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## **Business 856: Advanced Appraisal Theory and Practice. 1975-1988**

Graaskamp, James A.

[s.l.]: [s.n.], 1975-1988

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Business 856  
Appraisal Seminar - Semester I

First Semester 1975

Instructor - J.A. Graaskamp

I. Objectives

Purpose of this course is to introduce the student to advanced appraisal techniques and possible reforms of appraisal theory as currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal.

II. General Course Format

There will be weekly lectures and reading assignments. It is advised that you read the material in advance of class. There will be one 3-hour written exam on this material on Friday afternoon, December 5. In addition, there will be two property appraisals: each student will do a single family home appraisal utilizing Ratcliff linear regression approach; small student teams will appraise and complete full narrative appraisal of selected rental investment properties in Madison. Final grade will be based on total points scored on the single family appraisal (20%), the income property appraisal (30%), computer terminal sessions (10%), plus the final exam (40%).

III. Textbooks

Recommended for purchase:

Valuation for Real Estate Decisions, Richard U. Ratcliff, Democrat Press, Santa Cruz, California 1972 (\$7.00)

Real Estate Appraisal - Review and Outlook, Paul F. Wendt, University of Georgia Press, 1974, Athens, Georgia (\$11.00)

Available on reserve and for optional purchase:

Guide to Feasibility Analysis, James A. Graaskamp, Society of Real Estate Appraisers, 1972 (\$2.75)

Ellwood Tables, American Institute of Real Estate Appraisers, 1971 Chicago Volumes I & II, 3rd edition (\$19.00/set)

Mini-Math For Appraisers, Irvin E. Johnson, International Association of Assessing Officers, Chicago 1972

Instant Mortgage Equity Technique, Irvin E. Johnson, Society of Real Estate Appraisers, Chicago 1972

Books can be purchased from the Wisconsin Real Estate Club in Room 118 at the prices indicated. In addition, there is a mimeograph charge for the course of \$15 required by the School of Business collected by the student real estate club. No credit!

NOTE: ALL PAPERS AND EXERCISES TO BE HANDED IN SHOULD BE STAPLED AT UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT PLASTIC BINDERS OR OTHER SIMILAR COVERS.



Business 856  
Appraisal Seminar - Semester 1

Fall Semester, 1975

Prof. J.A. Graaskamp

| <u>Class Period</u>                               | <u>Readings</u>                                                                                                                                         | <u>Source</u> |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Sept. 5                                           | THE APPRAISAL PROCESS - SPECIAL CASE OF FEASIBILITY ANALYSIS                                                                                            |               |
|                                                   | A. "A Rational Approach to Feasibility Analysis,"<br>J. A. Graaskamp, Chap. 3; <u>Real Estate Investment Analysis</u> , James Cooper                    | Text<br>(850) |
|                                                   | B. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff,<br>Chap. 1-3                                                                             | Text          |
| Sept. 12<br>(Will meet<br>Wed. night<br>Sept. 10) | BASIC ROOTS AND ASSUMPTIONS OF THE APPRAISAL PROCESS                                                                                                    |               |
|                                                   | A. <u>Real Estate Appraisal - Review and Outlook</u> ,<br>Paul Wendt, Chaps. 1-4, 9                                                                     | Text          |
|                                                   | B. "Should the Traditional Appraisal Process be<br>Restructured?" H.C. Smith & R.L. Racster,<br><u>The Real Estate Appraiser</u> , Nov-Dec. 1970        | Mimeo         |
|                                                   | C. "What is Value?"; <u>The Valuation Consultant</u> by<br>Marshall and Stevens                                                                         | Mimeo         |
|                                                   | D. Single Family Home Inspection Field Trip                                                                                                             |               |
| Sept. 19                                          | THE RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS                                                                                                       |               |
|                                                   | A. <u>Valuation of Real Estate</u> , Chaps 6-7                                                                                                          | Text          |
|                                                   | B. "Is There a 'New School' of Appraisal Thought?";<br>Richard U. Ratcliff, <u>The Appraisal Journal</u> ,<br>Oct., 1972, pp. 522-528                   | Mimeo         |
| Sept. 26                                          | PROBABLE MARKET PRICE AND STATISTICAL TECHNIQUES                                                                                                        |               |
|                                                   | A. <u>Real Estate Appraisal - Review and Outlook</u> ,<br>Paul Wendt, Chap. 5                                                                           | Text          |
|                                                   | B. <u>The New Approach to Real Estate Appraising</u> ,<br>Gene Dillmore, Chaps. 14-16                                                                   | BLR           |
|                                                   | C. "Appraising Houses," Gene Dillmore, <u>Real Estate<br/>Appraiser</u> , July-Aug. 1974                                                                | Mimeo         |
|                                                   | D. "The Valuation of Multiple Family Dwellings By<br>Statistical Inference," by William M. Shenkel<br><u>The Real Estate Appraiser</u> , Jan-Feb., 1975 | Mimeo         |
|                                                   | E. "Multiple Regression Analysis and The Appraisal<br>Process," Jerome Dasso, <u>The Real Estate Appraiser</u> ,<br>Mar-Apr. 1973                       | Mimeo         |

