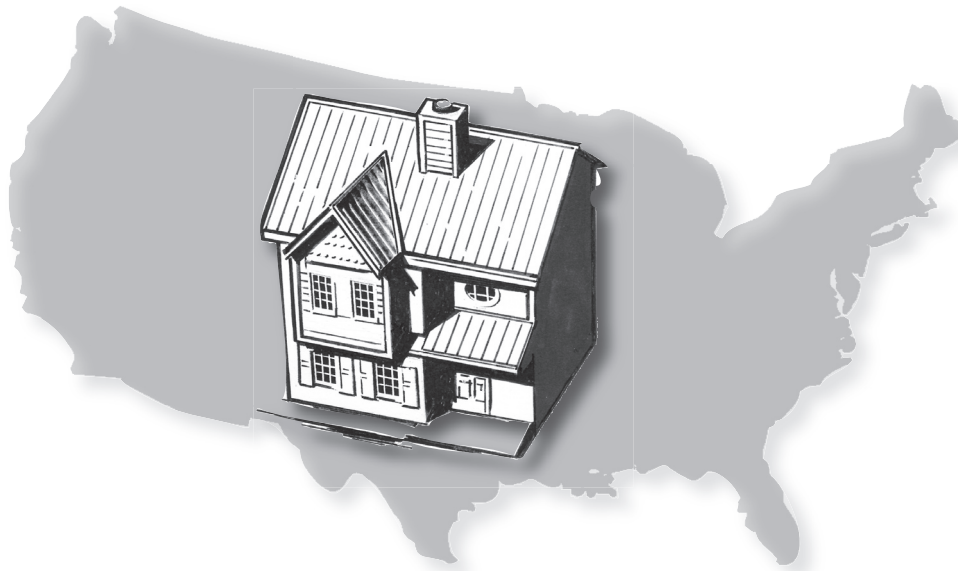


# **Residential Real Estate Appraisal**



***Walt Huber***

Glendale Community College

***Levin P. Messick, IFAC***

Mt. San Antonio College  
President, AC Appraisers, Inc.



# ***Residential Real Estate Appraisal***

---

COPYRIGHT 2006  
Educational Textbook Company, Inc.  
P. O. Box 3597  
Covina, California 91722  
(626) 339-7733  
FAX (626) 332-4744  
www.etc textbooks.com or www.etcbooks.com

Library of Congress Cataloging-in-Publication Data

Huber, Walt - 1941  
Residential Real Estate Appraisal / Walt Huber, Levin P. Messick, IFAC

Summary: Covers all material required of college real estate appraisal classes. Very clear and simple language, easy-to-read format with photographs, charts and cases. Includes glossary and index.

1. Real property - Valuation.
2. Dwellings - Valuation.

Includes Index

HD 1387. H547 2001  
333.33'82 - dc21

ISBN: 0-916772-23-3

All Rights Reserved

All the rights to this Residential Real Estate Appraisal textbook are reserved. No part of this text may be reproduced or transmitted in any form, by any means; including electronic or mechanical photocopying, recording or storing in any retrieval system, or otherwise used without the prior written permission of this publisher.

Printed in the United States of America

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering appraisal, legal, accounting, or other professional services. If legal advice or other expert assistance is required, the services of a competent professional person should be sought.

## **Preface**

Once again, we've beaten the competition to the punch and created a book that is ahead of its time. **RESIDENTIAL REAL ESTATE APPRAISAL**, by Walt Huber and Levin P. Messick, IFAC, is a groundbreaking textbook, the first of its kind. We have taken the material from our best-selling *Real Estate Appraisal (Principles and Procedures)* book and added a section of questions and answers to help students self-test themselves on the key topics of:

- I. Residential Market Analysis and Highest and Best Use (15 questions)**
- II. Residential Appraiser Site Valuation and Cost Approach (15 questions)**
- III. Residential Sales Comparison and Income Approaches (30 questions)**

This additional section is meant to comply with the Curriculum Content Guidance Notes, set forth in the 2008 Appraisal Foundation Requirements, and reflects the high standards of both the professional industry and the authors of this text. **We've also included a completed CAR® 8-Page Residential Purchase Agreement and Joint Escrow Instructions at the end of this additional section.**

Walt Huber is a real estate professional with over thirty years of college-level real estate instruction under his belt, and is the author of over twenty-six real estate-related books. Professor Levin P. Messick of Mt. San Antonio College is a respected teacher of all aspects of appraisal and finance. He has twenty-two years of experience as both a residential and commercial appraiser. He is the president of AC Appraisals, Inc., of Placentia, California and has a Certified General License in the state of California. Huber and Messick's experience as working professionals as well as college-level teaching have given them a unique perspective on student strengths and weaknesses.

