

CONTENTS

1	Introduction	1
	<i>Divya Chandrasekhar, Fatemeh Kiani, Sadegh Sabouri, Fariba Siddiq, and Keunhyun Park</i>	
	<i>Companion Book: Basic Quantitative Research Methods for Urban Planners</i>	2
	<i>Structure of the Advanced Methods Book</i>	2
	<i>Techniques Not Included in This Book</i>	4
	<i>Data and Measurements</i>	6
	<i>Conceptual Framework</i>	7
	<i>Statistics</i>	8
	<i>Chapter Structure</i>	9
	<i>Datasets</i>	10
	<i>Computer Software Used in This Book</i>	15
2	Technical Writing	19
	<i>Robin Rothfeder and Reid Ewing</i>	
	<i>Overview</i>	19
	<i>Purpose</i>	20
	<i>Preliminaries</i>	26
	<i>Mechanics</i>	28
	<i>Rewriting, Editing, and Polishing</i>	36
	<i>Literature Reviews</i>	37
	<i>Planning Examples</i>	39
	<i>Conclusion</i>	43

3	Planning Journals and Topics	46
	<i>Kathryn Terzano, David Proffitt, Fariba Siddiq, and Reid Ewing</i>	
	Overview	46
	Planning Journals	47
	Impact Factors	48
	Peer Review	50
	Overview of Planning Topics	51
	Methodological Issues	51
	Climate Change and the Natural Environment	56
	Social Justice Issues	58
	Land Use and Development Regulations	60
	Sprawl, Travel, and the Built Environment	60
	Urban Design	68
	Other Topics	69
	Conclusion	71
4	Poisson and Negative Binomial Regression Analysis	74
	<i>Anusha Musunuru, David Proffitt, Reid Ewing, and William H. Greene</i>	
	Overview	74
	Purpose	75
	History	75
	Mechanics	76
	Interpreting Results	79
	Step by Step	80
	Planning Examples	87
	Conclusion	92
5	Principal Component and Factor Analysis	95
	<i>Matt Wheelwright, Zacharia Levine, Andrea Garfinkel-Castro, Tracey Bushman, and Simon C. Brewer</i>	
	Overview	95
	Purpose	95
	History	97
	Mechanics	98
	Interpreting Results	103
	Step by Step	104
	Planning Examples	114
	Conclusion	118
6	Cluster Analysis	121
	<i>Andrea Garfinkel-Castro, Tracey Bushman, Sadegh Sabouri, Simon C. Brewer, Yu Song, and Keunhyun Park</i>	
	Overview	121
	Purpose	122
	History	122

Terminology	123	
Methodology	125	
Step by Step	128	
Planning Examples	147	
Conclusion	151	
7 Multilevel Modeling		154
<i>Zacharia Levine, Robert Young, Roger Child, Brian Baucom, Reid Ewing, and John Kircher</i>		
Overview	154	
Purpose	155	
History	157	
Mechanics	158	
Step by Step	163	
Planning Examples	178	
Conclusion	182	
8 Structural Equation Modeling		185
<i>Matt Miller, Ivana Tasic, Torrey Lyons, Reid Ewing, and James B. Grace</i>		
Overview	185	
Purpose	186	
History	188	
Mechanics	189	
Interpreting Results	191	
Step by Step	193	
Planning Examples	209	
Conclusion	214	
9 Spatial Econometrics		216
<i>Keuntae Kim and Simon C. Brewer</i>		
Overview	216	
Purpose	217	
Spatial Data	217	
History	218	
Mechanics	219	
Step by Step 1: Spatial Data Analysis	238	
Step by Step 2: Spatial Econometrics	246	
Planning Examples	252	
Conclusion	259	
10 Meta-Analysis and Meta-Regression		261
<i>Mark Stevens, Torrey Lyons, and Reid Ewing</i>		
Overview	261	
History	262	

Purpose and Mechanics 263

Planning Examples 268

11 Mixed-Methods Research

Adam Millard-Ball and Keuntae Kim

Overview 275

Purpose 275

History 277

Mechanics 278

Planning Examples 283

Conclusion 285

List of Contributors

Index

275

288

291