

Education

1983. BSAS. Architecture. 1983. University of Illinois at Urbana-Champaign.

1997. MA. Architecture. 1997. UIUC

2003. Ph.D. Urban and Regional Planning. UIUC

Academic Positions

2003-05. Research Assistant Professor. Department of Urban and Regional Planning,
University of Illinois at Urbana-Champaign (UIUC)

2005-16. Assistant/Associate Professor, Department of Urban and Regional Planning, UIUC

2016-present. Professor, Department of Landscape Architecture, UIUC

Affiliated faculty appointments:

- Department of Urban and Regional Planning
- School of Architecture
- Department of Natural Resources and Environmental Sciences
- National Center for Supercomputing Applications (NCSA)

2004-24. Executive Director, Smart Energy Design Assistance Center (SEDAC)

2003- present. Director, LEAM Modeling Systems Laboratory

Professional Employment

1983-93. Professional Licensed Architect. Chicago Metro Area. Deal Associates

1993-03. Senior Research Architect. Construction Engineering Research Laboratory (CERL),
US Army Corps of Engineers ERDC-CERL. Champaign, IL

Honors and Recognition

2004. Outstanding Planning Award for a Student Project, Missouri Chapter of the American
Planning Association, Conservation Design Workshop

2006. Horwood Critique Prize for Most Outstanding Paper, "A Comprehensive Urban Planning
Support System," the Urban and Regional Information Systems Association (URISA)

2006. Sustainable Infrastructure Research Project of the Year, "A Dynamic Spatial Decision
Support System for Sustainable Military Communities," the Strategic Environmental
Research and Development Program

ULI Hines Student Urban Design Competition (faculty advisor to student teams)

2006, Honorable Mention; 2007, Finalist; 2008, Honorable Mention

2008-11. Honorary Scientist, Republic of Korea Rural Development Administration 2008.

2009 Fall. List of Teachers Ranked as Excellent by their Students

2012. J. Frederick Miller Award for distinguished volunteer service, the University YMCA

Invited Lectures

2000. Keynote address, Sustainable Building 2000, Maastricht, The Netherlands (October 22-25).
2002. "The Land use Evolution and Impact Assessment Model (LEAM)," US EPA Region V Watershed Modeling Workshop, Chicago, IL (April 9).
2002. "Evolving Landscapes, Urban Transformation, and Smart Growth," Invited speaker, 2002 Governors Balanced Growth Conference, Springfield, IL (August 13).
2002. "Land Use Modeling and Smart Growth," National Governors Association Policy Academy on Smart Growth, Salt Lake City, UT (November 18-19).
2003. "The Land Use Evolution and impact Assessment Model (LEAM): Applications to Hydrologic Processes," Hydrologic Seminar Series, Purdue University, West Lafayette, IN (March 27).
2003. "Land Use Change and Metro Transportation Models," Featured speaker, Midwest Transportation Planning Conference, St Louis, MO (April 15).
2003. "Sustainable Land-Use Planning: The Integration of Process and Technology," Invited Speaker, Illinois Facility Conference and Expo, Illinois State University, Normal, IL (November 5).
2004. "Land Use and Transportation Modeling" with Todd Brauer, Chicago Area Transportation Study (CATS) Modeling User Group, Chicago, IL (February 2).
2004. "Land Use Change and Transportation Modeling: a Synergy of Models," Featured speaker, Transportation Engineering Association of Missouri, St Louis, MO (March 15).
2005. "Energy and Historic Structures," IHPA Main Street Annual Conference, Rock Island, IL (April 6-7).
2005. "Energy, Sustainability, and Modeling," St. Louis Earth Day Celebration and Conference, St Louis, MO (April 22).
2005. "Assessing Multiple Futures," Workshop on Land Use and Planning, Lincoln Institute, Cambridge, MA (September 15-16).
2005. "Land Use Modeling and Water Quality: Outcomes of Analysis in Peoria, IL." 2005 Governor's Conference on the Management of the Illinois River System, Peoria, IL (October 6).
2005. "Understanding Sustainability," Featured speaker, Edison Electric Institute Users Conference and Assembly, Dallas, TX (October 18).
2006. "Tightly Coupled Land Use and Transportation Modeling: The LEAM/TransEval Experience in St Louis, MO," Featured speaker, Midwest Transportation Engineers Annual Conference, Kansas City, MO (April 6-7).
2006. "Landscape Evolution and Planning Implications," Sharing Spaces: A DOD Workshop on Encroachment, Beckman Institute, University of Illinois (April 11-12).
2006. "Land Use Modeling and Simulation," Invited lecture, Geography Colloquium, Northern Illinois University, Dekalb, IL (Sept 15).
2006. "Dynamic Spatial Modeling," Inter-University Natural Resource Consortium, Benedictine University, Lisle, IL (October 3).
2006. "Dynamic Spatial Modeling of Complex Urban Systems," National Center for Smart Growth Research and Application, University of Maryland, College Park, MD (Nov 27).
2007. "Use-Based Dynamic Modeling," Workshop on land use modeling, Lincoln Institute of

