysburg College.

Crawford, T.W. (2000). Integration of demographic data with GIS and remotely sensed data to support a village-level analysis of Nang Rong District, Northeast Thailand. Annual Meeting of the Association of American Geographers, Pittsburgh, PA.

Walsh, S. J., **T.W. Crawford**, K.A. Crews-Meyer, & W.F. Welsh. (1999). Scale dependent relationships in northeast Thailand: NDVI variation as a function of biophysical, social, and geographical factors and their influence on landscape form and function. An International Workshop, "Current Progress in Quantifying Spatially-Explicit Causes and Effects of Land-Use/Cover Change: Examples From Different Parts of the World," Wageningen, The Netherlands.

Crawford, T.W. (1999). Use of an integrated GIS to analyze the impact of population change on forest biomass change in northeast Thailand. Annual Meeting of the Association of American Geographers Southeastern Division, Tampa, FL.

Crawford, T.W. (1999). A comparison of region building methods used to examine human-environment interactions in Nang Rong District, Northeast Thailand. Applied Geography Conference, Charlotte, NC.

Rindfuss, R.R., B. Entwisle, S. J. Walsh, **T.W. Crawford**, & Y. Sawangdee. (1999). A comparison of spatially explicit methods for relating household census data to field plots in rural Thailand. Third Open Meeting of Human Dimensions of Global Change Community, Shonan Village, Japan.

Crawford, T.W., 1999. Spatial modeling of population-environment linkages and biophysical profiles in northeast Thailand. Annual Meeting of the Association of American Geographers, Honolulu, HI.

Crawford, T.W. & S. J. Walsh. (1998). Social, spatial, and biophysical domains: village associations in northeast Thailand. Annual Meeting of the Association of American Geographers, Boston, MA.

Walsh, S.J., & **T.W. Crawford**. (1997). The future of mapping. Conference on the Southeast in Early Maps, University of North Carolina, Chapel Hill, NC.

Crawford, T.W. (1997). The meaning of pilgrimage in the United States. Annual Meeting of the Association of American Geographers, Fort Worth, TX.

Crawford, T.W. (1996). Network analysis and hospital use indices: Approaches for assessing health care accessibility. North Carolina Geographic Information Systems Conference, Winston-Salem, NC.

Crawford, T.W. (1996). Social space and therapeutic places on the Internet: a Multiple Sclerosis listserver. Meeting of the Association of American Geographers Southeastern Division, Athens, GA.

Crawford, T.W., W. M. Gesler, S. J. Walsh, & P. H. Page. (1996). Approaches for assessing health care accessibility within a GIS environment. Annual Meeting of the Association of American Geographers, Charlotte, NC.

Gesler, W.M., S.J. Walsh, **T.W. Crawford**, P.S. Wittie, & T.C. Ricketts. (1995). Analysis of hospital service areas in the Charlotte-Mecklenburg region of North Carolina, USA through GIS approaches. CREDES, Hospitals and the Geography of Health Care, Paris, France.

Walsh, S.J., P. Wittie, **T.W. Crawford**, & P. Page. (1995). Health care planning and the spatial perspective within a GIS environment. Carolinas Medical Center, Charlotte, North Carolina.

Wittie, P.S., **T.W. Crawford**, S.J. Walsh, & W.M Gesler. (1995). Delineating health service areas using a geographic information system. Annual Meeting of the Association of American Geographers, Chicago, IL.

OTHER PRESENTATIONS

Crawford, T. (2018). Coastal erosion vulnerabilities, monsoon dynamics, and human adaptive response in Bangladesh. Dhaka University (Bangladesh), Department of Geography Guest Seminar.

Crawford, T. (2018). Coastal erosion vulnerabilities, monsoon dynamics, and human adaptive response in Bangladesh. Old Dominion University, Center for Physical Oceanography (CCPO) & ODU Resilience Collaborative (ODURC) Spring 2018 Seminar Series.

Crawford, T., B. Paul, M.K. Rahman, & S. Curtis. (2018). Panel Presentation: Geospatial science, human geography, and atmospheric science for coastal research – understanding and predicting riverbank erosion in Bangladesh. East Carolina University, Harriot College of Arts and Sciences & Department of Geography.

