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Autore	Li Yanmei
Titolo	Applied research methods in urban and regional planning // Yanmei Li, Sumei Zhang
Pubbl/distr/stampa	Cham, Switzerland : , : Springer International Publishing, , [2022] ©2022
ISBN	3-030-93574-4
Descrizione fisica	1 online resource (368 pages)
Disciplina	307.1216
Soggetti	City planning - Research Regional planning - Research Urbanisme Ordenació del territori Investigació Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- Chapter 1: Research Methods and the Planning Process -- The Planning Process -- Research Methods and the Planning Process -- Smart Cities, Machine Learning, and the Future of Urban Analytics -- Structure of the Book -- References -- Web Resources -- Chapter 2: Identifying the Research Problem -- Research Problems Identified from Sub-disciplines of Planning -- Literature Search for Research Questions -- Research Questions Identified from Data -- Research Questions Identified Through Other Sources -- References -- Web Resources -- Chapter 3: Research Design -- Project Statement -- Literature Review -- Sources of Literature -- Systematic Quantitative Literature Review -- Writing a Narrative Literature Review -- Theorizing the Key Concepts -- Citation Formats -- Research Methodology -- Research Ethics -- References -- Chapter 4: Data Collection -- Data and Variables -- Variables -- Observations -- Census Data Versus Sample Data -- Sampling Techniques -- Probability Sampling -- Non-probability Sampling -- Data Sources -- Secondary Data Sources -- Primary Data

Sources -- Surveys -- Field Observations -- Experimental Design -- Public Forums and Focus Groups -- Data Collection Through Social Media, Remote Sensing, Real-Time Tracking, and Other Technologies -- References -- Web Resources -- Chapter 5: Data Presentation -- Data, Information, and Geographic Information -- Information and Planning -- Data Presentation -- Audiences -- Table, Graph, and Map -- Ten Rules for an Effective Data Presentation -- Planning Ethics -- References -- Chapter 6: Communicating the Research Findings -- Effective Communication -- Plan the Communication -- Technical Writing Skills -- Types of Communication Conduit -- Emails -- Memorandum -- Staff Report -- Research Papers -- Research or Planning Reports -- Infographics -- Proofreading. PowerPoint Presentation -- Public Speaking Skills -- Engaging the Audience -- Facilitation Skills -- Storytelling Skills -- References -- Chapter 7: Statistical Analysis -- Summary Statistics -- Measures of Location -- Frequency Table -- Measures of Dispersion -- Probability -- Basic Concepts -- Relations Between Events and Facts of Probabilities -- Assigning Probabilities -- Using Probability for Planning Issues -- Probability Distributions -- Random Variable and Probability Distribution -- Expected Value -- Probability Mass Function -- Probability Density Function -- The Central Limit Theorem -- Confidence Interval -- Hypothesis Test -- General Steps of a Hypothesis Test -- One Sample z-Test of Population Mean -- One Sample t-Test for Population Mean -- Two Sample t-Test for Difference -- Two-Sample t-Test -- Type I Vs. Type II Error -- The Simple Linear Regression -- Dependent Vs. Independent Variable -- The Concept of Correlation -- Simple Linear Regression -- Regression Analysis in Excel -- Spatial Statistics -- Appendix 1: Standard Normal Distribution -- Appendix 2: T-Distribution -- References -- Chapter 8: Qualitative Data Analysis -- Discovering Patterns in Qualitative Data -- Frequencies -- Magnitude -- Structure -- Processes -- Causes and Consequences -- Types of Qualitative Data -- Observations and Ethnographic Data -- Interview Data -- Focus Groups or Design Charrette -- Documents and Artifacts -- Analyzing Qualitative Data -- Cross-Case Analysis -- Grounded Theory Method -- Constant Comparative Method -- Keywords-in-Context Analysis -- Conversation Analysis -- Word Count Analysis -- Classical Content Analysis -- Semiotics and Domain Analysis -- Taxonomic Analysis -- Componential Analysis -- Qualitative Data Processing -- Coding -- Memoing -- Concept Mapping -- Common Software for Qualitative Data Analysis -- References.

