Contents

Foreword vii Acknowledgments viii Preface ix

Part I: Framing geodesign 1

Chapter 1: A necessary collaboration 3

The design professions and the geographic sciences 5 A symbiotic collaboration 8 Geodesign is not new 8 Geodesign is different 12 An early study example: Boston, Massachusetts, USA 13

Chapter 2: The context for geodesign 19

Geography matters 19 Scale matters 19 Size matters 21

Part II: A framework for geodesign 23

Chapter 3: Questions and iterations 25

The six questions of the framework 26 The three iterations through the framework 26 The framework in practice 33

Chapter 4: The first iteration through the framework: Scoping the geodesign study 35

Questions 1 through 6 and their related models 36 Scenarios of assumptions, objectives, and requirements 40 Is geodesign the best way forward? 41

(Part II continued)

Chapter 5: The second iteration through the framework: Designing the study methodology 45

Decision models 46 Impact models 48 Change models 49 Evaluation models 60 Process models 63 Representation models 73 Choices must be made 76

Chapter 6: The third iteration through the framework: Carrying out the study 83

Questions 1 through 6 and implementing the models 84 Reaching the first decision stage: *No, Maybe,* or *Yes* 87 Feedback strategies 87 Changing scale and/or size 87 *Yes,* and to review by the decision makers 88 A caution: adaptability 89 The choices matter 91

Part III: Case studies in geodesign 93

Chapter 7: Geodesign with certainty 95

The anticipatory change model (Camp Pendleton, California, USA) 95 The participatory change model (The Osa region, Costa Rica) 104 The sequential change model (The Bermuda dump) 112

Chapter 8: Geodesign under uncertainty 119

The constraining change model (Cagliari, Sardinia, Italy)119The combinatorial change model (The Roncajette Park and the Industrial Zone, Padova, Italy)128

Chapter 9: Geodesign when knowing the rules 139

The rule-based change model (La Paz, Baja California Sur, Mexico)140The optimized change model (The Telluride region, Colorado, USA)150The agent-based change model (Idyllwild, California, USA)161Mixed: sequential and agent-based change models (West London, United Kingdom, 1875–2005)171

Part IV: A future for geodesign 179

Chapter 10: Implications for research in geodesign 181

Tools, techniques, and methods 181 Research needs for geodesign 182 A research question: which level of spatial-analytic complexity? 184 A research question: which ways of designing? 184 A research question: which ways of visualization and communication? 185 A support system for geodesign 186

Chapter 11: Implications for education and practice in geodesign 189

Educating conductors vs. training soloists 189 The roles of history and precedent 190 The study of failures 192 Toward curricula for geodesign 193 A master's level curriculum in geodesign 194

Chapter 12: A future for geodesign 197

A future for geodesign education 197 A future for geodesign practice 198 Some last words 201

Bibliography 203 About the author 209 Enclosing as a vision, for being geographic tension clively and thoughtfully design. It will take and body the meration of both geographics and assign. When Confices an powerfully is find the memory geography and the memory geography and the memory of design and blance of geography and the memory of design and of memory and the memory of design, and a basis for many generations as a tramework for creation of memory blance.