Sept. 26 readings continued

## Business 856 Fall 1975

- Sept. 26  
continued
- F. "E.S.P. and the Appraiser," Robert M. Gustafson Mimeo
  - G. "A 'Final' Word on Multiple Regression and Appraisal," Jack Lessinger, The Appraisal Journal July 1972 Mimeo
- Oct. 3
- PROBABLE MARKET PRICE (CONTINUED)
- A. "Condominium Buyer Market Preference Study," by Market Facts, Inc. Mimeo
  - B. MKTCOMP Manual - Parts I & II Mimeo
  - C. Residential appraisal due in mailbox of Prof. Graaskamp at the School of Business by 4:30 P.M. Original
- Oct. 10
- INVESTMENT SIMULATION OF PROBABLE SALES PRICE
- A. Valuation for Real Estate Decisions, Richard U. Ratcliff, Chaps. 8-10 Text
  - B. Real Estate Appraisal - Review and Outlook, Paul Wendt, Chaps. 6 & 7 Text
  - C. "Babcock Revisited: A Return to Fundamentals" M. B. Hodges Mimeo
- Oct. 17
- APPLICATION OF INVESTMENT SIMULATION BY COMPUTER
- A. Ellwood ala EDUCARE
  - B. TAP Program, input and output forms Handout
  - C. "The Market & the Mini-Computer," M.B. Hodges, Jr. Real Estate Appraiser, July-Aug. 1975 Mimeo
- Oct. 20-22
- COMPUTER TERMINAL DEMONSTRATION LABS - LOWELL HALL LIBRARY  
(Class will be split into teams for testing MKTCOMP, Ellwood, multiple regression, and other programs on EDUCARE network in conjunction with 850 class. Attendance is required in problem sets handed in to indicate completion of exercise)
- Oct. 24
- THE REPLACEMENT COST METHOD
- A. Real Estate Appraisal - Review and Outlook, Paul Wendt, Chaps. 8, 10 Text
  - B. Valuation for Real Estate Decisions, R.U. Ratcliff Chaps. 5, 12, 13 Text
  - C. "Replacement Cost Example", Marshall & Stevens Demonstration Mimeo

Business 856 Fall 1975

Oct. 31

WRITING THE APPRAISAL REPORT

- A. Writing Appraisal Reports, William C. Himstreet BLR
- B. "How to Write a Poor Report," Charles B. Smith,  
The Appraisal Journal, Apr. 1973 Mimeo
- C. "The Appraisal Report: Is There a Better Way?"  
T. C. Hitchings, Jr., The Appraisal Journal,  
Apr. 1972 Mimeo

Nov. 7

APPRAISAL VALUE OF LAND

- A. Valuation for Real Estate Decisions, R.U. Ratcliff  
Chap. 11 Text
- B. "Development Analysis for the Valuation of Vacant  
Land," Paul Fullerton, The Appraisal Journal,  
Apr. 1965 Mimeo
- C. "A Basic Methodology for Estimating the Market  
Value of a Subdivision Land Development,"  
Dan Swango, The Real Estate Appraiser, Nov-Dec.'71 Mimeo
- D. "How Will They Affect the Value of Recreational  
Land?", Fred Case & Harold Davidson, The Real  
Estate Appraiser, Jan-Feb. 1975 Mimeo
- E. "Some Economic Implications of Land-Use Planning  
for Real Estate Owners and Investors, Donald R.  
Levi, The Appraisal Journal, July 1975 Mimeo
- F. "Water Rights in Relation to the Appraisal of  
Land," E.J. Skeen, The Appraisal Journal, July '75 Mimeo

Nov. 14

APPRAISAL FOR REAL ESTATE TAX ASSESSMENT

- A. "Valuation For Realty-Tax Purposes," Kahn, Case,  
Schimmel, Real Estate Appraisal & Investment Mimeo
- B. "A Word for the Property Tax," Dan Cordtz, Fortune  
May 1972, pp. 105-106, 110-112 Mimeo
- C. "Aspects of Property Taxation," John B. Rackham,  
The Real Estate Appraiser, Jan-Feb. 1973, pp 31-37 Mimeo
- D. Management Information Systems by Andrew J. Hinshaw Mimeo
- E. "FHA 236 Housing Projects: Some Thoughts on  
Valuation," William B. Jackson Mimeo
- F. "Inner City Valuation Study," Richard Bowler, et al  
Real Estate Appraiser, May-June 1975 pp. 19-38 Mimeo
- G. First draft income appraisal reports due at class time

## Business 856 Fall 1975

- Nov. 21 VALUATION FOR EMINENT DOMAIN
- A. "Eminent Domain: A Kaleidoscopic View," Sidney Z. Searles, Real Estate Law Journal Winter 1973 Mimeo
  - B. "General Guidelines For Preparation of State & Federal Highway Condemnation Appraisal Forms" Mimeo
  - C. "Data Documentation and Appraisal Reporting Standards," Standard Federal Real Estate Acquisition Procedures, U.S. Printing Office Mimeo
  - D. "Rural Appraisal Field Procedure," suggested by State of Wisconsin Highway Division of Acquisition Mimeo
  - E. "The Expert Witness from a Lawyer's Viewpoint," Fred H. Winner, Condemnation Appraisal Practice, pp. 445-452 Mimeo
  - F. "What is Expected of the Expert Witness," John D. Cochran, Condemnation Appraisal Practice, pp. 453-460 Mimeo
- Nov. 28 THANKSGIVING
- Dec. 5 EMINENT DOMAIN - PARTIAL TAKINGS
- A. Readings to be assigned
  - B. Income Property Appraisal due at high noon
- Dec. 12 THREE HOUR FINAL EXAM

Business 856  
Appraisal Seminar - Semester I

First Semester 1976

Instructor - J.A. Graaskamp

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Purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory as currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

II. General Course Format

There will be weekly lectures and reading assignments. It is advised that you read the material in advance of class. There will be one 3-hour written exam on this material on Monday afternoon, December 13. In addition, there will be two property appraisal reports: each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach. Report will be graded on appraisal and on composition and returned to be completely re-done as a final report. Final grade will be based on total points scored on the first draft appraisal (30%), the re-draft appraisal (15%), classroom exercises (15%), plus the final exam (40%).