- Land Policy, Cambridge, MA (Sept 19).
2008. "The Future of Sustainable Land Use Planning," US EPA Brown to Green: Sustainable Redevelopment Workshop, Kansas State University, Manhattan, Kansas (Sept 9).
2008. "Integrating Dynamic Land Use Modeling with Transportation Planning," Featured Speaker, National Association of Regional Councils (NARC), Chicago, IL (Sept 11).
2008. "What Would Daniel Do? With Regional Dynamic Spatial Models," Featured Speaker, On the Eve of the Centennial: Daniel Burnham, Big Thinkers, and the Future of the Metropolis, organized by the Chicago Metro Section of the American Planning Association, Chicago, IL (Nov 20).
2011. "Sustainable Urban Systems Modeling," Urban Colloquium, Kansas State University, Manhattan, Kansas (April 1).
2011. "National Climate Assessment: Land Use Land Cover Change Technical Committee," U.S. Global Change Research Program, Salt Lake City, UT (November).
2012. "Urban Systems Science," Royal Institute of Technology (KTH), Stockholm (October 2).
2014. "Modeling Urban Systems," National Center for Smart Growth Research and Education, University of Maryland, College Park, MD (April 3).
2014. "Sustainable Energy Systems," University of Illinois at Chicago Summer Institute on Sustainability and Energy, Chicago, IL (July 6).
2015. "Integrated Urban Models and Planning Support," The National Socio-Environmental Synthesis Center (SESYNC), Andover, MD (January 22).
2016. "Sustainable Urban Design: Growth and Development in Rural China," International Programs, University of Illinois at Urbana-Champaign (September).
2016. "Modeling Urban Water Systems," Royal Institute of Technology (KTH) and Stockholm City Planners, Stockholm, Sweden (September 27).
2016. "Agriculture and Urban Systems Modeling for Climate Change," Atkinson Center for a Sustainable Future, Cornell University, Ithaca, NY (October 6).
2017. "Scenario Planning," Planning Support Systems Symposium, Royal Institute of Technology (KTH), Stockholm, Sweden (May 11).

Professional Societies

- 2001-04. LEED Technical Advisory Committee, US Green Building Council.
- 2002-03. Advisory Board, State of Illinois Capitol Development Board Green Building.
- 2003-10. Board of Directors, Sustainable Livings Systems, Inc.
- 2011-14. Policy Advisory Board, Allerton Park and Conference Center.

Editorships

2005-present. Editorial Board, *International Journal of Sustainable Design*.

2010-present. Section Editor, *Sustainability Journal*.

2017-present. Editorial Board, *Urban Science Journal*.

Grants

Deal, Brian PI, Pallathucheril, V., and Hannon, B. Co-PIs. Department of Defense Strategic Environmental Research and Development Program (SERDP), 2002-2006, \$1,600,000. Competitive Award.

Deal, Brian PI, Pallathucheril, V. Co-PI. Engineering Research and Development Center (ERDC-CERL), 2003, \$25,000.

Deal, Brian PI, Pallathucheril, V. Co-PI. Engineering Research and Development Center (ERDC-CERL), 2003, \$75,000.

