

Contents

Introduction: Towards a Transdisciplinary Understanding of Complex Urban Systems	1
Jens Martin Gurr and Christian Walloth	
Multimethod Modeling and Simulation Supporting Urban Planning Decisions	13
Ernst Gebetsroither-Geringer	
Uncertainty in Urban Systems: How to Optimize Decision Making Using Stochastic Programming	29
Rüdiger Schultz	
Understanding Effects of Complexity in Cities During Disasters	51
Funda Atun	
Towards Evolutionary Economic Analysis of Sustainable Urban Real Estate: Concept of a Research Strategy Exemplified on House Price Modeling Using the Self-Organizing Map, Interviews and Field Inspection	67
Tom Kauko	
Organized and Disorganized Complexities and Socio-Economic Implications in the Northern Ruhr Area	87
Hans-Werner Wehling	
An Organizational Cybernetics Approach to University Planning in an Urban Context: Four Intervention Experiences	103
Xosé L. Martínez Suárez and José Pérez Ríos	
Emergence in Complex Urban Systems: Blessing or Curse of Planning Efforts?	121
Christian Walloth	

‘Urban Complexity’ from a Literary and Cultural Studies Perspective: Key Cultural Dimensions and the Challenges of ‘Modeling’	133
Jens Martin Gurr	
About the Authors.	151
Index	155

Understanding Complex Urban Systems:
Multidisciplinary Approaches to Modeling
Walloth, C.; Gurr, J.M.; Schmidt, J.A. (Eds.)
2014, XI, 158 p. 36 illus., Hardcover
ISBN: 978-3-319-02995-5