III. Textbooks

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Real Estate Appraisal - Review and Outlook, Paul F. Wendt, University of Georgia Press, 1974, Athens, Georgia (\$11.00)

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Guide to Feasibility Analysis, James A. Graaskamp, Society of Real Estate Appraisers, 1972 (\$3.50)

Ellwood Tables, American Institute of Real Estate Appraisers, 1971 Chicago Volumes I & II, 3rd edition (\$20.00/set)

Mini-Math For Appraisers, Irvin E. Johnson, International Association of Assessing Officers, Chicago 1972

Ram's Real Estate Appraising Handbook, Edwin M. Rams, Prentice-Hall, Inc. Englewood Cliffs, N.J. 1975

Real Estate Terminology, compiled and edited by Burl N. Boyce, American Institute of Real Estate Appraisers & Society of Real Estate Appraisers, Ballinger Publishing Company, Cambridge, Mass. 1975

The Elements of Style, William Strunk, Jr. & E. B. White, MacMillan Publishing Co., Inc. New York 1972

A Manual for Writers of Term Papers, Theses, and Research Papers, Kate L. Turabian, 4th edition, University of Chicago Press

Books can be purchased from the Wisconsin Real Estate Club in Room 118 at the prices indicated. In addition, there is a mimeograph charge for the course of \_\_\_\_ required by the School of Business collected by the student real estate club. No credit! Make checks payable to UW Real Estate Club.

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Topic Schedule - Business 856  
REAL ESTATE VALUATION THEORY  
Fall 1976

Wed., Sept. 8 - THE APPRAISAL PROCESS - SPECIAL CASE OF FEASIBILITY ANALYSIS

Mon., " 13 - BASIC ELEMENTS OF THE APPRAISAL PROCESS & REPORT - ASSIGN PROBLEM

Wed., " 15 - THE RATCLIFF RE-STATEMENT OF THE APPRAISAL PROCESS

Mon., " 20 - OTHER RE-STATEMENTS OF THE APPRAISAL PROCESS

Wed., " 22 - REPORT WRITING LAB - FRAN LARSON

Mon., " 27 - PROBABLE MARKET PRICE & STATISTICAL TECHNIQUE

Wed., " 29 - FRAN LARSON CONT'D. (EXERCISE DUE)

Mon., Oct. 4 - PROBABLE MARKET PRICE & STATISTICAL TECHNIQUE CONT'D.

Wed., " 6 - FRAN LARSON CONT'D. (EXERCISE DUE)

Mon., " 11 - INVESTMENT SIMULATION OF PROBABLE SALES PRICE & EDUCARE VESPERS

Wed., " 13 - FRAN LARSON CONT'D. (EXERCISE DUE)

Mon., " 18 - REPORT DUE - FIRST DRAFT

Wed., " 20 - MULTIPLE REGRESSION

Mon., " 25 - MULTIPLE REGRESSION CONT'D.

Wed., " 27 - REPLACEMENT COST METHODS

Mon., Nov. 1 - RETURN & DISCUSS APPRAISAL REPORTS

Wed., " 3 - FRAN LARSON - CRITIQUE OF APPRAISAL REPORTS

Mon., " 8 - LAND VALUATION

Wed., " 10 - LAND VALUATION CONT'D.

Mon., " 15 - APPRAISAL FOR REAL ESTATE TAX ASSESSMENT

Wed., " 17 - APPRAISAL FOR EMINENT DOMAIN

Mon., " 22 - APPRAISAL FOR EMINENT DOMAIN CONT'D.

Wed., " 24 - APPRAISAL FOR EMINENT DOMAIN CONT'D.

Mon., " 29 - FINAL REPORT DUE

Wed., Dec. 1 - PROFILING THE MOST PROBABLE BUYER

Mon., " 6 - PROFILING THE PROBABLE APPRAISER

Wed., " 8 - RETURN & DISCUSS FINAL REPORTS (GRAASKAMP & LARSON)