We owe a special debt to Jack C. Flynn for his help with this newest edition of the textbook. Jack is an instructor of appraisal at Glendale Community College and has been teaching and practicing real estate for over 40 years. He owns the successful appraisal firm of Anchor Pacific Company in San Marino, California. He holds a life certificate with the Appraisal Institute, Senior Member of the American Society of Appraisers (ASA), National Association of Realtors® (NAR), Appraisal Division (GAA), and has a Certified General license in the state of California.

We would also like to extend our thanks to the Appraisal Foundation for allowing us to provide brief quotes from USPAP, as well as the Appraisal Institute and the National Association of Independent Fee Appraisers for allowing us to print their codes of ethics. We also appreciate the firm of Marshall and Swift, the leader in residential and commercial building cost data, for giving us permission to reproduce many of their graphics. Day One, Bradford Technologies, Forms and Worms, and FREa were all most generous in providing us with the appraisal forms you will find in this book.



## ***Residential Real Estate Appraisal***

---

We would be remiss in our duties not to acknowledge the exceptional contributions of Rick Lee, prepress editor and layout, and Colleen Taber, editor, as well as the creative talents of Philip Dockter, art director, and Melinda Winters, cover designer.

We are grateful for the contributions made by appraiser Edward S. Stahl, Professor Emeritus, Solano College; Donna Grogan, CPM, El Camino College; William Nunally, Sacramento City College; Kim Tyler, Shasta College; Jim Michaelson, Santa Rosa Junior College; Nick Zoumbos, Riverside College and Crafton Hills College; Joe Newton, Bakersfield College; Fred Martinez and Allan Nutall, City College of San Francisco; Martin Welc, Saddleback College; Elliot Dixon, East Los Angeles College; Frank Pangborn, Irvine Valley College; and Charles Ellis, Occidental College.

## **Acknowledgements**

Our authors, although seasoned veterans themselves, welcome strategy advice from comrades in the trenches. We would like to thank the following professors for the time and effort they contributed with suggestions, critiques and general input on the text:

**John Aust, Ph.D, Santiago Canyon College**  
**Earl H. Bond, Certified General Appraiser, Chaffey College**  
**Marty Carrick, Instructor, Shasta College**  
**Steve Costello, CMDC (FNC Company), National Comparable Data Specialist**  
**Ed Culbertson, Ph.D, Professor of Real Estate, MiraCosta College**  
**Raymond Curry, Instructor, Compton College**  
**Thomas Felde, Felde Publications**  
**Terrence R. Flinn, Professor, College of San Mateo**  
**Jim Glickman, MAI, Sacramento City College**  
**Ignacio Gonzalez, Real Estate Instructor/Coordinator, Mendocino College**  
**Wes Green, American River College**  
**Fred Henning, Professor, Riverside Community College**  
**Donald Holman, Instructor, El Camino College**  
**David Kemp, R.E. Instructor, Certified General Appraiser, Palomar College**  
**Patrick McKinney, Instructor, Southwestern College**  
**Jay Mumford, CCIM, Chabot College**  
**Marvin N. Nadler, West Los Angeles College, and U.C.L.A. Extension**  
**L. H. Sawyer, Instructor, Los Angeles Mission College**  
**D. Brian Shumway, Real Estate Appraisal Instructor, Mt. San Jacinto College**  
**Lloyd D. Werner, IFAS, DAC, Portland Community College**  
**Alex R. Yguado, Instructor, Los Angeles Mission College**

# ***Residential Real Estate Appraisal***

---

**We thank the following appraisers and real estate professionals for their suggestions and contributions toward improving our textbook.**

Rick Arellano, Appraiser  
Assistant Professor Computer Applications  
And Office Technology  
Ohlone College  
Fremont, CA

Sharon Bertolucci  
Half Moon Bay, CA

Larry Bivens  
AC Appraisers, Inc.

