# **Table of Contents**

Seminar Description	V	
Seminar Description	v	
Seminar Schedule	ix	
SECTION 1		
Part 1. Real Estate Markets and Market Analysis		
Preview Part 1		
Introduction to Market Analysis	3	
Market Value Appraisals and Property Use	7	
Purposes of Market Analysis	8	
Types of Market Analysis	8	
Levels of Market Analysis (Marketability Studies	) 16	
Summary: Levels of Market Analysis	19	
Use of Market Analysis in Appraisals	20	
How to Determine the Adequacy of Market Analy	sis in an Appraisal21	
The Structure of Market Analysis	22	
Review Part 1	23	
Part 2. Basic Trend Analysis		
Preview Part 2	25	
Data Analysis in Marketability Studies	27	
Market Analysis and Statistics	27	
Measures of Central Tendency: Mean, Median, a	and Mode30	
Measures of Dispersion: Range and Standard D	eviation37	
Graphing Data	41	
Simple Linear Regression	45	
Short Trends	50	
Guidelines for Use of Projection Methods	54	
Alternative Market Analysis Tools	54	
Paview Part 2	55	

## **SECTION 2**

### Part 3. Level B Marketability Study: Office Property

Preview Part 3	57
Case Study: Kinnard Building—Urban Office Property	59
The Six-Step Process for a Level B Marketability Study for Office Prope	rties 63
Step 1. Analyze Property Productivity	64
Step 2. Delineate the Market Areas	69
Step 3. Measure Current Demand; Project Demand	74
Step 4. Measure and Project Competitive Supply	86
Step 5. Calculate Residual Demand	88
Step 6. Project Subject Capture	91
Review Part 3	97
Part 4. Level B Marketability Study: Suburban Residential Subdivision Property Preview Part 4	_
Preview Part 4	99
	99 101
Preview Part 4 Introduction: Marketability Studies for Residential Subdivisions	99 101
Preview Part 4	
Preview Part 4 Introduction: Marketability Studies for Residential Subdivisions Case Study: The Oaks—Suburban Residential Subdivision Step 1. Analyze Property Productivity	
Preview Part 4	
Preview Part 4 Introduction: Marketability Studies for Residential Subdivisions Case Study: The Oaks—Suburban Residential Subdivision Step 1. Analyze Property Productivity Step 2. Delineate the Market Areas Step 3. Measure Current Demand; Project Demand	
Preview Part 4	

## **Seminar Description**

Marketability Studies: The Six-Step Process and Basic Applications provides an overview of market analysis concepts and the formal process of market analysis, then presents two real-world case studies of its application. This seminar will provide practical exposure to basic market analysis for general and advanced appraisers and can serve as either a refresher or an introduction to the material contained in the Appraisal Institute's General Appraiser Market Analysis and Highest & Best Use course. In addition, the seminar is intended as a prelude to the Appraisal Institute's Marketability Studies: Advanced Considerations and Applications seminar.

The purpose of this seminar is to provide exposure to structured market analysis while demonstrating the process on two relatively straight-forward, noncomplex appraisal assignments. The process shown here is not advanced, but it lays the foundation necessary to apply advanced techniques. Most appraisers will find the process demonstrated in this seminar to be adequate for the majority of appraisal assignments. After the seminar is concluded, participants can use the two case studies as a guide in appraisal practice.

### **Learning Objectives**

At the conclusion of the seminar, participants will be able to:

Recognize the importance of market analysis and marketability studies to highest and best use and market value.
Understand the six-step process of market analysis.
Apply basic trend analysis.
Perform a Level B marketability study for a Class B office property.
Perform a Level B marketability study for a suburban residential subdivision.
Apply Level B marketability studies to support conclusions for the three approaches to value.