Mon., " 13 - FINAL EXAM

Business 856  
Appraisal Seminar - Semester I

Fall Semester, 1976

Prof. J. A. Graaskamp  
Lecturer Fran Larson

| <u>Class Period</u> | <u>Readings</u>                                                                                                                                  | <u>Source</u> |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Sept. 8, W          | THE APPRAISAL PROCESS - SPECIAL CASE OF FEASIBILITY ANALYSIS                                                                                     |               |
|                     | A. "A Rational Approach to Feasibility Analysis,"<br>J. A. Graaskamp, Chap. 3; <u>Real Estate Investment Analysis</u> , James Cooper             | Mimeo         |
|                     | B. "Highest & Best Use - Fact or Fancy, Paul F. Wendt, <u>Appraisal Journal</u> , April 1972                                                     | Mimeo         |
|                     | C. "The Importance of the Highest & Best Use Analysis,"<br>Paul S. Tischler, <u>Real Estate Appraiser</u> , May-June 1972                        | Mimeo         |
|                     | D. "What is Value? II," <u>The Valuation Consultant</u> by<br>Marshall & Stevens                                                                 | Mimeo         |
| Sept. 13, M         | BASIC ELEMENTS OF THE APPRAISAL PROCESS & REPORT - ASSIGN PROBLEM                                                                                |               |
|                     | A. <u>Real Estate Appraisal - Review and Outlook</u> ,<br>Paul Wendt, Chaps. 1-4, 9                                                              | Text          |
|                     | B. Graaskamp Appraisal Outline                                                                                                                   |               |
|                     | C. "Data Documentation & Appraisal Reporting Standards"                                                                                          | Mimeo         |
|                     | D. Appraisal Project Inspection Field Trip                                                                                                       |               |
| Sept. 15, W         | THE RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS                                                                                                |               |
|                     | A. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff,<br>Chap. 1-3                                                                      |               |
|                     | B. "Is There a 'New School' of Appraisal Thought?"<br>R. U. Ratcliff, <u>The Appraisal Journal</u> , October 1972<br>pp. 522-528                 |               |
| Sept. 20 M          | OTHER RESTATEMENTS OF THE APPRAISAL PROCESS                                                                                                      |               |
|                     | A. "Should the Traditional Appraisal Process be<br>Restructured?" H.C. Smith & R.L. Racster,<br><u>The Real Estate Appraiser</u> , Nov-Dec. 1970 | Mimeo         |
|                     | B. "The Three Approaches," Frederick M. Babcock                                                                                                  |               |
| Sept. 22 W          | REPORT WRITING LAB                                                                                                                               |               |
|                     | A. <u>The Elements of Style</u> , Strunk & White                                                                                                 | Text          |
|                     | B. "How to Write a Poor Report," Charles B. Smith,<br><u>Appraisal Journal</u> , April 1973                                                      | Mimeo         |



- Sept. 27, M PROBABLE MARKET PRICE & STATISTICAL TECHNIQUE
- A. Valuation of Real Estate, Chap. 6 & 7 Text
  - B. Real Estate Appraisal - Review & Outlook  
Paul Wendt, Chap. 5 Text
  - C. "Some Quick & Easy Statistical Procedures for the  
Real Estate Analyst," Wayne W. Daniel, Appraisal  
Journal, April 1974 Mimeo
  - D. "Highest and Best Use Studies," Chap. 12, Rams  
Real Estate Appraising Handbook, Edwin M. Rams Mimeo
- Sept. 29, W REPORT WRITING LAB
- A. First Exercise Due
- Oct. 4, M PROBABLE MARKET PRICE & STATISTICAL TECHNIQUE CONT'D
- A. EDUCARE Market Comp
  - B. SREA Data Bank & Mkt-Val
- Oct. 6, W REPORT WRITING LAB
- A. Second Exercise Due
- Oct. 11, M INVESTMENT SIMULATION OF PROBABLE SALES PRICE & EDUCARE VESPER
- A. "Babcock Revisited - A Return to Fundamentals,"  
edited by M. P. Hodges Mimeos
  - B. Valuation for Real Estate Decisions, Richard U.  
Ratcliff, Chaps. 8-10 Text
  - C. Real Estate Appraisal - Review & Outlook,  
Paul Wendt, Chaps. 6 & 7 Text
  - D. "The Market and the Mini-Computer," M.B. Hodges, Jr.,  
Real Estate Appraiser, July-August, 1975 Mimeo
  - E. Monday Evening - 7:00-10:00 P.M. students will be  
required to attend EDUCARE Lab at First Floor Library  
at Lowell Hall Center, Langdon & Frances Streets
  - F. Symbols Used in Mortgage-Equity Valuations, Forms A-G Mimeo
- Oct. 13, W REPORT WRITING LAB
- A. Third Exercise Due
- Oct. 18, M FIRST DRAFT OF APPRAISAL PROBLEM DUE
- Must be in Prof. Graaskamp's office by 4:30 P.M.,  
Monday afternoon

|            |                                                                                                                                                           |       |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Oct. 20, W | MULTIPLE REGRESSION FOR APPRAISAL                                                                                                                         |       |
|            | A. <u>The New Approach to Real Estate Appraising</u> ,<br>Gene Dilmore, Chaps. 14-16                                                                      | Mimeo |
|            | B. "Appraising Houses," Gene Dilmore, <u>Real Estate Appraiser</u> , July-August 1974                                                                     | Mimeo |
|            | C. "Multiple Regression Analysis & the Appraisal Process," Jerome Dasso, <u>The Real Estate Appraiser</u> , March-April 1973                              | Mimeo |
| Oct. 25, M | MULTIPLE REGRESSION CONT'D                                                                                                                                |       |
|            | A. "E.S.P. and the Appraiser," Robert Gustafson                                                                                                           | Mimeo |
|            | B. "A Case Study in Regression Analysis," Robert L. Foreman                                                                                               | Mimeo |
|            | C. "A 'Final' Word in Multiple Regression and Appraisal," Jack Lessinger, <u>The Appraisal Journal</u> July 1972                                          |       |
| Oct. 27, W | REPLACEMENT COST METHODS                                                                                                                                  |       |
|            | A. <u>Real Estate Appraisal - Review and Outlook</u> ,<br>Paul Wendt, Chaps. 8, 10                                                                        | Text  |
|            | B. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff<br>Chaps. 5, 12, 13                                                                         | Text  |
|            | C. "Building Cost Estimating," Ala Boeckh, Rooney & Washa                                                                                                 | Mimeo |
|            | D. Kahn on the Entrepreneur, Sanders A. Kahn,<br><u>Appraisal Journal</u> , 1973                                                                          | Mimeo |
| Nov. 1, M  | RETURN AND DISCUSS REPORTS AS APPRAISAL                                                                                                                   |       |
| Nov. 3, W  | FRAN LARSON - DISCUSS WRITING STYLE OF REPORTS                                                                                                            | Text  |
| Nov. 8, M  | LAND VALUATION                                                                                                                                            |       |
|            | A. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff,<br>Chap. 11                                                                                | Text  |
|            | B. "Development Analysis for the Valuation of Vacant Land," Paul Fullerton, <u>The Appraisal Journal</u> , April 1965                                     | Mimeo |
|            | C. "A Basic Methodology for Estimating the Market Value of a Subdivision Land Development,"<br>Dan Swango, <u>The Real Estate Appraiser</u> , Nov-Dec '71 | Mimeo |
|            | D. "Developmental Method of Land Apprasal," James H. Boykin, <u>Appraisal Journal</u> , April 1976                                                        | Mimeo |