Crawford, T.W. (2015). Geospatial characterization of coastal hazards and human biometric response. Invited seminar at the Parks College of Engineering, St. Louis University.

Crawford, T.W. (2015). Geospatial characterization of coastal hazards and human biometric response. Invited

seminar at ASPRS Saint Louis University Student Chapter Meeting, St. Louis University.

Crawford, T.W. (2015). The fluidity of resilience: panarchy as a model for the coupling of monsoon dynamics, riverbank erosion, and human adaptive response. Invited seminar at Center for Sustainability, St. Louis University.

Crawford, T.W. (2013). Geospatial characterization of coastal hazards and human biometric response. Invited seminar at the Centre for Geoinformatics, St. Andrews University, Scotland UK.

Crawford, T.W. (2013). Mapping and monitoring coastal hazards with geospatial technology. Guest class lecture for Monitoring the Environment, Department of Geography & Environment, University of Aberdeen, Scotland UK.

Crawford, T.W. (2013). Shoreline erosion hazard vulnerability of U.S. Atlantic barrier beaches. Guest class lecture for Current Issues in Coastal Management, Department of Geography & Environment, University of Aberdeen, Scotland UK.

Crawford, T.W. (2010). Connecting the dots from North Carolina to the world: places and products. North Carolina Teacher Cadet and FTA 2010 Regional Conference, Greenville, NC.

Crawford, T.W. (2009). Pixels, polygons, and scale: geospatial considerations for land use modeling in coastal North Carolina. Department of Geography Colloquium, UNC-Chapel Hill.

Crawford, T.W. (2009). Pixels, polygons, and scale: geospatial considerations for land use modeling in coastal North Carolina. Workshop of the North Carolina Sea Level Rise Risk Management Study, Cary, North Carolina.

Crawford, T.W. (2009). Regional overview and data for Task 4 land projection and modeling. Workshop of the North Carolina Sea Level Rise Risk Management Study, Chapel Hill, North Carolina.

Allen, T., S. Sanchagrin, & **T. Crawford**. (2009). Visualizing storm surges: communicating risk linking modeling and geovisualization. North Carolina Emergency Managers Association Meeting, Sunset Beach, North Carolina.

Crawford, T. W. (2008). Human dimensions of GIScience and technology. Invited presentation at Geographic Information Science Workshop 2008, Greenville, North Carolina, sponsored by the ECU Center for Geographic Information Science, ECU Coastal Maritime Council, and ECU Renaissance Computing Initiative (RENCI).

Crawford, T. W. (2008). GIS overview and application. Invited presentation at Innovative Community Planning Tools Workshop, Kinston, North Carolina, sponsored by the Department of Defense US Marine Corps.

Crawford, T. W. (2008). Linking demographic patterns to landscape indicators of coastal development. Invited presentation at Marine Fisheries Council Habitat and Water Quality Advisory Committee, New Bern, North Carolina.

Crawford, T.W. (2006). Multiple roles of geographic information science and technology. Workshop on Storm-related Risk and Emergency Communications in the Coastal Zone, East Carolina University.

Crawford, T.W. (2006). Human dimensions of coastal land cover change. Research Workshop, ECU Coastal Maritime Council, Greenville, NC.

Crawford, T.W. (2005). Geographic information science at East Carolina University's Department of Geography. Poster presented at NCGIS 2005 Conference, Winston-Salem, NC, March 3-4.

Crawford, T.W. (2004). GIS and landscape approaches to coastal restoration. Coastal Ecosystem Restoration Workshop, ECU Coastal Maritime Council, Greenville, NC, September 18.

Crawford, T.W. (2004). Geographic approaches to coastal land use and cover change. For, CRM 6100: Introduction to Coastal Problems, East Carolina University, September 10.

Crawford, T.W. (2004). GIS workshop on computer applications in public administration. For, PADM 6260: Computer Applications in Public Administration, East Carolina University, April 13.

Crawford, T.W. (2004). GIS workshop. For, American Fisheries Society, East Carolina University Chapter, March 26.

