

Table of Contents

| | |
|---|------|
| Foreword..... | vii |
| Preface | ix |
| Acknowledgments..... | xi |
| About the Authors | xiii |
| Introduction Mark R. Linné, MAI, SRA | 1 |
| SECTION I | |
| Reimagining Valuation: Thoughts on the Future of Appraisal | |
| Chapter 1 Valuation 2.0: The Changing Landscape of Appraisal..... | 13 |
| Mark R. Linné, MAI, SRA | |
| Chapter 2 Leveraging Valuation 2.0: Examining the Changing Appraisal Landscape..... | 23 |
| Mark R. Linné, MAI, SRA | |
| Chapter 3 Open Data Standards for Real Estate, Appraisal, and Mortgage Banking: Implications for the Industry | 33 |
| Mark R. Linné, MAI, SRA, Elizabeth Green, and John Cirincione, SRA | |
| Chapter 4 The Valuation Professional of the Future: Training for Innovation | 47 |
| Mark R. Linné, MAI, SRA | |

| | | |
|------------------|--|----|
| Chapter 5 | Introduction to Geographic Information Systems | 59 |
| | Michelle M. Thompson, PhD, and Milton Ospina | |
| Chapter 6 | Integrating Geographic Information and Valuation Modeling for Real Estate | 65 |
| | Mark R. Linné, MAI, SRA, and John Cirincione, SRA | |
| Chapter 7 | GIS for Business and Economic Development: From Data to Analysis | 77 |
| | Michelle M. Thompson, PhD, and Milton Ospina | |

SECTION II

Implementing Innovation: Practical Applications of Advanced Technology

| | | |
|-------------------|--|-----|
| Chapter 8 | GIS and GPS Usage in Land Appraisal | 101 |
| | Christopher Miner, MAI, SRA | |
| Chapter 9 | Developing Enterprise-Level Valuation Applications: Incorporating Appraisers in Innovation | 123 |
| | John Connelley, Kirk Manker, Mark R. Linné, MAI, SRA, and James Gresham | |
| Chapter 10 | Innovating the Approaches to Value: Incorporating Valuation Modeling Techniques into Traditional Appraisal Practice | 155 |
| | Mark R. Linné, MAI, SRA, James Gresham, and James Russell Thimgan | |
| Chapter 11 | Practical Integrations of Valuation Modeling and Geographic Information Systems: First Steps toward a More Robust Market Analysis and Valuation Methodology | 181 |
| | Patrick M. O'Connor and Michael Ireland | |
| Chapter 12 | Innovation in Residential Valuation Tools: Integrating Data and Analytics | 221 |
| | Mark R. Linné, MAI, SRA | |

SECTION III

Pushing the Envelope: Advanced Case Studies from Academia

| | | |
|-------------------|--|-----|
| Chapter 13 | Advanced Statistical Analysis of Real Estate Data Using Geoda | 253 |
| | Françoise Vermeylen, Sumeeta Srinivasan, PhD, and Michelle M. Thompson, PhD | |
| Chapter 14 | Using Econometrics and Geographic Information Systems for Property Valuation: A Spatial Hedonic Pricing Model | 265 |
| | Richard Bernknopf, PhD, Kevin Gillen, PhD, Susan Wachter, PhD, and Anne Wein, PhD | |
| Chapter 15 | Coastal Property Analysis through a Hazard Exposure Lens | 301 |
| | Ann-Margaret Esnard, PhD, and Ana Puszkin-Chevlin, PhD | |