Paul D. Bowen  
Valuation and Environmental Consultant  
Puyallup, Washington 98373

Michael R. Cartwright, CMA,ASA, RPG  
Mineral Business Appraisal  
Reno, NV

Elizabeth Champagne, MAI  
CB Richard Ellis  
San Francisco, CA 94104

Donald Choice, MAI  
San Diego, CA

Melody Clark  
New Jersey

Dennis Corrigan, CPA, CIA, E.E.  
Xavier College  
Chicago, IL

Steven G. Coull, IFAS, DAC  
Canadian National Association  
of Real Estate Appraisers

Tim Cullen  
Tim Cullen Real Estate Appraisers  
San Diego, CA

Denis DeSaix  
Mike Baz  
Metrocal Appraisal  
Livermore, CA

Michael W. Dreier  
SantaCruzAppraisers.Com  
Cabrillo College  
Santa Cruz, CA

Frank Fanelli, ASA  
Manager Real Estate Division  
City of Oakland California  
Oakland, CA

Paul Ganley  
Arizona/California License  
Scottsdale, AZ

Marge Haley  
Martha Nolan  
Laura Reeves  
Lisa Cohen  
San Matteo Assessor's Office

Guy Hall  
AC Appraisers  
Placentia, CA

Michael Hamilton  
Albuquerque, New Mexico

George H. Harrison, Ph.D  
President  
The Columbia Institute  
San Antonio, TX

Amber Hatter  
Ohlone College

Glen M. Higdon  
Real Estate & Manufactured Home  
Antioch, CA

Lori L. Horn, SRA  
Burlingame, CA

Sanford T. Jones, III and Sanford T. Jones, IV  
AC Appraisers, Inc.

James Kaysen, WCGA  
Kaysen Realty Valuation Company  
Grafton, WI

Milan Krajci, PHD  
San Francisco, CA

Michael Layne  
Placentia, CA

Ric Love  
Del Norte Appraisal Associates  
Crescent City, CA

Betty J. Lowery  
Irvine, CA



## ***Residential Real Estate Appraisal***

---

Arlette Lyons  
Professor of Real Estate  
Mt. San Antonio College  
Walnut, CA

William Madia  
Deena Coakley  
Steven M. Bigel  
KMB Appraisal Services, LTD  
Crestwood, Illinois

Linda L. Manning  
Residential, Industrial, Commercial, Land  
Walnut Creek, CA

Calixto R. Manriquez, Inc.  
San Jose, CA

Jeremy McCarty, SRA  
Electronic Appraisal Solutions  
Roseville, CA

Richard McCauley & Associates  
Fresno, CA

George S. McLeod, IFAS  
Houston, Texas

Pete Mueller  
Mueller Appraisal  
Toledo, Ohio

Raul Nepomuceno  
Union City, CA

John Norberg  
Appraisal Research Corporation  
San Jose State University  
San Jose, CA

Stephen O'Leary  
Lansing Community College  
Lansing, Michigan

Scott M. Parkinson CRA  
Utah/ Idaho

Robert D. Rodriguez  
Timothy Glaser  
Mighty Appraisal  
West Hills, CA

Katherine Sheets  
NYS Certified  
New York State

Richard Stephan  
Professor of Real Estate  
Mt. San Antonio College  
Walnut, CA