Deal, Brian PI, Pallathucheril, V. and Hannon, B. Co-PIs. East West Gateway Council of Governments, 2003-2006, \$800,000. Multiple awards.

Deal, Brian PI, Pallathucheril, V. Co-PI. Engineering Research and Development Center (ERDC-CERL), 2004, \$25,000. Competitive Award.

Deal, Brian PI, Pallathucheril, V. Co-PI. The Illinois Department of Natural Resources and the Tri-County Regional Planning Commission, 2005, \$45,000.

Deal, Brian PI, Pallathucheril, V. Co-PI. Illinois Department of Transportation, 2006-07, \$200,000.

Deal, Brian PI, Pallathucheril, V. and Hopkins, L. Co-PIs. The Illinois Department of Natural Resources, 2006, \$100,000.

Deal, Brian PI. Department of Defense, Strategic Environmental Research and Development Program (SERDP), 2006-2007, \$30,800. Competitive Award.

Deal, Brian PI, Pallathucheril, V. Co-PI. National Oceanic and Atmospheric Administration (NOAA) Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET), 2007-2010, \$320,000. Competitive Award.

Deal, Brian PI, Pallathucheril, V. Co-PI. The Chicago Metropolitan Agency for Planning (CMAP), 2007, \$60,000.

Deal, Brian PI. Engineer Research and Development Center - Construction Engineering Research Laboratory (ERDC-CERL), 2007-2008, \$125,000.

Deal, Brian PI. The Greening of McDonalds, The McDonalds Corporation International, 2007- 2008, \$40,000.

Deal, Brian PI. The McHenry County Planning Department, 2008-2009, \$100,000.

Deal, Brian PI, Kim, Y.W. Co-PI. The Rural Development Admin of the Republic of Korea, 2008-2010, \$80,000.

Sullivan, William PI, Deal, B. Co-PI. The Forest Preserve District of Cook County, 2009, \$50,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Pilot (SEDAC), The US Department of Energy and the Illinois Department of Commerce & Economic Opportunity, 2004, \$200,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The US Department of Energy and the Illinois Department of Commerce & Economic Opportunity, 2005, \$2,093,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The US Department of Energy and the Illinois Department of Commerce & Economic Opportunity, 2006, \$1,200,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The US Department of Energy and the Illinois Department of Commerce & Economic Opportunity, 2007, \$1,000,000.

Deal, Brian PI, The Illinois Smart Energy Design Assistance Center Program (SEDAC), The US Department of Energy and the Illinois Department of Commerce & Economic Opportunity, 2008, \$1,700,000.

Fournier, Don PI, Deal, B. Co-PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The Illinois Department of Commerce & Economic Opportunity, 2009, \$2,827,825.

Deal, Brian PI. 2040 Agricultural Preservation Strategies, The Chicago Metropolitan Agency for Planning (CMAP), 2010, \$21,023.

Deal, Brian PI, Kim, Y.W. Co-PI. Impact Analysis and Resource Mapping Using LEAM GeoPortal Technologies in the Republic of Korea, The Rural Development Administration of the Republic of Korea, 2010, \$20,000

Fournier, Don PI, Deal, B. Co-PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The IL Department of Commerce & Economic Opportunity, 2010, \$4,506,226.

Deal, Brian PI. An Illinois Green Infrastructure and Ecosystem Services Valuation Tool, Illinois Indiana Sea Grant, 2011, \$9,999. Competitive Grant Award.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The Illinois Department of Commerce & Economic Opportunity, 2011, \$5,776,424.

Chakraborty, Arnab PI, Deal, B. Co-PI. Proposal to Develop Land Use Scenarios using LEAM and Maryland Statewide Transportation Model, Eco Northwest, 2011-2012, \$27,990.

Deal, Brian PI. SIRA Data Layer Update for USACE CorpsMap Application, Engineer Research and Development Center Laboratory (ERDC-CERL), 2012, \$36,167.

Deal, Brian PI, Fulton, G. Co-PI. Sentient Information Systems Study, Engineer Research and Development Center Laboratory (ERDC-CERL), 2012, \$20,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The Illinois Department of Commerce & Economic Opportunity, 2012, \$7,596,922.