Nov. 10, W LAND VALUATION CONT'D

- A. "How Will They Affect the Value of Recreational Land?", Fred Case & Harold Davidson, The Real Estate Appraiser, January-February, 1975 Mimeo
- B. "Some Economic Implications of Land-Use Planning for Real Estate Owners and Investors, Donald R Levi, The Appraisal Journal, July 1975 Mimeo
- C. "Water Rights in Relation to the Appraisal of Land," E.J. Skeen, The Appraisal Journal, July, '75 Mimeo

Nov. 15, M APPRAISAL FOR REAL ESTATE TAX ASSESSMENT

- A. "Valuation For Realty-Tax Purposes," Kahn, Case, Schimmel, Real Estate Appraisal & Investment Mimeo
- B. "Aspects of Property Taxation," John B. Rackham, The Real Estate Appraiser, Jan-Feb 1973, pp.31-37 Mimeo
- C. "FHA 236 Housing Projects: Some Thoughts on Valuation," William B. Jackson
- D. "Inner City Valuation Study," Richard Bowler, et al Real Estate Appraiser, May-June 1975, pp. 19-38 Mimeo
- E. "The President's House," Benjamin Smith Mimeo

Nov. 17, W APPRAISAL FOR EMINENT DOMAIN

(TO BE CONTINUED)

Mon.  
Nov. 22

## APPRAISAL FOR TAX ASSESSMENT APPEAL

- A. "Property Tax Assessments: Contract Rent is Fair Market Rent, Or Is It?", Adolph Koepple & Horace Z. Kramer, Real Estate Law Journal Fall 1973 Mimeo
- B. Wild, Inc. versus City of Madison, Board of Review Mimeo
- C. "The Use of Multivariate Statistical Methods in Appraisal Analysis", James E. Reinmuth, Assessors Journal September, 1976 Mimeo

Wed.  
Nov. 24

## OPEN SESSION FOR QUESTIONS ON FINAL APPRAISAL REPORT

Mon.  
Nov. 29

## APPRAISAL FOR EMINENT DOMAIN

- A. Valuation for Real Estate Decisions, R.U. Ratcliff, Chap. 14 Text
- B. "Eminent Domain: A Kaleidoscopic View," Sidney Z. Searles, Real Estate Law Journal Winter 1973 Mimeo
- C. "General Guidelines for Preparation of State & Federal Highway Condemnation Appraisal Forms" Mimeo
- D. "Data Documentation and Appraisal Reporting Standards," Standard Federal Real Estate Acquisition Procedures, U.S. Printing Office Text
- E. "Rural Appraisal Field Procedure," suggested by State of Wisconsin Highway Division of Acquisition *Revised by [unclear]* Mimeo

Wed.  
Dec. 1

## FINAL REPORT DUE Eminent Domain, continued

- A. "The Expert Witness from a Lawyer's Viewpoint," Fred M. Winner, Condemnation Appraisal Practice, pp. 445-452 Mimeo
- B. "What is Expected of the Expert Witness," John D. Cochran, Condemnation Appraisal Practice, pp. 453-460 Mimeo

Mon.  
Dec. 6

## EMINENT DOMAIN CONTINUED

- A. Rules of Compensability and Valuation Evidence  
For Highway Land Acquisition, Highway Research  
Program Report, Dean T. Massey, University of  
Wisconsin, Madison, Wisconsin
  - Chap. 2: Qualifications of Witnesses Giving Opinion  
Evidence
  - Chap. 4: Admissibility of Evidence of Sales of Similar  
Properties
  - Chap. 5: Admissibility of Evidence of Sales of the  
Subject Property
  - Chap. 6: Admissibility of Evidence of Offers to Buy &  
Sell
  - Chap. 8: Admissibility of Evidence of Income
  - Chap. 11 Admissibility of Evidence of Reputation or  
Sentimental Value
  - Chap. 12 Admissibility of Evidence of Highest and Best  
Use for Property
  - Chap. 13 Admissibility of Photographs or Other Visual Aids
- B. "Appraisal Review Committee: Its Purpose & Function,"  
Lawrence Sando, The Appraisal Journal April, 1966

Wed.  
Dec. 8

## DISCUSSION OF APPRAISAL REPORTS

Mon.  
Dec. 13

## FINAL EXAM

Appraisal Seminar - Semester I

First Semester 1978

Instructor: J. A. Graaskamp

I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

II. General Course Format

There will be two lectures and reading assignments each week. It is advised that you read the material in advance of class. There will be two 1-2 hour written exams on this material. On each Friday there will be a 50 min. workshop on English composition and on report techniques. There will be two property appraisal reports: each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely re-done as a final report. Final grade will be based on total points scored on the first draft appraisal (40%), the re-draft appraisal (20%), and 40% on 2 exams.