Crawford, T.W. (2004). An overview of GIS. For, ECON 3323: Seminar in Regional Analysis, East Carolina University, February 13.

Crawford, T.W. (2004). An overview of geographic information systems. Presented to a Visiting Delegation from the Urals Academy of Public Administration (Yekaterinburg, Russia), Greenville, NC.

Crawford, T.W. (2003). The integrative power of GIS. Keynote speaker at GIS Day Celebration, East Carolina University, November 19.

Crawford, T.W., J. Commito, & R. Wilson. (2002). Geographic Information Systems and Environmental Studies at Gettysburg College. Fall Meeting of the Gettysburg College Board of Trustees.

Crawford, T.W., S. Italiano, & W. Hunter. (2002). Geographic Information Systems and the Gettysburg College Curriculum. Gettysburg College Science Advisory Committee Meeting.

Crawford, T.W. (1999). Spatial linkage of social and environmental data to assess regional development patterns in Nang Rong District, Northeast Thailand. Invited talk a the Carolina Population Center, University of North Carolina, Chapel Hill, NC.

TEACHING EXPERIENCE

Introduction to GIS (grad, Saint Louis University)

Introduction to Geographic Information Systems (Gettysburg College and UNC-Chapel Hill)

Geographic Information Systems I, Intermediate GIS (ECU)

Geographic Information Systems II, Advanced GIS (ECU)

Environmental Applications of Geographical Information Systems (Gettysburg College)

Digital Cartography and Geovisualization (grad, Saint Louis University)

GIS Research Methods/Spatial Planning Methods (grad, Saint Louis University)

GIS and Society (ECU)

GIScience, Society, and Sustainability (grad, proposed/accepted, not yet taught, Saint Louis University)

Graduate Seminar on Geographic Information Science (ECU)

Introduction to Geography (ECU and Gettysburg College)

People, Places, and Environments (ECU)

World Regional Geography (UNC-Chapel Hill)

Power of Place (ECU), Honors College Seminar

Human Dimensions of Environmental Change, Senior Seminar (Gettysburg College)

AWARDS & HONORS

Banpu Chair of Sustainability, Saint Louis University, 2014, an endowed named chair honor with permanent appointment (though resigned from university in 2017).

Best Paper, Rural Geography Specialty Group of the AAG, 2014, Wilson, R. Crawford, T., and Cawley, S. (2014). Collaborative conservation and rural sustainability in the American West. Presented at the Annual Meeting of the AAG.

Scholar Teacher Award, 2010-2011, East Carolina University Division of Research and Graduate Studies, \$1,000.

Best Publication in *Southeastern Geographer*, 2008, Luchette, J. L. and T.W. Crawford (2008). A public participation GIS application for citizen based watershed monitoring in the Pamlico-Tar River Basin, North Carolina. *Southeastern Geographer* 48(2), 184-200.

Best Paper, Ph.D. Student Honors Competition, 1999 Annual Meeting of the Association of American Geographers Southeastern Division, Use of an integrated GIS to analyze the impact of population change on forest biomass change in northeast Thailand, \$200.

First Place Award, Student Paper Competition of the GIS Specialty Group of the Association of American Geographers, 1999 Annual Meeting of the Association of American Geographers, Spatial modeling of population-environment linkages and biophysical profiles in northeast Thailand, \$1,000.

UNIVERSITY AFFILIATIONS

Coastal@VT, affiliate faculty member, Virginia Tech

PhD. Program in Integrative Applied Sciences, affiliate faculty, Saint Louis University.

Center for Geographic Information Science, Director, East Carolina University

Renaissance Computing Initiative (RENCI), research associate, East Carolina University.

Center for Sustainable Tourism, research associate, East Carolina University.

Center for Natural Hazards Research, affiliate faculty, East Carolina University.

PhD. Program in Coastal Resources Management, affiliate faculty, East Carolina University.

DEPARTMENTAL AND UNIVERSITY SERVICE

Member, Department Heads Executive Committee, Fall 2018-Spring 2020. Virginia Tech.