Deal, Brian PI. The Role of Behavior Change in Energy Use Reduction in Education, The Illinois Green Economy Network, 2013, \$20,320.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The Illinois Department of Commerce & Economic Opportunity, 2013, \$8,010,309.

Cvetkovic, Vladimir PI, Deal, B. Co-PI. Watershed Planning for Urban-Regional Development, The Swedish National Research Council (Formas), 2014-2017, \$250,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The Illinois Department of Commerce & Economic Opportunity, 2014, \$7,407,324.

Deal, Brian PI. Detection and Diagnostic Methods for Energy Efficiency Performance Degradation in Buildings, Engineer Research and Development Center Laboratory (ERDC-CERL), 2015, \$175,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center Program (SEDAC), The Illinois Department of Commerce & Economic Opportunity, 2016, \$10,475,000.

Deal, Brian PI. Land-use Evolution and impact Assessment Model (LEAM) for the Sangamon County Region, The Sangamon County Regional Planning Council, 2016-2017, \$55,000.

Deal Brian PI. Watershed Specific Storm Water Release Rates, Grant with the Metropolitan Water Reclamation District of Greater Chicago (MWRD) – with the Prairie Research Institute, 2017, \$25,000.

Deal, Brian PI. The Illinois Smart Energy Design Assistance Center (SEDAC), Multiple Grants-- ComEd, Ameren, Nicor, Peoples Gas and North Shore Gas, 2017, \$5,250,000.

Deal, Brian PI. Technical Support of SEDAC Public Sector Enhanced Building Optimization Program. 360 Energy Group. Contract. 2017-19 \$400,000.

Deal, Brian PI. ComEd Public Housing Authority Energy Study. ComEd/CLEAResult Consulting, Inc. Grant. 2018-19. \$197,058.

Deal, Brian PI. 2019 Outreach Service Providers. Exelon Corp. Grant. 2018 - 350,000. 2019- \$350,000.

Deal, Brian PI. SEDAC Henry Hill Correctional Center Public Sector Energy Assessment. IL Dept of Corrections. Grant. 2018. \$12,500.

Deal, Brian PI. A Study on the Feasibility and Appropriateness of a DNR Solar Development Project. IL Dept of Natural Resources (IDNR). Grant. 2018-19. \$35,000.

Deal, Brian PI. SEDAC Energy Assessments for Illinois Publicly-Owned Wastewater Treatment Plants. IL Environmental Protection Agency (IEPA). Contract. 2018-19. \$354,688.

Deal, Brian PI. The Illinois Energy Conservation Code: Training, Education, and Technical Assistance through the University of Illinois Smart Energy Design Assistance Center. IL Environmental Protection Agency (IEPA). Contract. 2018 – 350,000. 2019 - \$472,500.

Deal, Brian PI. SEDAC John A Logan College Public Sector Energy Assessment. John A Logan College. Grant. 2019. \$12,500.

Deal, Brian PI. SEDAC Pekin High School Public Sector Energy Assessment. Pekin Community High School District 303. Grant. 2019. \$12,500.

Deal, Brian PI. An Application of Coupling Land Use Evolution and Impact Assessment Model (LEAM) and Regional Economic Input-Output Models (REIM) to the Sangamon County Region in Illinois. Sangamon (IL) County. Grant. 2018-19. \$42,500.

Deal, Brian PI. Illinois Energy Conservation Code Assistance for the 2019 Illinois Technical Reference Manual Update. Vermont Energy Investment Corporation. Grant. 2019. \$30,000.00

Deal, Brian PI. Technical and Financial Feasibility Study for Installation of Solar Infrastructure. Grant. IL Department of Transportation. 2019-22. \$251,000.

Deal, Brian PI. Enhancement and Expansion of National Business Environmental Data. Grant. USEPA. 2019-22. \$400,000.

Deal, Brian PI. Net Zero State Parks. IL Dept of Natural Resources (IDNR). Grant. 2019-20. \$40,000.