III. Textbooks

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Valuation for Real Estate Decisions, Richard U. Ratcliff, Democrat Press, Santa Cruz, California, 1972 (\$7.00)

The Appraisal of 25 N. Pinckney: A Demonstration Case for Contemporary Appraisal Methods, James A. Graaskamp, 1977 (\$9.00)

Real Estate Terminology, compiled and edited by Burl N. Boyce, American Institute of Real Estate Appraisers & Society of Real Estate Appraisers, Ballinger Publishing Co., Cambridge, Mass., 1975 (\$10.00)

Packet of mimeos and assorted text materials (\$\_\_\_\_\_)

(Books can be purchased from the UW Real Estate Club in Room 118. No credit!)

Recommended for purchase:

Wisconsin Administrative Code, Building and HVAC

The Elements of Style, William Strunk, Jr. & E.B. White, MacMillan Publishing Co., Inc., New York, 1972

A Manual for Writers of Term Papers, Theses, and Research Papers, Kate L. Turabian, 4th Edition, University of Chicago Press

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# ADVANCED REAL ESTATE APPRAISAL - BUSINESS 856

## Topic Schedule - Fall 1978

|       |        |                                                    |
|-------|--------|----------------------------------------------------|
| Sept. | 6 - W  | APPRAISAL PROCESS - INTRO                          |
| "     | 8 - F  | LAB - COMMUNICATION ARTS                           |
| "     | 11 - M | THE RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS  |
| "     | 13 - W | BASIC ELEMENTS OF THE APPRAISAL PROCESS AND REPORT |
| "     | 16 - F | LAB - VISIT SUBJECT PROPERTY                       |
| "     | 18 - M | OTHER CRITICS OF THE APPRAISAL PROCESS             |
| "     | 20 - W | MOST PROBABLE USE MATRIX                           |
| "     | 22 - F | WRITING LAB - FRAN LARSON                          |
| "     | 25 - M | MOST PROBABLE USE CONT'D                           |
| "     | 27 - W | MOST PROBABLE BUYER                                |
| "     | 29 - F | WRITING LAB - FRAN LARSON (EXERCISE 1 DUE)         |
| Oct.  | 2 - M  | PROBABLE MARKET PRICE AND STATISTICAL TECHNIQUE    |
| "     | 4 - W  | " "                                                |
| "     | 6 - F  | SIMULATION OF PROBABLE BUYER CALCULUS              |
| "     | 9 - M  | FRAN LARSON CONT'D (EXERCISE 2 DUE)                |
| "     | 11 - W | STATISTICAL AND APPRAISAL TOOLS ON WITTS           |
| "     | 13 - F | FRAN LARSON CONT'D (EXERCISE 3 DUE)                |
| "     | 16 - M | NORMATIVE METHODS - INVESTMENT SIMULATION          |
| "     | 18 - W | NORMATIVE METHODS - COST APPROACH                  |
| "     | 20 - F | TESTING APPRAISAL PREDICTIONS                      |
| "     | 23 - M | MULTIPLE REGRESSION AND APPRAISAL                  |
| "     | 25 - W | " "                                                |
| "     | 27 - F | FIRST DRAFT OF APPRAISAL REPORT DUE                |
| "     | 30 - M | MARKETCOMP ALTERNATIVE - THEORY                    |
| Nov.  | 1 - W  | MARKETCOMP ALTERNATIVE - PRACTICE                  |
| "     | 3 - F  | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT           |
| "     | 6 - M  | " "                                                |
| "     | 10 - F | ATTEND EDUCARE - LOWELL HALL LIBRARY               |

|      |        |                                                          |
|------|--------|----------------------------------------------------------|
| Nov. | 13 - M | RETURN AND DISCUSS APPRAISAL REPORTS                     |
| Nov. | 15 - W | LAND VALUATION                                           |
| Nov. | 17 - F | LAND VALUATION CONT'D                                    |
| Nov. | 20 - M | FINAL EXAM ON APPRAISAL THEORY                           |
| Nov. | 22 - W | INTRODUCTION TO EMINENT DOMAIN                           |
| Nov. | 24 - F | THANKSGIVING RECESS                                      |
| Nov. | 27 - M | APPRAISAL FOR EMINENT DOMAIN                             |
| Nov. | 29 - W | APPRAISAL FOR EMINENT DOMAIN CONT'D                      |
| Dec. | 1 - F  | APPRAISAL IN THE COURT ROOM                              |
| "    | 4 - M  | APPRAISAL REPORT GRAPHICS                                |
| "    | 6 - W  | PROFESSIONAL STRUCTURE OF APPRAISAL AND THE NEW APPROACH |
| "    | 8 - F  | THE BUSINESS OF APPRAISAL - FEES AND EXPENSES            |
| "    | 11 - M | GOVERNMENT STANDARDS OF APPRAISAL                        |
| "    | 13 - W | HAND IN RE-DRAFT OF APPRAISAL REPORT                     |
| "    | 15 - F | ONE HOUR EXAM ON EMINENT DOMAIN AND APPRAISAL PRACTICE   |