Member, University Strategic Planning Advisory Committee, Spring 2018-present, Virginia Tech.

Member, Gender@VT (university committee to promote gender equity), Fall 2018-present, Virginia Tech.

Chair, Rank and Tenure Committee, Fall 2014-present, Saint Louis University.

LTAC Committee Representative, Fall 2015-present, Saint Louis University.

Activity Insight Liaison, Spring 2015-present, Saint Louis University.

University Website Design Preview Panel, Fall 2015-present, Saint Louis University.

Coordinator, Undergraduate GIScience Certificate, Fall 2003-2014, Geography, East Carolina University.

Coordinator, Graduate GIScience Certificate, Fall 2003-2014, Geography, East Carolina University.

Director, Center for Geographic Information Science, 2006-2014, East Carolina University.

Chair, GIST Degree Committee, Fall 2006-2010, Geography, East Carolina University.

Member, Curriculum Committee, 2012-2014, Geography, East Carolina University.

Chair, Curriculum Committee, 2009-2012, Geography, East Carolina University.

Member, Curriculum Committee, 2007-2009, Geography, East Carolina University.

Member, Ad-hoc Committee (for integration of Planning and Geography), 2012, East Carolina University.

Member, Search Committee, Human Geography interim hire, 2012, Geography, East Carolina University.

Steering Committee, 2007-2014, Coastal Maritime Council, East Carolina University.

Member (elected), Geography Advisory Committee, 2011-2012, Geography, East Carolina University.

Member (elected), Geography Advisory Committee, 2006-2008, Geography, East Carolina University.

Panel Reviewer, Spring 2008, Research Development Award Program, East Carolina University.

Faculty Judge, Spring 2008, 2nd Annual Research and Creative Activity Week (judged student research).

Member, Search Committee, Coastal Policy hire, 2006-2008, IICSP, East Carolina University.

Member, Graduate Committee, Fall 2006-2014, Geography, East Carolina University.

Member, Search Committee, Atmospheric Science hire, 2006-2007, Geography, East Carolina University.

Chair, Search Committee, GIScience hire, 2005-2006, Geography, East Carolina University.

Member, Social Committee, Fall 2003-Spring 2006, Geography, East Carolina University.

Member, Search Committee, Landscape Ecology hire, 2004-2005, CRM, East Carolina University.

Director, Gettysburg College GIS Lab, 2000 – 2003, Gettysburg College.

Acting Department Co-chair, Spring 2001, Dept. of Environmental Studies, Gettysburg College.

Information Resources Advisory Committee, 2001 – 2003, Gettysburg College.

 $Information\ Technology\ Liaison,\ 2001-2003,\ Dept.\ of\ Environmental\ Studies,\ Gettysburg\ College.$

Faculty Advisor, 2001-2002, Science Theme House, Gettysburg College. Colloquium Series Chairperson, 1996-1997, Department of Geography, UNC-Chapel Hill. Graduate Representative, 1994-1995, Department of Geography, UNC-Chapel Hill.

JOURNAL AND REVIEWER SERVICE

Associate Editor, *International Journal of Applied Geospatial Research*, 2012-present. Editorial Board, *Journal of Cultural Geography*, 2014-present.

NSF panel member, four two-day panels (not currently serving). University of Puerto Rico Sea Grant College Program, proposal review.

Saint Louis University Beaumont Faculty Development Fund, proposal review. External tenure review:Gettysburg College, University of Southern Mississippi, Mississippi State University

Journals Served

Area

Canadian Geographer

Computers and Geosciences

 $Environmental\, Management$

Environment and Planning A

Environment and Planning B

Geocarto International

Geographical Review

Health and Place

International Journal of Applied Geospatial Research

International Journal of Geographic Information Science

Journal of Coastal Conservation

Journal of Cultural Geography

Journal of Flood Risk Management

Journal of Geography

Journal of Environmental Management

Land Degradation and Society

Landscape and Urban Planning

Land Use Policy

 $North\ Carolina\ Geographer$

Photogrammetric Engineering & Remote Sensing

Plant Ecology

Physical Geography

Population and Environment

Southeastern Geographer

Remote Sensing

OFFICES HELD

Academic Councilor (elected), 2015-present, GIS Specialty Group of the Association of American Geographers. Secretary/Treasurer (elected), 2012-2015, Coastal and Marine (COMA) Specialty Group of the Association of American Geographers.

