

Table of Contents

Overview	xi
Course Schedule	xv

SECTION 1

Part 1. Real Estate Markets and Analysis

Preview Part 1.....	1
Overview: Market Analysis in Real Estate Appraisal.....	3
Purposes of Market Analysis	19
The Scientific Method—The Recognized Approach to Problem Solving	20
Where Market Analysis Fits in the Valuation Process.....	21
Review Part 1.....	23

Part 2. Types and Levels of Market Analysis

Preview Part 2.....	27
Characterizing Market Analysis by Depth of Analysis	29
Definitions	29
Distinctions between the Two Types of Market Analysis	30
Characterizing Market Analysis by the Way Demand Is Measured	31
Inferred Analysis	32
Fundamental Demand Analysis.....	38
Levels of Market Analysis.....	42
Level A Marketability Analysis.....	42
Level B Marketability Analysis.....	45
Level C Marketability Analysis.....	45
Summary: Levels of Market Analysis.....	48
Determining the Level of Marketability Analysis for a Valuation Assignment.....	51
Review Part 2.....	59

Part 3. The Six-Step Process and Use of Market Analysis

Preview Part 3.....	63
Overview of the Six-Step Process Used in Market Analysis.....	65
Step 1. Analyze Property Productivity	66
Step 2. Delineate the Market Area/Competitive Market Area	68
Step 3. Project/Forecast Demand.....	71
Step 4. Measure and Project/Forecast Competitive Supply.....	72
Step 5. Calculate Residual Demand.....	73
Step 6. Project/Forecast Subject Capture.....	74

Part 3. The Six-Step Process and Use of Market Analysis, cont.

Use of Market Analysis	77
How to Determine the Adequacy of Market Analysis in an Appraisal	78
Review Part 3.....	81
Practice Test—Section 1	83

SECTION 2

Part 4. Basic Trend Analysis Techniques

Preview Part 4.....	89
Data Analysis in Marketability Analyses.....	91
Market Analysis and Statistics	91
Measures of Central Tendency: Mean, Median, and Mode.....	93
Measures of Dispersion: Range and Standard Deviation.....	99
Graphing Data.....	102
Simple Linear Regression	105
Short Trends	108
Alternative Market Analysis Tools.....	111
Review Part 4.....	113

Part 5. Level B Marketability Analysis for Suburban Residential Subdivision Property: Steps 1 and 2

Preview Part 5.....	117
Introduction: Marketability Analyses for Suburban Residential Subdivisions	119
5.1 Exhibit. The Six-Step Market Analysis Process for a Level B Marketability Analysis for Suburban Residential Subdivisions	121
Step 1. Analyze Property Productivity	122
Step 2. Delineate the Market Areas	133
Review Part 5.....	141

Part 6. Level B Marketability Analysis for Suburban Residential Subdivision Property: Steps 3–6

Preview Part 6.....	145
Level B Marketability Analysis for Suburban Residential Subdivisions	147
Suburban Residential Subdivision Demand Analysis.....	148
Step 3. Measure Current Demand; Project Demand	150
Step 4. Measure and Project Competitive Supply.....	162
Step 5. Calculate Residual Demand.....	166
Step 6. Project Subject Capture.....	168
Review Part 6.....	175
Practice Test—Section 2	177

SECTION 3

Part 7. Multiunit Property Concepts and Definitions

Preview Part 7	181
Multiunit Property Types	183
Multiunit Property Classes	185
Forms of Multiunit Property Ownership	187
Specialty Occupancy of Multiunit Properties	189
Property Analysis	191
Market Segmentation for Multiunit Properties	195
Review Part 7	197

Part 8. Level B Marketability Analysis for Multiunit Property: Steps 1–3

Preview Part 8	201
Case Study Property	203
The Six-Step Process for a Level B Marketability Analysis for Multiunit Residential Properties	215
Step 1. Analyze Property Productivity	216
Step 2. Delineate the Market Areas	221
Step 3. Measure Current Demand; Project Demand	227
Review Part 8	235

Part 9. Level B Marketability Analysis for Multiunit Property: Steps 4–6

Preview Part 9	239
9.1 Exhibit. The Six-Step Process for a Level B Marketability Analysis for Multiunit Residential Properties	241
Step 4. Measure and Project Competitive Supply	242
Step 5. Calculate Residual Demand	252
Step 6. Project Subject Capture	255
Review Part 9	257
Practice Test—Section 3	259

SECTION 4

Part 10. Office Property Concepts and Definitions

Preview Part 10	267
Classes of Office Space	269
Office Market Segmentation	273
What Office Tenants Want	275
Key Office Building Terms	276
Review Part 10	279