Deal, Brian PI. Workforce Development in Energy Efficiency Study. Ameren Illinois Corp. Contract. 2019-21. \$276,000.

Deal, Brian PI. A Dynamic Spatial Simulation Approach to Stormwater, Landscape, and Its Implications on Physical Design: the Case of Chicago. Illinois-Indiana Sea Grant. 2020-21. \$147,185.

Deal, Brian PI. Net Zero Community Colleges. IGEN network. 2020-21. \$350,000.

Deal, Brian PI., Zarha Kalantari, Stockholm University CO-PI .LEAM Stockholm. Advanced modeling and simulation analysis and research. The Swedish Science Academy FORMAS. 2020-22. \$250,000.

Deal, Brian PI. SEDAC Public Buildings in Distressed Communities, ComEd. 2021. \$192,000.

Deal, Brian PI. Energy Efficiency Workforce Development Pilot: A Program for Workforce Development and Diversification for the AIC Service Territory. Ameren Illinois. \$220,000.

Deal, Brian PI. Ameren- AIC Grant Development Assistance for MDI Partners. Ameren Illinois. 2021. \$50,000.

Deal, Brian PI. Building Energy and Sustainability. Cook County Forest Preserve District. 2021. \$108,000

Deal, Brian PI. IGEN Net Zero Collaborative - FY22. IGEN Network. 2021. \$200,000

Deal, Brian PI. FY22 SEDAC Energy Assessments for Illinois Publicly Owned Wastewater Treatment Plants. IEPA. 2021. \$513,568.

Deal, Brian PI. FY22 The Illinois Energy Conservation Code: Training, Education, and Technical Assistance through the University of Illinois Smart Energy Design Assistance Center. IEPA. 2021. \$560,000.

Deal, Brian PI. Data Platform Integration to Increase Access and Usability. USEPA. 2021. \$400,000.

Deal, Brian PI. IDNR Climate Action Planning and Solar Implementation FY2022: Phase 3. IDNR. 2021. \$145,000.

Deal, Brian PI. Ameren Leidos MDI Grant Writing Contract FY22. Ameren Illinois. 2021. \$65,000.

Deal, Brian PI. FY23-25 SEDAC Public Water Infrastructure Energy Efficiency Program. 2023-25. \$1,706,178.

Deal, Brian PI. FY23-25 The Illinois Energy Conservation Code: Training, Education, and Technical Assistance through the University of Illinois Smart Energy Design Assistance Center. 2023-25. \$1,699,998.

Deal, Brian PI. Ameren Leidos MDI Grant Writing Contract FY23. Ameren Illinois. 2022. \$45,000.

Deal, Brian PI. Accelerating P2 Best Practice Adoption through Illinois Green Business Programs. USEPA. 2023-25. \$350,000.

Deal, Brian PI. IGEN Net Zero Collaborative - FY23. IGEN Network. 2022-23. \$100,000

Deal, Brian PI. Building Energy and Sustainability. Cook County Forest Preserve District. 2022-23. \$50,000.

Deal, Brian, PI. US Climate Alliance. An Illinois Natural and Working Lands Climate Plan. 2025-25. \$100,000.

Research Review Panels

Proposal Review Panel, *Emerging Frontiers in Research and Innovations (EFRI) Program*, U.S. National Science Foundation (NSF), 2010.

Proposal Review Panel, *National Estuarine Research Reserve System (NERRS) Science Collaborative Program*, National Oceanic and Atmospheric Agency (NOAA), 2011.

Proposal Review Panel, *National Estuarine Research Reserve System (NERRS) Science Collaborative Program*, National Oceanic and Atmospheric Agency (NOAA), 2012.

Research Committee, *SNSF Fellowships Commission: Fellowships For Prospective Researchers*, Swiss National Science Foundation (SNSF), 2012.

Proposal Review Panel, *National Estuarine Research Reserve System (NERRS) Science Collaborative Program*, National Oceanic and Atmospheric Agency (NOAA), 2013.

Proposal Review Panel, *Partnerships for Innovation (PFI) Program*, U.S. National Science Foundation (NSF), 2014.