NC State Representative (elected), 2012-2014, Southeastern Division of the Association of American Geographers. Nominating Committee, Member (elected), 2005-2006, Southeastern Division of the Association of American Geographers.

President (elected), 2009-2011, North Carolina Geographical Society.

Secretary/Treasurer (elected), 2007-2009. North Carolina Geographical Society.

Steering Committee, Member (elected), 2004-2006, North Carolina Geographical Society.

OTHER SERVICE AND ACTIVITIES

Session Organizer, Chair, and Judge, GIS Specialty Group Student Paper Competition, Association of American Geographers Annual Meeting, New Orleans, LA, 2018.

Session Organizer, Sea Level, GIScience and Uncertainty, Association of American Geographers Annual Meeting, Boston, MA, 2017.

Session Organizer, Chair, and Judge, GIS Specialty Group Student Paper Competition, Association of American Geographers Annual Meeting, Boston, MA, 2017.

Session Organizer, Hazards, Disasters and Human Dimensions in the Context of South Asia, Association of American Geographers Annual Meeting, Boston, MA, 2017.

Session Organizer, Human-Environment Interactions and Adaptation to Climate Change in the Context of Bangladesh, Association of American Geographers Annual Meeting, Boston, MA, 2017.

Session Organizer, Chair, and Judge, GIS Specialty Group Student Paper Competition, Association of American Geographers Annual Meeting, San Francisco, CA, 2016.

Session Organizer and Chair (6 sessions), Association of American Geographers Annual Meeting, Chicago, IL, 2015.

Session Organizer (1 session), Southeastern Division of the Association of American Geographers Annual Meeting, Pensacola, FL, 2015.

Science Committee Member, Albemarle-Pamlico National Estuary Program, 2012-2014.

Facilitator, FoR ENC (Foundation of the Renewal for eastern North Carolina), Your Town: Creative Communities Imitative, Produced large format map and served as a small group facilitator for a community planning workshop sponsored by FoR ENC targeted towards coastal growth in small communities of the Inner Banks, NC., Columbia, North Carolina, 3-day workshop.

Paper Discussant, Southeast Division of the Association of American Geographers Annual Meeting, Charleston, SC, November 2007.

Session Moderator, 'University Research Applications', 2007 NCGIS Conference, Winston-Salem, NC, March 2007

Panelist, 'Women in Geography', Southeast Division of the Association of American Geographers Annual Meeting, Morgantown, WV, November 2006.

Paper Discussant, Southeast Division of the Association of American Geographers Annual Meeting, Morgantown, WV, November 2006.

Paper Discussant, Southeast Division of the Association of American Geographers Annual Meeting, West Palm Beach, FL, November 2005.

Panelist, 'Unifying Themes and Issues in AAG Biogeography', Annual Meeting of the Association of American Geographers, Denver, CO, April, 2005.

Session Co-organizer, 'Geographical Perspectives on Complex Systems II', Annual Meeting of the Association of American Geographers, Philadelphia, PA, March 2004.

Session Chair, 'Geographical Perspectives on Complex Systems I', Annual Meeting of the Association of American Geographers, Philadelphia, PA, March 2004.

Paper Discussant, Southeast Division of the Association of American Geographers Annual Meeting, Biloxi, MS, November 2004.

Faculty Judge, 2001 Student Poster Competition of the Remote Sensing Specialty Group (AAG).

GIS Election Mapping Analyst, 1993, Office of Chancellor, UNC-Chapel Hill.

MEMBERSHIPS

Association of American Geographers (AAG), current. Southeastern Division, Association of American Geographers, current. North Carolina Geographical Society, 2004-2013.

