Contents

Acknowledgments *vii*
Introduction *ix*

Chapter 1 **Creating a geodatabase / 1**

Exercise 1a Examine the existing Arc City data / 5
Exercise 1b Create the Arc City geodatabase and import CAD data / 13
Exercise 1c Create separate parcel and building feature classes / 33
Exercise 1d Correct digitizing errors and create a topology / 46
Exercise 1e Create parcel polygon features / 59
Exercise 1f Find and fix errors in parcel polygon features / 67
Exercise 1g Create building polygon features / 84
Exercise 1h Create block features / 94
Exercise 1i Review and clean up the database / 103

Chapter 2 **Using and geocoding attribute data / 105**

Exercise 2a Join tax assessment data to parcel features / 108
Exercise 2b Add census data to the blocks / 114
Exercise 2c Create districts from blocks / 121
Exercise 2d Calculate sales values / 131
Exercise 2e Query attribute files / 136
Exercise 2f Geocode parcels with blocks and districts / 149

Chapter 3 Reporting and performing spatial analysis / 155

Exercise 3a Produce the Arc City land-use report / 162
Exercise 3b Produce the Arc City residential density report / 190
Exercise 3c Produce the floodplain report and map / 198
Exercise 3d Produce the mosquito analysis and report / 221
Exercise 3e Find possible drug houses near playgrounds / 231

Chapter 4 Updating spatial and attribute data / 247

Exercise 4a Convert CAD drawing of Weil addition to a geodatabase feature class / 251
Exercise 4b Update the Arc City parcel data with new parcels in the Weil addition / 268

Conclusion 295
References 301
How to install data from the CD 303