# ADVANCED REAL ESTATE APPRAISAL - BUSINESS 856

Fall Semester 1978

Prof. James A. Graaskamp

| <u>Class Period</u> | <u>Readings</u>                                                                                                                                                                | <u>Source</u> |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Sept. 6, W          | THE APPRAISAL PROCESS - INTRODUCTION                                                                                                                                           |               |
|                     | A. "A Rational Approach to Feasibility Analysis," J. A. Graaskamp, <u>Appraisal Journal</u> , Oct. 1972                                                                        | Mimeo         |
|                     | B. "Recent Developments in Appraisal Theory, Wendt <u>Appraisal Journal</u> , October, 1969                                                                                    | Mimeo         |
|                     | C. Chapter 9, "The Appraisal Process", and Chapter 10, "Summary & Conclusion", <u>Real Estate Appraisal: Review and Outlook</u> , Paul Wendt, University of Georgia Press 1974 | Mimeo         |
| Sept. 8, F          | LAB - COMMUNICATION ARTS                                                                                                                                                       |               |
| Sept.               | A. "How to Write a Poor Report," Charles B. Smith, <u>Appraisal Journal</u> , April 1973                                                                                       | Mimeo         |
| Sept. 11, M         | THE RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS                                                                                                                              |               |
|                     | A. "Is there a 'New School' of Appraisal Thought?" R.U. Ratcliff, <u>The Appraisal Journal</u> , Oct. 1972, pp. 522-528                                                        | Mimeo         |
|                     | B. "Appraisal Is Market Analysis," Richard U. Ratcliff, <u>Appraisal Journal</u> , October 1975                                                                                | Mimeo         |
|                     | C. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff, Chapter 1-3                                                                                                     | Text          |
| Sept. 13, W         | BASIC ELEMENTS OF THE APPRAISAL PROCESS AND REPORT                                                                                                                             |               |
|                     | A. Section One and Two, <u>The Appraisal of 25 N. Pinckney</u>                                                                                                                 | Text          |
|                     | B. <u>Valuation for Real Estate Decisions</u> , R. U. Ratcliff, Chapter 4                                                                                                      | Text          |
| Sept. 15, F         | LAB - VISIT SUBJECT PROPERTY                                                                                                                                                   |               |
|                     | A. "The Written Appraisal Concept," <u>Real Estate Appraiser</u> , Jan.-Feb., 1977                                                                                             | Mimeo         |
| Sept. 18, M         | OTHER CRITICS OF THE APPRAISAL PROCESS                                                                                                                                         |               |
|                     | A. "Should the Traditional Appraisal Process be Re-Structured?" H.C. Smith & R.L. Racster, <u>The Real Estate Appraiser</u> , Nov.-Dec. 1970                                   | Mimeo         |
|                     | B. "The Three Approaches," Frederick M. Babcock                                                                                                                                | Mimeo         |

| <u>Class Period</u> | <u>Readings</u>                                                                                                                                                        | <u>Source</u> |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Sept. 20, W         | MOST PROBABLE USE MATRIX                                                                                                                                               |               |
|                     | A. "Highest & Best Use: A New Definition, A New Opportunity," John E. Bohling, <u>The Real Estate Appraiser</u> , Jan.-Feb. 1976, pp. 33-37                            | Mimeo         |
|                     | B. "Highest and Best Use - Fact or Fancy," Paul F. Wendt, <u>Appraisal Journal</u> , April 1972                                                                        | Mimeo         |
|                     | C. "The Importance of the Highest & Best Use Analysis," Paul S. Tischler, <u>Real Estate Appraiser</u> , May-June 1972                                                 | Mimeo         |
|                     | D. "Determining Optimum Developmental Intensity," Bruce Singer, <u>The Appraisal Journal</u> , July 1970, pp. 406-417                                                  | Mimeo         |
| Sept. 22, F         | WRITING LAB - FRAN LARSON                                                                                                                                              |               |
| Sept. 25, M         | A. <u>The Elements of Style</u> , Strunk and White                                                                                                                     | Text          |
|                     | MOST PROBABLE USE (CONTINUED)                                                                                                                                          |               |
|                     | A. <u>The Appraisal of 25 N. Pinckney</u> , pp. 14-62                                                                                                                  | Text          |
|                     | B. <u>Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code</u> Chapter 50, Administration and Inforcement, Chapter 52, 53, and 54 | Text          |
| Sept. 27, W         | MOST PROBABLE BUYER                                                                                                                                                    |               |
|                     | A. <u>The Appraisal of 25 N. Pinckney</u> , pp. 63-71                                                                                                                  | Text          |
|                     | B. <u>Valuation For Real Estate Decisions</u> , Ratcliff Chapters 6 & 7                                                                                                | Text          |
| Sept. 29, F         | WRITING LAB - FRAN LARSON (EXERCISE #1 DUE)                                                                                                                            |               |
| Oct. 2, M           | PROBABLE MARKET PRICE AND STATISTICAL TECHNIQUE                                                                                                                        |               |
|                     | A. "Theory and Methods of Social Measurement," Clyde H. Coombs                                                                                                         | Mimeo         |
|                     | B. "Do Not Demean the Mean," Robert C. Mason, <u>The Appraisal Journal</u> , Jan. 1977                                                                                 | Mimeo         |
|                     | C. "Some and Easy Statistical Procedures for the Real Estate Analyst," Wayne W. Daniel, <u>Appraisal Journal</u> , April 1974                                          | Mimeo         |
|                     | D. <u>The New Approach to Real Estate Appraising</u> , Gene Dilmore, Chapters XIV, XV                                                                                  | Mimeo         |