Margaret Singleton, MAI, SRA, ASA  
San Diego, CA

Douglas G. Smith IFAS  
Appraisal Services  
Butte, Montana

Crawford M. Spens  
Longview, Washington

Ann Susko  
Valleywide Appraisal Services  
Phoenix, AZ

Larry Tack  
Salinas, CA

Mike Tognotti  
Location Cubed  
San Mateo, CA

Dr. Dan J. Tosh, Ph.D, SCREA  
P. O. Box 1287  
Brentwood, CA

Sidney S. Uyetake, SRA  
Uyetake, Uyetake & Associates Inc.  
Honolulu, Hawaii

T. Hugh Windsor, PCA  
Stockton, CA

L.P. Woodard, Jr.  
Placentia, CA

Mike Woods  
Pam Woods  
United California Financial  
Temecula, CA

R. H. Woodworth, IFAS  
Highline Community College  
Woodworth & Associates  
Washington State

Mary Ann Zamel  
Professor of Real Estate  
Mt. San Antonio College  
Walnut, CA

## **Table of Contents**

### **Chapter 1: Introduction 1**

- I. WHY APPRAISAL IS IMPORTANT (p. 3)**
- II. DEFINITION OF APPRAISAL (p. 3)**
  - A. Opinion (p. 4)
  - B. Value (p. 4)
  - C. Appraisal – Art or Science? (p. 5)
  - D. Appraisal Practice (p. 5)
  - E. Consulting (p. 5)
  - F. Review (p. 6)
- III. HISTORY OF APPRAISAL (p. 6)**
  - A. Appraisal Foundation (p. 7)
- IV. PURPOSES AND USES OF APPRAISALS (p. 8)**
  - A. Standards of Appraisal (p. 8)
  - B. Statements (p. 8)
  - C. Advisory Opinions (p. 8)
  - D. Intended Use, Intended Users, and Standard of Value (p. 8)
  - E. Career Opportunities (p. 10)
  - F. Real Estate (p. 11)
- V. DISTINGUISHING REAL ESTATE FROM PERSONAL PROPERTY (p. 12)**
  - A. Method of Attachment (p. 12)
  - B. Adaptability (p. 13)
  - C. Relationship of Parties (p. 13)
  - D. Intention of the Interested Parties (p. 13)
  - E. Agreement of the Parties (p. 13)
  - F. Trade Fixtures (p. 14)
- VI. REAL PROPERTY (p. 14)**
  - A. Bundle of Rights (p. 14)
  - B. Estates (p. 15)
  - C. Encumbrances (p. 18)
- VII. GOVERNMENT RESTRICTIONS OF PROPERTY RIGHTS (p. 20)**
  - A. Eminent Domain (p. 20)
  - B. Taxation (p. 21)
  - C. Police Power (p. 21)
  - D. Escheat (p. 21)
- VIII. CHAPTER SUMMARY (p. 22)**
- IX. CLASS DISCUSSION TOPICS (p. 24)**
- X. CHAPTER 1 QUIZ (p. 24)**

### **Chapter 2: Understanding Value 27**

- I. WHAT IS VALUE? (p. 30)**
- II. FOUR CHARACTERISTICS OF VALUE (p. 30)**
  - A. Utility (p. 31)
  - B. Scarcity (p. 31)
  - C. Transferability (p. 31)
  - D. Effective Demand (p. 31)
- III. VALUE DISTINGUISHED FROM PRICE AND COST (p. 32)**
  - A. Direct and Indirect Costs (p. 32)





# ***Residential Real Estate Appraisal***

---

- B. Development Cost and Construction Cost (p. 33)
- C. Replacement Cost and Reproduction Cost (p. 33)
- IV. PRINCIPLES OF APPRAISAL (ECONOMIC VALUE) (p. 34)**
  - A. Principle of Supply and Demand (p. 35)
  - B. Principle of Substitution (p. 36)
  - C. Principle of Competition (p. 36)
  - D. Principle of Change (p. 37)
  - E. Principle of Anticipation (p. 39)
  - F. Principle of Balance (p. 39)
  - G. Principle of Surplus Productivity (p. 40)
  - H. Principle of Contribution (p. 40)
  - I. Principle of Increasing and Decreasing Returns (p. 41)
- V. EFFECT OF USE ON REAL ESTATE VALUE (p. 41)**
  - A. Highest and Best Use Principle (p. 42)
  - B. Consistent Use Principle (p. 43)
  - C. Conformity, Progression, and Regression Principles (p. 43)
- VI. PRODUCTION AS A MEASURE OF VALUE (p. 44)**
  - A. Agents of Production Principle (p. 44)
- VII. TYPES OF VALUE (p. 45)**
  - A. Market Value (p. 46)
  - B. Price (p. 47)
  - C. Value in Use (p. 48)
  - D. Investment Value (p. 48)
  - E. Liquidation Value (p. 49)
  - F. Assessed Value (p. 49)
  - G. Insurable Value (p. 49)
  - H. Going Concern Value (p. 50)
- VIII. FORCES AFFECTING VALUE (p. 50)**
  - A. Social Factors (p. 50)
  - B. Economic Factors (p. 51)
  - C. Political Factors (p. 53)
  - D. Environmental (Physical) Factors (p. 54)
- IX. CHAPTER SUMMARY (p. 56)**
- X. CLASS DISCUSSION TOPICS (p. 59)**
- XI. CHAPTER 2 QUIZ (p. 60)**

## ***Chapter 3: The Appraisal Process***

**63**

- I. THE EIGHT STEPS OF THE APPRAISAL PROCESS (p. 65)**
- II. STEP 1: DEFINING APPRAISAL PROBLEM (p. 67)**
  - A. What is to be Appraised? (p. 67)
  - B. When is it to be Appraised? (p. 73)
  - C. Why is it to be Appraised? (p. 75)
  - D. How is it Being Valued? (p. 76)
  - E. Defining the Appraisal Problem in the Appraisal Report (p. 86)
- III. STEP 2: PRELIMINARY ANALYSIS (p. 86)**
  - A. Identifying the Necessary Data (p. 87)
  - B. Identifying the Sources of Data (p. 87)
  - C. Preliminary Analysis (p. 87)