Research Committee, *SNSF Fellowships Commission: Fellowships For Prospective Researchers*, Swiss National Science Foundation (SNSF), 2016.

External Reviewer, *NSFC/RGC Joint Research Program*, National Natural Science Foundation of China (NSFC) / Research Grants Council (RGC), 2017.

Research Committee, *SNSF Fellowships Commission: Fellowships For Prospective Researchers*, Swiss National Science Foundation (SNSF), 2019.

External Reviewer, *Mitacs Accelerate*, Canadian Research Program, 2022.

PUBLICATIONS AND CREATIVE WORKS

Doctoral thesis

Deal, Brian. *Sustainable Land-Use Planning: The Integration of Process and Technology*, Ph.D. Dissertation, Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign, 2003.

Books Authored

Deal, Brian. *Sustainable Land-Use Planning: The Integration of Process and Technology* Saarbrücken, Germany: VDM Publishing, 2008.

Book Chapters

- Deal, Brian, Farello, C. Lancaster, M., Kompare, T. and Hannon, B. "A Dynamic Model of the Spread of an Infectious Disease: The Case of Fox Rabies in Illinois," in *Landscape Simulation Modeling: A Spatially Explicit, Dynamic Approach*, ed. R. Costanza and A. Voinov (New York, NY: Springer, 2004): pp. 275-300.
- Deal, Brian, and Z. Sun. "A Spatially Explicit Urban Simulation Model: Landuse Evolution and Impact Assessment Model (LEAM)," in *Smart Growth and Climate Change: Regional Development, Infrastructure and Adaptation*, ed. M. Ruth (Northampton, MA: Edward Elgar, 2006): pp. 181-203.
- Deal, Brian, and V. Pallathucheril. "Developing and Using Scenarios," in *Engaging the Future: Forecasts, Scenarios, Plans, and Projects*, ed. L.D. Hopkins, M.A. Zapata (Cambridge MA: Lincoln Institute for Land Policy, 2007): pp. 221-242.
- Deal, Brian, and V. Pallathucheril. "Simulating Regional Futures: The Land-use Evolution and impact Assessment Model (LEAM)," in *Planning Support Systems for Cities and Regions*, ed. R. Brail (Cambridge MA: Lincoln Institute for Land Policy, 2008): pp. 61-84.
- Deal, Brian, and V. Pallathucheril. "A Use-Driven Approach to Large-Scale Urban Modeling and Planning Support," in *Planning Support Systems: Best Practice and New Methods*, ed. S. Geertman, J. Stillwell (New York, NY: Springer, 2009): pp. 29-51.
- Deal, Brian, E. Jenicek, W. Goran, N. Meyers, and J. Fittipaldi. "Strategic Sustainability Assessment," in *Societal Challenges and GeoInformatics*, ed. by A.K. Sinha, L. Gundersen, D. Arctur, J. Ian (Boulder, CO: Geological Society of America, 2011): 482, pp. 41-57.
- Deal, Brian, J.H. Kim, and G. Hewings. "Complex Urban Systems Integration: The LEAM Experiences in Coupling Economic, Land Use, and Transportation Models in Chicago, IL," in *Employment Location in Cities and Regions: Models and Applications*, ed. F. Pagliara, M. de Bok, D. Simmonds, A.G. Wilson (Heidelberg: Springer, 2012): pp. 107-131.
- Deal, Brian, D. Fournier, and B. Sliwinki. "Energy Efficiency In Niche Markets: A Smart Energy Approach," in *Local Economic Development and Environment: Finding Common Ground*, ed. S. Opp, J. Osgood (Boca Raton, FL: Taylor and Francis, 2013).
- Deal, Brian, V. Pallathucheril and T. Heavisides. "Ecosystem Services, Green Infrastructure and the Role of Planning Support Systems," in *Planning Support Systems for Sustainable Urban Development*, ed. S. Geertman, F. Toppen, J. Stillwell (Berlin Heidelberg: Springer, 2013): pp. 187-207.