#### **Learning Enhancements**

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

- **Preview.** To give you a taste of what is to come, each part begins with a preview page, which 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 information you're about to cover.
- **Learning Objectives.** Each learning objective covers information required for understanding the concepts in the seminar. Look them over 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, this is the time to ask your instructor for help or review the concepts that you do not understand.
- Problems, Examples, and Discussion Questions. To supplement the discussions, we've included problems, examples, and discussion questions to help you plan to apply 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.
- **Solutions.** Answers to all of the problems and discussion questions are provided behind the Solutions tab at the back of this handbook.

#### **Classroom Guidelines**

To make the seminar 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**

- Calculators. A financial calculator is required. The accepted model used in the seminar is the HP-12C.
- **Laptop computers** with a spreadsheet program such as Microsoft Excel are recommended. Instructors will demonstrate a few problems using Excel. While participants won't need a computer to work the problems, they may like to try a few things in Excel during class.
- In Part 2, instructors will demonstrate Excel applications to the class. To try these applications, you must activate the Analysis ToolPak Add-In, which provides data analysis functions, including regression analysis.

#### To determine whether the Analysis ToolPak is activated in Excel:

Open Excel and click on the **Data** tab. If the **Analysis ToolPak** is operational, you will see a **Data Analysis** choice displayed in the **Analysis** group at the far right of the menu ribbon at the top of the worksheet. Click on **Data Analysis** and a small **Data Analysis** window will open in front of the worksheet.

If you are able to open the Data Analysis window, then the Analysis ToolPak is operational and you may skip the following steps.

#### To activate the Analysis ToolPak in Excel:

- **Step 1.** Open Excel and click the File tab (the Windows icon in the upper left corner).
- **Step 2.** Click the **Options** link on the dropdown menu bar that opened after you clicked **File.**
- **Step 3.** Click Add-ins in the Excel Options Window.
- **Step 4.** Select **Analysis ToolPak**, which is found within the list of available add-ins. The **Analysis ToolPak Add-in** will be highlighted after you click on it. Then click on **OK** button located at the bottom right of the **Excel Options** window.

If the **Add-ins** window did not appear after you completed Step 3, go to the drop-down list labeled **Manage** near the bottom of the **Excel Options**. Select **Excel Add-ins** and click **Go**. When the **Add-ins** window appears, follow the directions in Step 4 to select the **Analysis ToolPak** and activate it.

After completing Step 4, it may be necessary to close **Excel** and restart the program to finalize the activation. Repeat these steps to ensure that the **Analysis ToolPak** is ready for use.

**Note.** If the **Analysis ToolPak** add-in is not included in the **Add-ins** list found in your **Excel Options** window, it was most likely not installed with Office. It will be necessary to reinstall Office, selecting **Analysis ToolPak** for installation within Excel. Once this is accomplished you can follow the preceding instructions to activate the **Analysis ToolPak**.

- 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 may be downloaded after completion of the course, and attendance during the entire course is required.

#### **Terminology Note**

This seminar uses the term *marketability study* to denote an analysis of a specific property in a specific market. Note that other sources, including *The Dictionary of Real Estate Appraisal*, 6th ed., may use other terms such as *marketability analysis* for this type of analysis. Also, some practitioners use the term *market analysis* very broadly to reference both market-wide and property-specific analyses.

Appraisal terminology changes over time and new terms are often not adopted by all sources simultaneously.

#### **Recommended Textbooks**

- The Dictionary of Real Estate Appraisal, 6th ed. Chicago: Appraisal Institute, 2015.
- Market Analysis for Real Estate: Concepts and Applications in Valuation and Highest & Best Use, 2nd ed., by Stephen F. Fanning, MAI. Chicago: Appraisal Institute, 2014.
- Practical Applications in Appraisal Valuation Modeling, by M. Steven Kane, Mark R. Linne, MAI, and Jeffrey A. Johnson, MAI. Chicago: Appraisal Institute, 2004.
- Subdivision Valuation, by Don M. Emerson Jr., MAI, SRA. Chicago: Appraisal Institute, 2008.
- The Valuation of Office Properties: A Contemporary Perspective, by Barrett A. Slade, PhD, MAI. Chicago: Appraisal Institute, 2009.