# ***Residential Real Estate Appraisal***

---

- D. Creating a Plan (p. 88)
- E. Fee Proposal and Contract (p. 88)
- IV. STEP 3: COLLECTING, VERIFYING, AND ANALYZING THE DATA (p. 88)**
- V. STEP 4: HIGHEST AND BEST USE ANALYSIS (p. 90)**
- VI. STEP 5: VALUING THE SITE (p. 83)**
  - A. Reasons for Separate Site Valuation (p. 90)
- VII. STEP 6: APPLYING THE THREE APPROACHES TO VALUE (p. 91)**
  - A. Cost Approach (p. 91)
  - B. Sales Comparison Approach (p. 92)
  - C. Income Approach (p. 92)
- VIII. STEP 7: RECONCILING THE VALUE INDICATORS (p. 93)**
- IX. STEP 8: REPORTING THE VALUE ESTIMATE (p. 94)**
  - A. The Three Basic Appraisal Reports (p. 94)
  - B. Essential Elements of the Appraisal Report (p. 95)
- X. CHAPTER SUMMARY (p. 96)**
- XI. CLASS DISCUSSION TOPICS (p. 99)**
- XII. CHAPTER 3 QUIZ (p. 100)**

## ***Chapter 4: Property Description and Appraisal Math***

**103**

- I. PROPERTY DESCRIPTION (p. 105)**
- II. METES AND BOUNDS (p. 106)**
  - A. Reference Points (p. 106)
  - B. Courses and Distances (p. 108)
- III. RECTANGULAR (U.S. GOVERNMENT) SURVEY (p. 108)**
  - A. Base Line and Meridian (p. 109)
  - B. Townships (p. 109)
  - C. Sections (p. 111)
  - D. Partial Sections (p. 111)
  - E. Adjustments and Government Lots (p. 112)
  - F. Rectangular Survey Descriptions (p. 113)
  - G. Geodetic Survey System (p. 113)
- IV. LOT AND BLOCK SYSTEM (p. 113)**
- V. APPRAISAL MATH (p. 114)**
  - A. Distance, Area, and Volume (p. 114)
  - B. Area of a Rectangle (p. 116)
  - C. Units of Area (p. 116)
  - D. Converting Units (p. 117)
  - E. Area of a Triangle (p. 118)
  - F. Right Triangles (p. 119)
  - G. Areas of Complex Figures (p. 120)
  - H. Volume (p. 120)
    - I. Reciprocals (p. 123)
    - J. Percentages (p. 123)
  - K. Direct Capitalization (p. 125)
  - L. Interest (p. 126)



## ***Residential Real Estate Appraisal***

---

### **VI. FINANCIAL CALCULATIONS (p. 127)**

- A. Present and Future Value (p. 127)
- B. Interest Compounding (p. 128)
- C. "Hoskold" or Sinking Fund Method (p. 129)
- D. "Inwood" Method (p. 129)

### **VII. MEASURES OF CENTRAL TENDENCY (p. 129)**

### **VIII. CHAPTER SUMMARY (p. 131)**

### **IX. CLASS DISCUSSION TOPICS (p. 133)**

### **X. CHAPTER 4 QUIZ (p. 134)**

## ***Chapter 5: Data Collection and Analysis***

**137**

### **I. UNDERSTANDING DATA (p. 139)**

- A. Market Trend Data (p. 139)
- B. Competitive Supply and Demand Data (p. 140)
- C. Subject Property Data (p. 141)
- D. Comparable Property Data (p. 141)

### **II. REGIONAL AND COMMUNITY DATA (p. 142)**

- A. Use of Regional and Community Data (p. 142)
- B. Regional and Community Value Indications (p. 144)
- C. Housing Supply and Demand (p. 145)

### **III. NEIGHBORHOOD DATA (p. 148)**

- A. Defining Neighborhood Boundaries (p. 149)
- B. Neighborhood Value Indicators (p. 149)
- C. Sources of Neighborhood Data (p. 152)
- D. Neighborhood Inspection (p. 152)

### **IV. SITE DATA (p. 155)**

- A. Site Description (p. 155)
- B. Physical Data (p. 156)

### **V. BUILDING DATA (p. 158)**

- A. Categories of Building Data (p. 159)