- Deal, Brian, V. Pallathucheril, Y.W. Kim, and H. Pan. "Sentient PSS for Smart Cities," in *Planning Support Systems and Smart Cities*, ed. S. Geertman, J. Ferreira, R. Goodspeed, J. Heidelberg. Springer (2015): pp. 281-296.
- Deal, Brian, and H. Pan. "Operationalizing Planning Support Systems," in *Smart Governance and New Forms of Collaborative Planning*, ed. Y.L. Lin, S.F. Wang, S. Geertman, Z.H. Deng. Beijing: China Commerce and Trade Press, (2017).
- Deal, Brian, A. Petri, and H. Pan. "Big Data, Socio-Environmental Resilience and Planning Support," in *Big Data for Regional Science*, ed. L.A. Schintler and Z. Chen. Routledge, (2017).
- Deal, B., H. Pan, and Y. Zhaung. "Modeling Land-use Change in Complex Urban Environments," in *Comprehensive Geographic Information Systems*, ed. B. Huang, T. Cova, M.H. Tsou, G. Bareth, C. Song, Y. Song, K. Cao, and E. Silva. Elsevier, (2017).
- Gu, Yexuan, and Brian Deal. "Geodesign, resilience and planning support systems: the integration of process and technology." In *Handbook of Planning Support Science*. Edward Elgar Publishing. (2020). 167-200.

Journal Publications

- Chalifoux, Alan, A. McNamee, B. Deal, and B. Lynn. "The Model Energy Installation Program: Progress and Lessons Learned," *ASHRAE Transactions* 102 (1996).
- Deal, Brian, J. Adams, and M. Adams. "The Green Neighborhood Process: Energy Conservation through Collaboration," *ASHRAE Transactions* 102 (1996).
- Beasley, Robert, B. Deal and L. DeBaillie. "Systematic Estimating End-Use Energy Consumption Patterns at Large Military Installations." *Journal of Environmental Systems* 25, 3 (1996): pp. 241-53.
- Larsen, Larissa, J. Adams, B. Deal, B. Kweon, and E. Tyler. "Productivity in the Interior Work Environment," *Journal of Environment Behavior* 30, 3 (1998): pp. 261-82.
- Deal, Brian, C. Farrello, M. Lancaster, T. Kompore, and B. Hannon. "A Dynamic Model of the Spatial Spread of an Infectious Disease," *Environmental Modeling and Assessment* 5, 1 (2000): pp. 47-62.
- Deal, Brian. "Ecological Urban Dynamics: the Convergence Spatial Modeling and Sustainability," *Journal of Building Research and Information* 29, 5 (2001): pp. 381-93.
- Goran, William, and B. Deal. "Technologies to Help Installations Plan Across Fence Lines." *Army Acquisition, Logistics, and Technology* (Sep-Oct 2002): pp. 32-34.
- Yang, Limin, G. Xian, J. Klaver, and B. Deal. "Urban Land Cover Change Detection Through Sub-Pixel Imperviousness Mapping Using Remotely Sensed Data," *Photogrammetric Engineering & Remote Sensing* 69, 9 (2003): pp. 1003-1010.
- Deal, Brian, and D. Schunk. "Spatial Dynamic Modeling and Urban Land Use Transformation: A Simulation Approach to Assessing the Costs of Urban Sprawl," *Journal of Ecological Economics* 51, 1-2 (2004): pp. 79-95.
- Wang, Yun, W. Choi, and B. Deal. "Long-Term Impacts of Land-Use Change on Non-Point Source Pollutant Loads for the St. Louis Metropolitan Area," *Journal of Environmental Management* 35, 2 (2005): pp. 194-205.