GRADUATE ADVISING

Ph.D. Mentor or Committee Member (Integrated and Applied Sciences, Saint Louis University)

2014-17	Ted Dawson, mentor (Crawford left Saint Louis University in 2017)
2017-18	Ted Dawson, external committee member (Crawford at Virginia Tech)
2015-17	Erik Mueller, mentor (Crawford left Saint Louis University in 2017)
2015-17	Kate Schaefer, mentor (Crawford left Saint Louis University in 2017)

M.S. Mentor (GIScience, Saint Louis University)

- 2017 Govind Chadalawada, non-thesis.
- 2017 Allison Davis, Sensitivity Analysis of a Euclidean Distance-Based Resource Selection Function: Neutral Landscape Modeling Approach.
- 2017 William McWay, non-thesis.

Ph.D. Dissertations Directed (Coastal Resources Management, East Carolina University)

2013 Andrew Bennett, Characterizing Patterns And Drivers of Land Use/Land Cover Change Along the Atlantic Coast Barrier Islands: Examining the Roles of Development Pressure, Spatial Accessibility, and Policy.

M.A. Theses Directed (Geography, East Carolina University)

- 2013 Brian Clayton, Applying GIS to Locate the USS Louisiana: A Study of the Fort Fisher Civil War Naval Battlefield.
- 2011 Bryce Carmichael, A Validation Assessment for the Hazards of Place model of Vulnerability for Northeastern North Carolina.
- 2011 Laurynas Gedminas, Evaluating Hurricance Risk Communication Using Eye-tracking and Biometric Data.
- 2007 Joseph Luchette, Application of GIS and IMS at the Pamlico-Tar River Foundation.
- 2006 Sallie Vaughn, Using Geographic Information Science to Predict Archaeological Sites: An Example From Northwestern Belize.
- 2006 William Suvak, Spatial Analysis of Broadband Service: Identifying the Digital Divide in North Carolina.
- 2006 Timothy Tresholavy, Stormwater Runoff in North Carolina's Tar-Pamlico River Basin: Analyzing the Potential for Runoff and Stakeholder Perceptions of Urban Stormwater Rules.
- 2005 Brian Chambers, Coastal Urbanization and Tidal Water Creek Quality.

M.A. Committees (Geography, East Carolina University)

* Did not complete.

Note: Thesis unless indicated as "Internship Report".

- 2014 Christopher Zarzar, Development and Spatial Analysis of Precipitation Organization Climatology for North Carolina.
- 2013 Richard Kennedy, Automobility, Hospitality, African-American Tourism, and Mapping Victor H. Green's Negro Motorist Green Book.
- 2013 Heather Blair, North Carolina Wine Growers' Perceptions of Climate Change Impacts.