Chapter 9: Demographic Analysis -- Demographic Data -- Resident-based Versus Employment-based Data -- The Decennial Census -- The American Community Survey -- Describing the Population -- Size -- Composition and Characteristics -- Population Changes -- Distribution -- Choosing a Benchmark -- Extrapolation Analysis -- Estimates Versus Projections -- Extrapolation Versus Interpolation -- Popular Growth Trends -- The Cohort-component Method -- Age Cohort -- The Mortality Component -- The Fertility Component -- The Migration Component -- Set Up a Cohort-Component Model -- Population Projection Quality Assessment -- References -- Chapter 10: Analyzing the Local Economy -- The Concept of Economy -- Economic Activity Classification -- U.S. Economic Data and Limitations -- Assessing an Economy -- The Economic Base Theory -- Basic vs. Non-basic Employment -- Base Multiplier -- Calculating Basic and Non-basic Employment - Quick Approaches -- Location Quotients -- Calculating Base Multiplier: The Location Quotient Approach -- Shift-Share Analysis -- Set Up a Shift-Share Analysis -- National Share -- Industry

Mix -- Regional Shift -- Employment Decomposition -- Employment Projection -- Input-Output Analysis -- The Transaction Table -- Input-Output Coefficients -- Input-Output Matrix -- The Leontief Matrix -- Direct, Indirect, and Induced Effects -- Multiplier Analyses -- References -- Chapter 11: Evaluation Research -- Fundamentals of Budgeting -- Ex-ante Evaluation Methods -- Site Feasibility Analysis -- Regulatory and Political Feasibility Analysis -- Market Feasibility Analysis -- Identifying Suitable Sites -- Site-Specific Market Potentials -- Target Market Identification -- Riley's Law of Gravitation -- Zip Code Tabulation to Capture Trade Area Data -- Using GIS to Delineate Trade Areas -- Understanding Local Area Market Conditions. Financial Feasibility Analysis -- Time Value of Money -- Sources of Funds Analysis -- Uses of Funds Analysis -- Balance Sheet and Income Statement -- Costs and Benefits -- Cash Flow and Pro-forma Analysis -- Ex-post Analysis -- Cost-Oriented Approaches -- Goals Achievement Matrix (GAM) -- Cost Effective Analysis (CEA) -- Cost-Benefit Analysis -- Cost Revenue Analysis -- Before-and-After Comparisons -- With-and Without Comparisons -- Actual-Versus-Planned Performance Comparisons -- Experimental Methods -- Quasi-Experimental Methods -- Economic Impact Analysis -- Social Impact Analysis -- Environmental Impact Analysis -- Data Science, Technology, and Evaluation Research -- References -- Web Resources -- Chapter 12: Urban Land Use Analysis -- Land Use Classification -- Land Use Inventory Analysis -- Land Use Incompatibility -- Land Use Indicators -- Density -- Diversity -- Design -- Destination Accessibility -- Land Use Suitability Analysis -- Future Land Development Projection -- Analytical Programs and Models -- References -- Chapter 13: Transportation Planning Analysis -- Key Concepts in Transportation Planning -- Transportation and Mobility -- Functional Classification of Streets and Roads -- Level of Service -- Transportation Demand Management (TDM) Modeling -- Trip Generation, Distribution, Mode Choice, and Route Selection -- Parking Analysis -- Fundamentals of Traffic Data Analysis -- Annual Average Daily Traffic (AADT) and Vehicle Miles Traveled (VMT) -- K-Factor -- Capacity and LOS -- Critical Speed, Maximum Flow Rate, and Critical Density -- Number of Signalized Intersections -- Transit Data Analysis -- Ridership and Boarding Estimation -- Passenger Miles -- Load Profiles -- Schedule Adherence Analysis -- Other Types of Transit Analysis -- Cycling, Walking, and Other Alternative Mode Analysis -- Travel Behavior and Safety Analysis. Capital Improvement Planning -- Long-Range Transportation Planning -- The Future of Mobility -- References -- Web Resources -- Chapter 14: Environmental Analysis -- Environmental Elements -- Measures of the Environment -- The Environmental Inventory Analysis -- The Environmentally Sensitive Area Analysis -- The Environmental Carrying Capacity -- The Ecological Footprint -- The Environmental Impact Assessment -- References -- Chapter 15: Housing Analysis -- Land Economics -- Housing Needs Assessment -- Housing Supply Analysis -- Provision of Affordable Housing -- Fair Market Rent (FMR) and Income Limits -- Low Income Housing Tax Credit (LIHTC) Program -- Public Housing Projects -- Section 8 Housing Choice Voucher Program -- Housing Demand Analysis -- The Gap: Housing Affordability Analysis -- Housing Finance -- Mortgages and Secondary Mortgage Market -- Project Financing -- Pro-forma and Cash Flow -- Analyzing Housing Market Conditions -- Housing Construction -- Housing Price -- Housing Tenure -- Housing Vacancy Rates -- Housing Affordability Analysis -- Using GIS to Analyze Housing Market Conditions -- References -- Web Resources.

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2. Record Nr.	UNINA9910765875203321
Titolo	Process-structure-property relationships in metals // edited by Soran Birozca
Pubbl/distr/stampa	[Place of publication not identified] : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2017
Descrizione fisica	1 online resource (v, 272 pages) : illustrations
Disciplina	620.1723
Soggetti	Corrosion resistant alloys Corrosion and anti-corrosives
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Process-Structure-Property Relationships in Metals.