Part 11. Level B Marketability Analysis for Office Property: Steps 1–3

Preview Part 11..... 283
Office Building Case Study Description..... 285
The Six-Step Process for a Level B Marketability Analysis for Office Properties 287
Step 1. Analyze Property Productivity 288
Step 2. Delineate the Market Areas 291
Step 3. Measure Current Demand; Project Demand 293
Review Part 11..... 317

Part 12. Level B Marketability Analysis for Office Property: Steps 4–6

Preview Part 12..... 321
12.1 Exhibit. Level B Marketability Analysis Process for Office Properties 323
Step 4. Measure and Project Competitive Supply..... 324
Step 5. Calculate Residual Demand..... 327
Step 6. Project Subject Capture..... 329
Review Part 12..... 335
Practice Test—Section 4..... 337

SECTION 5

Part 13. Fundamental Concepts and the Four Tests of Highest and Best Use Analysis

Preview Part 13..... 343
Preview Quiz 345
Understanding the Importance of Highest and Best Use to Market Value..... 351
Definitions and Definitional Issues..... 354
Testing for Highest and Best Use..... 355
Further Study of the Four Formal Tests 357
Measuring Financial Feasibility 362
Maximally Productive Use..... 373
Review Part 13..... 377

Part 14. Considerations in Highest and Best Use Analysis

Preview Part 14..... 381
Two Considerations for the Highest and Best Use of Land or
a Site as though Vacant..... 383
The Ideal Improvement 383
The Special Issue of Consistency in Determining the Highest and Best Use
of an Improved Site 384
Alternative Use Decisions for Improved Property 386
The Use-Decision Process..... 387

Part 14. Considerations in Highest and Best Use Analysis, cont.

Considerations Pertaining to Improved Property with Excess or Surplus Land.. 391
Relationship between Use and Value 394
Review Part 14..... 395

Part 15. The Three Conclusions of Highest and Best Use Analysis

Preview Part 15..... 399
Goal of a Highest and Best Use Analysis..... 401
Analysis Required If Use Is Not Currently Feasible..... 407
Analysis of the Complete Highest and Best Use Analysis Flow Chart 408
Interim Use 412
The Most Likely Buyer/User 413
Review Part 15..... 417
Practice Test—Section 5..... 419

SECTION 6

Part 16. Highest and Best Use Applications

Preview Part 16..... 425
Land Residual Technique to Derive an Indication of Highest and Best Use 427
Application of Land Residual Technique to Highest and Best Use Analysis 429
Multiperiod Highest and Best Use Model..... 434
Legally Nonconforming Use 439
Assemblage and Highest and Best Use Analysis..... 442
Owner-Occupant Use in a Highest and Best Use Analysis 449
Fluid Markets 451
Review Part 16..... 453

Part 17. Applications of Market Analysis to the Three Approaches

Preview Part 17 455
Sales Comparison Approach 457
Income Capitalization Approach 463
Cost Approach 465
Review Part 17..... 471
Practice Test—Section 6..... 473

SECTION 7

Part 18. Introduction to Level C Marketability Analyses

Preview Part 18.....	475
When and Why Level C Marketability Analyses May Be Required	477
Reasons Why Level C Analyses May Show Different Indications than Level B Analyses.....	478
How Level C Analyses Differ from Level B Analyses	478
Six-Step Process for Level C Marketability Analysis for Existing Multiunit Residential Property	480
Demonstration: Level C Marketability Analysis for Multiunit Residential Property Using a Commercial Forecasting Service	481
Review Part 18.....	497

Part 19. Introduction to Level C Marketability Analysis for Office Property and Data Sources

Preview Part 19.....	499
Introduction to Level C Marketability Analyses for Office Properties	501
Additional Analysis Required for a Level C Marketability Analysis for an Existing Office Property	503
Data Sources.....	513
Review Part 19.....	517

SECTION 8

Part 20. Exam Content Review

Basic Information for the Exam.....	519
Guidance on Studying for the Final Exam.....	519
Guidance on Taking the Final Exam	519
Test-Taking Strategies	520
Course Content Review: Terms	520
Course Content Review: Concepts	521
Course Content Review: Calculations	522

APPENDIX A

Reprint: Rabianski, Joseph S., Ph.D. "Primary and Secondary Data: Concepts, Concerns, Errors, and Issues," *The Appraisal Journal*, January 2003, 43–55

APPENDIX B

Bibliography of Real Estate Market Research Books
Commercial Green and Energy Efficient Addendum

Overview

Course Description

Welcome to *General Appraiser Market Analysis and Highest & Best Use*. This course is designed to help you apply meaningful market analysis in valuation appraisals. It begins by presenting the basic concepts and terminology of market analysis and marketability analysis, and then shows how marketability analyses provide vital information for the highest and best use decision. In-depth coverage of Level B marketability analysis applications for three property types—a suburban residential subdivision, an existing multiunit residential property, and an office building—will enable you to start using the six-step market analysis process introduced at the beginning of the course and gain practice in applying inferred analysis techniques.