- 2013 Janna Caspersen, Measuring Geospatially Explicit Perceptions of Sudanese Ethnic Group Locations: A Comparision of Subject-Matter-Experts and Online Data.
- 2013 William Pace, Perceptions of Hurricane Risk Among North Carolina's Coastal Residents: A Case Study of Hurricane Irene.
- 2013 Brent Gore, Modeling Wetland Response to Future Sea Level Rise in the Pamlico and Croatan Sounds, North Carolina.
- 2013 Matthew Carey, Modeling Site Suitability of Living Shorelines in the Albermarle-Pamlico Estuarine System.
- 2012 Kelsey Mulder, Predicting Responses to Flash Flooding: A Case Study of Boulder, Colorado.
- 2011 Sarah Jessop, Mid-Summer Dry Spell and Agriculture in Jamaica: Implications for Farming Practices, Techniques, and Culture.
- 2011 James Edwards, *Prioritization of Carolina Bays as Mitigation Projects From a Herpetofaunal Perspective*.
- 2011 Alison Hueber, Analyzing Resident Place Satisfaction in a Tourist Destination Through Auto-Photography: The Case of Southern Shores, North Carolina.
- 2010 Haley Cleckner, Spatial Modeling of the Risk of Mosquito-borne Disease Transmission, Chesapeake, Virginia.
- 2010 Jennifer Mann, The Coast as a Vernacular Region.
- 2010 Justin Briggs, Locational Aspects of Adaptive Reuse: The Case of North Carolina's Textile Mills.
- 2009 Terri Moreau, Can You Hear Voices on Walls?: How Graffiti is Known in Punitive and Tolerant Public Spaces.
- 2009 Andrew Bennett, Combining the Tools of Smart Growth and Citizen Participation. Internship Report.
- 2009 Sean Hawley, *Greenville Utilities Commission Geographic Information Systems Training Plan*. Internship Report.
- 2008 Rachel Campbell, *Towards the Design of a Postal Code System for Trinidad and Tobago*. Internship Report.
- 2007 Caleb Parker, The Politics of Church Space: North Carolina's United Methodist Clergy Respond to Homosexuality.
- 2007 Lindsay Wolter, Stormwater Runoff Management: A Case Study of Short Term Solutions for Pitt County Planning. Internship Report.
- 2006 Joseph Luchette, Application of GIS and MIS at the Pamlico-Tar River Foundation, Internship Report.
- 2006 Joseph Mangum, A Greenprint for Pitt County's Future: A Review and Critique of the Methodology Guiding the Development of the Pitt County Greenway Plan. Internship Report.
- 2005 Matthew Mitchelson, The Economic Geography of MLK Streets.
- 2004 Philip Sullivan, Spatial Data Sharing: A Proposal for the City of Greenville, East Carolina University, Greenville Utilities Commission, and the County of Pitt. Internship Report.
- * Todd Palmer, Revisiting Stability and Change on the American Religious Landscape: On the Mormon Experience in Eastern North Carolina. Proposal defended Spring 2012.
- * Carey Tragert, Development, Validation and Vulnerability Assessment of an Overwash Model, Outer Banks, North Carolina. Proposal defended Fall 2008.
- * Travis Hill, Quantifying Storm Induced Overwash Deposits on a Barrier Island Using Terrestrial Laser Scanning Before and After Hurricane Irene.
- * Heather Sheffield, *Perceptions of a Rising Tide: The Outlook on Sea Level Rise in Carteret County*. Proposal defended Fall 2007.

M.A. Committees (Other Departments, East Carolina University)

- 2011 Whitney Knollenberg, Stakeholders' Attitudes Towards Sustainable Tourism Development in Coastal Communities. Sustainable Tourism.
- 2011 Jonathan Schleier, GIS-based Archaeological Site Location Modeling in Pitt County, North Carolina. Anthropology.
- 2009 Lisa Cowert, Analyzing Estuarine Shoreline Change in Coastal North Carolina. Geology.
- 2007 David Evans, Recreation and Leisure Studies.

Ph.D. Committees (East Carolina University)

- * Did not complete.
- 2015 Jennifer Cudney, *Incorporating Migration and Local Movement Patterns into Management Strategies for Spiny Dogfish (Squalus acanthias)*. Coastal Resources Management.

- 2012 Laura Jean Palmer-Moloney, Human-Environment Interaction and Water Complexities: Mustering Science and Policy for a Coastal Resources Management Approach to Counterinsurgency (COIN) Operations. Coastal Resources Management.
- 2012 Jingyuan Li, Community Flood Hazard Mitigation and the Community Rating System of National Flood Insurance Program. Coastal Resources Management.
- 2011 Gregory Meyer, Effects of Land Use Change on Juvenile Fishes, Blue Crab and Brown Shrimp Abundance in the Estuarine Nursery Habitats of North Carolina. Coastal Resources Management.
- 2009 Jason Brown, *A Key Ecological Trait Drives the Evolution of Monogamy in Peruvian Poison Frog.* Interdisciplinary Doctoral Program in Biological Sciences.
- 2008 Ahmed Salahuddin, Intraseasonal and Interannual Analysis of the Organization of Mesoscale Convection Systems in the Indo-Pacific Region Using Satellite Measurements. Coastal Resources Management.
- * Hilary Huffer, Analyzing Oil Spills and Bidding Behavior in the Gulf of Mexico: A GIS-Centric Approach. Coastal Resources Management.

Ph.D. Committees (UNC-Chapel Hill)

2016 Jared McGuirt, Formative Evaluation of a Food Access Enhanced Nutrition Education Program. Public Health.