### **VI. SPECIFIC MARKET DATA (p. 164)**

- A. Prices and Terms of Sale (p. 165)
- B. Date of Sale (p. 165)
- C. Financing (p. 166)
- D. Sale Conditions (p. 166)
- E. Cost Data (p. 166)
- F. Income and Expense Data (p. 167)

### **VII. CHAPTER SUMMARY (p. 168)**

### **VIII. CLASS DISCUSSION TOPICS (p. 170)**

### **IX. CHAPTER 5 QUIZ (p. 170)**

## ***Chapter 6: Site Valuation***

**173**

### **I. HIGHEST AND BEST USE (p. 175)**

- A. Highest and Best Use Defined (p. 175)
- B. Purpose of Highest and Best Use Analysis (p. 176)
- C. Characteristics of Highest and Best Use (p. 176)

# ***Residential Real Estate Appraisal***

---

- D. Importance of the Principle of Anticipation (p. 179)
- E. Interim Uses (p. 180)
- II. VACANT AND IMPROVED LAND (p. 180)**
  - A. Legal Nonconforming Uses (p. 181)
  - B. True Highest and Best Use (p. 181)
  - C. Principle of Consistent Use (p. 183)
  - D. Excess Land (p. 183)
  - E. Plottage (p. 184)
  - F. Highest and Best Use in Residential Appraisals (p. 184)
- III. METHODS OF SITE VALUATION (p. 184)**
  - A. Sales Comparison Method (First and Most Important Method) (p. 185)
  - B. Allocation Method (Second Method) (p. 191)
  - C. Extraction Method (Third Method) (p. 192)
  - D. Development Method (Fourth Method) (p. 193)
  - E. Land Residual Method (Fifth Method) (p. 193)
  - F. Ground Rent Capitalization Method (Sixth Method) (p. 196)
  - G. Depth Tables ("4-3-2-1 Method") (p. 196)
- IV. CHAPTER SUMMARY (p. 198)**
- V. CLASS DISCUSSION TOPICS (p. 200)**
- VI. CHAPTER 6 QUIZ (p. 200)**

## ***Chapter 7: Residential Construction***

**203**

- I. CLASSIFICATION OF HOUSES (p. 205)**
  - A. Types of Houses (p. 205)
- II. ARCHITECTURAL STYLES (p. 210)**
  - A. Compatibility (p. 210)
- III. ELEMENTS OF HOUSE DESIGN (p. 213)**
  - A. Siting (p. 213)
  - B. Interior Functional Zone (p. 214)
  - C. Room Characteristics (p. 216)
- IV. CONSTRUCTION METHODS AND MATERIALS (p. 219)**
  - A. Foundations (p. 219)
  - B. Framing and Sheathing (p. 222)
  - C. Exterior Finishes (p. 228)
  - D. Doors and Windows (p. 228)
  - E. Insulation (p. 229)
  - F. Ventilation (p. 232)
  - G. Interior Finishes (p. 232)
  - H. Plumbing (p. 234)
    - I. Heating and Air Conditioning (p. 234)
  - J. Electrical (p. 235)
  - K. Quality (p. 235)
- V. CHAPTER SUMMARY (p. 237)**
- VI. CLASS DISCUSSION TOPICS (p. 240)**
- VII. CHAPTER 7 QUIZ (p. 240)**



## ***Chapter 8: Cost Approach to Value***

***243***

- I. BASICS OF THE COST APPROACH (p. 245)**
- II. APPLICATION OF THE COST APPROACH (p. 246)**
- III. ESTIMATING COST (p. 246)**
  - A. Reproduction and Replacement Cost (p. 246)
  - B. Types of Cost (p. 247)
- IV. COST ESTIMATING TECHNIQUES (p. 247)**
  - A. Comparative Unit Method (p. 248)
  - B. Unit-In-Place Method (p. 252)
  - C. Quantity Survey Method (p. 254)
  - D. Cost Index Trending (p. 254)
- V. ESTIMATING DEPRECIATION (p. 255)**
  - A. Depreciation Terminology (p. 255)
  - B. Age and Economic Life (p. 255)
- VI. TYPES OF DEPRECIATION (p. 256)**
  - A. Physical Deterioration (p. 256)
  - B. Functional Obsolescence (p. 257)
  - C. External (Economic) Obsolescence (p. 258)
- VII. METHODS OF ESTIMATING DEPRECIATION (p. 258)**
  - A. Economic Age-Life Method (p. 258)
  - B. Sales Comparison Method (p. 260)
  - C. Capitalization Method (p. 260)
  - D. Cost to Cure Method (p. 261)
  - E. Observed Condition Method (p. 261)
- VIII. UNIFORM RESIDENTIAL APPRAISAL REPORT (p. 261)**
- IX. CHAPTER SUMMARY (p. 263)**
- X. CLASS DISCUSSION TOPICS (p. 265)**
- XI. CHAPTER 8 QUIZ (p. 266)**