- Aurambout, Jean P., A. G. Endress, and B. Deal. "A Spatial Model to Estimate Habitat Fragmentation and its Consequences on Long-Term Persistence of Animal Populations," *Environmental Monitoring and Assessment* 109, 1-3 (2005): pp. 199-225.
- Fournier, D, and B. Deal. "Toward an Energy Efficient Future: The Illinois Smart Energy Design Assistance Program," *Journal of Green Building* 2, 3 (2007): pp. 52-59.
- Choi, Woonsup, and B. Deal. "Assessing the Hydrological Impact of Potential Land Use Change through Hydrological and Land Use Change Modeling for the Kishwaukee River Basin," *Journal of Environmental Management* 88 (2008): pp. 1119-30.
- Deal, Brian, and V. Pallathucheril. "Sustainability and Urban Dynamics: A Determination of Development Stress on Local Resources," *Sustainability Journal* 1, 3 (2009): pp. 346-362
- Sun, Zanli, B. Deal, and V. Pallathucheril. "The Land-use Evolution and Impact Assessment Model: A Comprehensive Urban Planning Support System," *URISA Journal* 21, 1 (2009): pp. 57.
- Deal, Brian, J.H. Kim, and A. Chakraborty. "Growth Management and Sustainable Transport: Do Growth Management Policies Promote Transit Use?" *Journal of Public Transportation* 12, 4 (2009): pp. 21-40.
- Deal, Brian, and A. Chakraborty. "Cyber-physical Planning Support Systems: Advancing Participatory Decision Making in Complex Urban Environments," *International Journal of Operations and Quantitative Management* 16, 4 (2010): pp. 353-367.
- Chakraborty, Arnab, N. Kaza, G. Knaap, and B. Deal. "Robust Plans and Contingent Plans: Scenario Planning for an Uncertain World," *Journal of the American Planning Association* 77, 3 (2011): pp. 251-266.
- Deal, Brian, E. Jenicek, W. Goran, N. Myers, and J. Fittipaldi. "Strategic Sustainability Assessment," *Geological Society of America Special Papers* 482 (2011): pp. 41-57.
- Mortberg, Ulla, J. Haas, A. Zetterberg, J. Franklin, D. Jonsson, and B. Deal. "Urban ecosystems and sustainable urban development – analyzing and assessing interacting systems in the Stockholm region," *Urban Ecosystems* 16, 4 (2013): pp. 763-782.
- Kim, Jae H, B. Deal, and A. Chakraborty. "Parsing density changes: an outcome oriented growth management policy analysis." *Journal of Housing and the Built Environment* 28, 3 (2013): pp. 529-546.
- Jiang, Bin, L. Larsen, B. Deal, W. Sullivan. "A dose–response curve describing the relationship between tree cover density and landscape preference," *Landscape and Urban Planning* 139 (2015): pp. 16-25.
- Timm, Stephanie, B. Deal. "Effective or Ephemeral? The role of energy information dashboards in changing occupant energy behaviors," *Energy Research & Social Science* 19 (2016): pp. 11-20.
- Deal, Brian, H. Pan. "Discerning and Addressing Environmental Failures in Policy Scenarios Using Planning Support System (PSS) Technologies," *The Sustainability Journal* 9, 1 (Dec 2016): pp. 13.
- Jiang, Bin, B. Deal, H.Z. Pan, L. Larsen, C.H. Hsieh, C.Y. Chang, W.C. Sullivan. "Remotely-sensed imagery vs. eye-level photography: Evaluating associations among measurements of tree cover density," *Landscape and Urban Planning* 157 (2017): pp. 270-281.
- Deal, B, H. Pan, G. Fulton, V. Pallathucheril, Y.W. Kim. "Planning Support Systems: The Need for Sentience," *Journal of Urban Technologies* 24, 1 (Mar 2017).

- Mörtberg, Ulla, R. Goldenberg, Z. Kalantari, O. Kordas, B. Deal, B. Balfors, V. Cvetkovic. "Integrating Ecosystem Services in Urban Energy Trajectories," *Energy Policy Journal* 100 (Jan 2017): pp. 338–349.
- Deal, Brian, H. Pan, S. Timm, V. Pallathucheril. "The Role of Multidirectional Temporal Analysis in Scenario Planning Exercises and Planning Support Systems," *Journal of Computers, Environment and Urban Systems* 64 (2017): pp. 91-102.
- Goldenberg Romain, Z. Kalantari, V. Cvetkovic, U. Mörtberg, B. Deal, G. Destouni. "Distinction, quantification and mapping of potential and realized demand and supply of ecosystem services," *Science of the Total Environment* 593 (2017): pp. 599-609.
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