You will also gain practice in applying the test of feasibility and determining a property's highest and best use. Lecture, in-class problems, group discussions, and frequent quizzes and Practice Tests combine to give you new, valuable skills that can increase the reliability of your marketability analyses, highest and best use analyses, and the conclusions you reach in the three approaches to value. The course also provides a transitional discussion to prepare you for Level C marketability analyses using fundamental demand analysis. This type of market analysis is covered in the Appraisal Institute's *Advanced Market Analysis and Highest & Best Use* course.

General Appraiser Market Analysis and Highest & Best Use addresses three relevant questions relating to highest and best use and market analysis:

1. What information is needed to test for highest and best use?
2. Where is this information found?
3. How is this information applied?

The course emphasizes that a marketability analysis is integral to the highest and best use analysis, and highest and best use is integral to market value. All of the above questions must be answered to produce credible results in a market value appraisal.

Learning Enhancements

The course has been designed with a variety of elements to enhance your learning experience.

- **Preview.** To give you a taste of what is to come, the *Preview* page at the beginning of each part includes a brief overview of the content, learning objectives to consider as you move through the content, and learning tips that will assist you in understanding the material you're about to cover.
- **Learning Objectives.** Each learning objective covers the information and practices required for understanding the concepts in the course. Look over these objectives before the part begins so that you have a frame of reference as you move through the material. At the end of each part, reread the objectives. Are you able to do what is stated? If not, ask your instructor for help or review the concepts that you do not understand.
- **Examples and Problems.** To supplement the discussions, we have included examples and problems that will help you visualize and practice what you are learning.
- **Review.** Each part concludes with a review, which includes the learning objectives and key terms and concepts that have been covered. Also provided, where applicable, are recommended readings from textbooks that will reinforce what you have learned in class.
- **Review Quizzes and Practice Tests.** Short review quizzes are included at the end of most parts, and Practice Tests are provided at the end of Sections 1 through 6. The questions on the Practice Tests are similar in format to the types of questions you might find on the exam. By answering the fill-in-the-blank, matching, or multiple-choice questions on the quizzes and tests, you will find out whether you have mastered the information covered in the part.

Classroom Guidelines

To make the course a positive experience for everyone attending, we have some guidelines for your consideration:

- 100% attendance is required. No exceptions.
- Limit use of computers and wireless devices to classroom projects.
- Communicate with business associates during break time instead of class time.
- Put away reading materials such as newspapers and books that are not used in class.
- Silence cell phones.

- Use recording devices only if prior permission has been granted.
- Refrain from ongoing conversations with those seated near you and other distracting behavior.

General Information

- **Laptop computers.** A computer is optional for classroom work, but it can be a valuable addition to supplement the course material. It should have a spreadsheet program such as Excel installed.
- **Calculators.** A financial calculator is required. The accepted model used in the course is the HP-12C. **Important Note:** Laptops, cellular phones, tablets, iPads, wearable technology (smart watch, Apple Watch, Google Glass, etc.) and other devices that can store data or connect to the Internet are NOT permitted during the exam. In addition, all watches, wallets, bags, and purses must be removed and stored out of reach prior to taking the exam.
- **Breaks.** There will be two 10-minute breaks during the morning session and two 10-minute breaks during the afternoon session unless noted otherwise by the course sponsor. The lunch break is one hour.
- **Attendance sheets** will be distributed during class to verify your attendance during the morning and afternoon sessions.
- **Certificates of completion** will be emailed after completion of the course, and attendance during the entire course is required.

Recommended Texts

- Stephen F. Fanning, MAI. *Market Analysis for Real Estate: Concepts and Applications in Valuation and Highest and Best Use*, 2nd ed. Chicago: Appraisal Institute, 2014.
- *The Appraisal of Real Estate*, 14th ed. Chicago: Appraisal Institute, 2013.
- *The Dictionary of Real Estate Appraisal*, 6th ed. Chicago: Appraisal Institute, 2015.

Exam

- 50 multiple-choice questions