## ***Chapter 9: Sales Comparison Approach to Value*** 269

- I. MARKET THEORY OF VALUE (p. 271)**
- II. REAL ESTATE MARKETS (p. 272)**
  - A. Description of Improvements (URAR) (p. 273)
- III. COMPARABLE SALES (p. 278)**
- IV. STEPS IN THE SALES COMPARISON APPROACH (p. 278)**
  - A. Data Collection (p. 279)
  - B. Verification of Data (p. 279)
  - C. Selecting Units of Comparison (p. 280)
  - D. Analysis and Adjustment of Comparable Prices (p. 281)
  - E. Reconciliation of Comparable Value Indicators (p. 281)
- V. THE ADJUSTMENT PROCESS (p. 282)**
  - A. Elements of Comparison (p. 282)
- VI. ADJUSTMENT TECHNIQUES (p. 292)**
  - A. Paired Data Analysis (p. 293)
  - B. Relative Comparison Analysis (p. 297)

# ***Residential Real Estate Appraisal***

---

- C. Analysis of Price Per Square Foot (p. 297)
- VII. CALCULATION OF PERCENTAGE ADJUSTMENTS (p. 297)
- VIII. SEQUENCE OF ADJUSTMENTS (p. 299)
- IX. RECONCILIATION (p. 300)
- X. CHAPTER SUMMARY (p. 303)
- XI. CLASS DISCUSSION TOPICS (p. 305)
- XII. CHAPTER 9 QUIZ (p. 306)

## ***Chapter 10: Income Approach to Value*** **309**

- I. USE OF THE INCOME APPROACH (p. 311)
- II. INVESTOR'S PERCEPTION OF VALUE (p. 311)
  - A. Rate of Return (p. 312)
  - B. Competing Investment Opportunities (p. 314)
- III. INCOME CAPITALIZATION (p. 314)
  - A. Direct Capitalization (p. 315)
  - B. Income Estimation (p. 316)
  - C. Multipliers and Capitalization Rates (p. 320)
  - D. Calculating Value by Direct Capitalization (p. 324)
  - E. Yield Capitalization (p. 327)
- IV. DISCOUNTING (p. 327)
  - A. Compounding (p. 328)
  - B. Annuities (p. 329)
  - C. Yield Rates (p. 329)
- V. CHAPTER SUMMARY (p. 332)
- VI. CLASS DISCUSSION TOPICS (p. 335)
- VII. CHAPTER 10 QUIZ (p. 336)

## ***Chapter 11: Reconciliation and Final Value Opinion*** **339**

- I. RECONCILIATION (p. 340)
  - A. Definition of Reconciliation (p. 341)
  - B. Use of Reconciliation in Appraisals (p. 341)
- II. THE RECONCILIATION PROCESS (p. 343)
  - A. Reviewing the Appraisal (p. 343)
  - B. Assessing the Reliability of Value Indicators (p. 345)
  - C. The Reconciliation Judgment (p. 347)
- III. FINAL OPINION OF VALUE (p. 348)
  - A. Uniform Residential Appraisal Report (p. 348)
  - B. Point Estimates and Range Values (p. 349)
  - C. Self Review (p. 351)
- IV. CHAPTER SUMMARY (p. 351)
- V. CLASS DISCUSSION TOPICS (p. 353)
- VI. CHAPTER 11 QUIZ (p. 354)

## ***Chapter 12: The Appraisal Report*** **357**

- I. FUNCTION OF THE APPRAISAL REPORT (p. 359)



## ***Residential Real Estate Appraisal***

---

- II. REPORTING REQUIREMENTS UNDER USPAP (p. 359)**
  - A. Complete and Limited Appraisal Reports (p. 359)
  - B. Oral and Written Appraisal Reports (p. 360)
  - C. Narrative Reports (p. 360)
  - D. Form Reports (p. 364)
- III. UNIFORM RESIDENTIAL APPRAISAL REPORT (URAR) (p. 366)**
  - A. Page One of the URAR (p. 373)
  - B. Page Two of the URAR (p. 379)
  - C. Page Three of the URAR (p. 382)
  - D. Pages Four Through Six of the URAR (p. 384)
  - E. Desktop Underwriter's Quantitative Analysis Report (p. 384)
  - F. Desktop Underwriter's Property Inspection Report (p. 384)
  - G. Computer Aids (p. 384)
- IV. CHAPTER SUMMARY (p. 391)**
- V. CLASS DISCUSSION TOPICS (p. 391)**
- VI. CHAPTER 12 QUIZ (p. 392)**

## ***Chapter 13: Appraising Special Interests***

**395**

- I. PARTIAL INTERESTS IN REAL ESTATE (p. 397)**
  - A. Ways to Divide the Fee Simple (p. 397)
  - B. Partition Action (p. 404)
- II. APPRAISING PARTIAL INTERESTS (p. 405)**
  - A. Leasehold and Leased Fee Interests (p. 405)
  - B. Easements (p. 409)
  - C. Liens (p. 409)
  - D. Shared Ownership Interests (p. 410)
- III. OTHER FORMS OF OWNERSHIP (p. 410)**
  - A. Condominiums and PUDs (p. 410)
  - B. Cooperatives (p. 412)
  - C. Timeshares (p. 413)
  - D. Manufactured Homes (p. 413)
  - E. Prefabricated/Modular Homes (p. 415)
  - F. Ground Leases (p. 415)
- IV. CHAPTER SUMMARY (p. 417)**
- V. CLASS DISCUSSION TOPICS (p. 419)**
- VI. CHAPTER 13 QUIZ (p. 420)**

## ***Chapter 14: The Appraisal Profession***

**423**

- I. STANDARDS (p. 424)**
- II. PROFESSIONAL ASSOCIATIONS (p. 425)**
- III. STANDARDS OF PROFESSIONAL COMPETENCE AND CONDUCT (p. 427)**
  - A. The Appraisal Foundation (p. 427)
  - B. Certification and Licensing (p. 429)
- IV. THE UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE (p. 430)**
  - A. General Principles (p. 432)
  - B. Standards and Standards Rules (p. 441)

# ***Residential Real Estate Appraisal***

---

- C. Statements on Appraisal Standards (p. 441)
- D. Advisory Opinions (p. 442)
- E. Modifications of USPAP (p. 442)
- F. Introductory Provisions of the USPAP (p. 442)
- V. CHAPTER SUMMARY (p. 446)
- VI. CLASS DISCUSSION TOPICS (p. 447)
- VII. CHAPTER 14 QUIZ (p. 448)

## ***Chapter 15: Financial Institutions and Regulations***

**453**

- I. FINANCIAL INSTITUTIONS (p. 455)
  - A. Depository Institutions (p. 455)
  - B. Noninstitutional Lenders (p. 456)
- II. PRIMARY AND SECONDARY FINANCE MARKETS (p. 456)
- III. FIRREA (p. 456)
  - A. Resolution: Failed Savings Institutions (p. 457)
  - B. Reorganization of Federal Finance Regulators (p. 458)
  - C. Federal Finance Institutions Regulatory Agencies (FFIRA) (p. 458)
  - D. Real Estate Appraisal Reform Amendments: Title XI (p. 460)
  - E. Appraisals Covered by FIRREA (p. 463)
  - F. FFIRA Appraisal Standards (p. 464)
- IV. SECONDARY MARKET APPRAISAL REGULATIONS (p. 466)
  - A. Appraiser Qualifications (p. 467)
  - B. Unacceptable Appraisal Practices (p. 468)
- V. REPORTING REQUIREMENTS (p. 469)
  - A. Report Forms (p. 469)
  - B. Age of Appraisal Report (p. 469)
  - C. Required Attachments (p. 469)
  - D. Completion Certificates (p. 470)
  - E. Selection of Comparable Properties (p. 470)
- VI. OTHER APPRAISAL-RELATED INTERNET SITES (p. 472)
- VII. CHAPTER SUMMARY (p. 473)
- VIII. CLASS DISCUSSION TOPICS (p. 475)
- IX. CHAPTER 15 QUIZ (p. 476)

<b><i>Appendix 1</i></b>	<b>481</b>
<b><i>Appendix 2</i></b>	<b>487</b>
<b><i>Appendix 3</i></b>	<b>495</b>
<b><i>Appendix 4</i></b>	<b>503</b>
<b><i>Glossary</i></b>	<b>509</b>
<b><i>Index</i></b>	<b>515</b>
<b><i>Great Books From ETC</i></b>	<b>528</b>
<b><i>Residential Appraisal Self-Testing Exams</i></b>	<b>529</b>