Business 856

Oct. 4, W

## PROBABLE MARKET PRICE(CONTINUED)

- A. Appraisal of 25 N. Pinckney, pp. 71-81,  
p. 106-123 Text

Oct. 6, F

## SIMULATION OF PROBABLE BUYER CALCULUS

- A. "Don't Underrate the Gross Income Multiplier,"  
Richard U. Ratcliff, Appraisal Journal,  
April 1971 Mimeo
- B. "Decision Making in the Farmland Market," A  
Speech by Franklin J. Reiss Mimeo

Oct. 9, M

## WRITING LAB - FRAN LARSON (EXERCISE # 2 DUE)

Oct. 11, W

## STATISTICAL AND APPRAISAL TOOLS ON WITTS

- A. Witt Statistical Manual Mimeo
- B. Report to Room 203

Oct. 13, F

## WRITING LAB - FRAN LARSON (EXERCISE #3 DUE)

Oct. 16, M

## NORMATIVE METHODS - INVESTMENT SIMULATION

- A. "Babcock Revisited - A Return to Fundamentals,"  
Edited by M.B. Hodges Mimeo
- B. Valuation for Real Estate Decisions, Richard U.  
Ratcliff, Chaps. 8-10 Text
- C. "The Market and the Mini-Computer," M.B. Hodges, Jr.,  
Real Estate Appraiser, July-Aug. 1975 Mimeo
- D. "Counseling Investor-Clients Through Mortgage-  
Equity Analysis," William N. Kinnard, Jr.,  
Appraisal Journal, July 1972 Mimeo
- E. "Financial Theory and the Valuation of Real  
Estate Under Conditions of Risk," Steven D. Kapplin,  
The Real Estate Appraiser, Sept.-Oct. 1976 Mimeo
- F. "Condominiums Revisited," Robert J. Callaway,  
Appraisal Journal, Oct. 1975 Mimeo

Oct. 18, W

## NORMATIVE METHODS - THE COST APPROACH

- A. Valuation for Real Estate Decisions,  
R.U. Ratcliff, Chaps. 5, 12, 13 Text
- B. "Building Design Trade-Offs: Initial Cost  
Vs. Operating Cost Vs. Rental Income," Clayform  
T. Grimm, The Appraisal Journal, April 1976 Mimeo
- C. "Kahn on the Entrepreneur," Sanders A. Kahn,  
The Appraisal Journal, 1973 Mimeo

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- Oct. 20, F      TESTING APPRAISAL PREDICTIONS
- Oct. 23, M      MULTIPLE REGRESSION AND APPRAISAL
- A. The New Approach to Real Estate Appraising,  
Gene Dilmore, Chaps. 14-16      Mimeo
  - B. "Appraising Houses," Gene Dilmore, Real Estate Appraiser, July-Aug. 1974      Mimeo
  - C. "E.S.P. and the Appraiser," Robert Gustafson      Mimeo
  - D. "Multiple Regression Analysis & the Appraisal Process," Jerome Dasso, The Real Estate Appraiser,  
March-April 1973      Mimeo
- Oct. 25, W      MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)
- A. "The Use of Multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, Assessors Journal, Sept. 1976      Mimeo
  - B. "A 'Final' Word in Multiple Regression and Appraisal," Jack Lessinger, The Appraisal Journal, July 1972      Mimeo
- Oct. 27, F      FIRST DRAFT APPRAISAL REPORT DUE
- Oct. 30, M      MARKET COMPALTERNATIVE - THEORY
- A. EDUCARE MKTCOMP Manual      Mimeo
- Nov. 1, W      MKTCOMP ALTERNATIVE - PRACTICE
- A. Sample Maple Bluff Output      Mimeo
  - B. Sample MULVAR Output      Mimeo
- Nov. 3, F      APPRAISAL FOR REAL ESTATE TAX ASSESSMENT
- A. Chapter 19, "Realty Taxes," Kahn & Case, Real Estate Appraisal and Investment      Mimeo
  - B. "Aspects of Property Taxation," John B. Rackham, Mimeo  
The Real Estate Appraiser, Jan.-Feb. 1973, pp. 31-37
  - C. "FHA 236 Housing Projects: Some Thoughts on Valuation," William B. Jackson      Mimeo
  - D. "Inner City Valuation Study," Richard Bowler, et. al, Real Estate Appraiser, May-June 1975, pp. 19-38      Mimeo
- Nov. 6, M      APPRAISAL FOR REAL ESTATE TAX ASSESSMENT
- A. Proposed State of Wisconsin Automated Residential System      Mimeo

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Nov. 6, M

Cont'd

B. Wild, Inc. Vs. City of Madison Board or  
Review

Mimeo

Nov. 8, W.  
Nov. 10, F.

NO CLASS - SIT IN ON EDUCARE SESSION IN LOWELL HALL LIBRARY

Nov. 13, M

WILL RETURN AND DISCUSS FIRST DRAFT OF APPRAISAL REPORTS

Nov. 15, W

LAND VALUATION

A. Valuation for Real Estate Decisions, R.U. Ratcliff,  
Chap. 11 Text

B. "A Basic Methodology for Estimating the Market  
Value of a Subdivision Land Development," Mimeo  
Dan Swango, The Real Estate Appraiser, Nov.-Dec. 1971

C. Developmental Method of Land Appraisal," James H.  
Boykin, Appraisal Journal, April 1976 Mimeo

D. "Some Economic Implications of Land-Use Planning for  
Real Estate Owners and Investors," Donald R.  
Levi, The Appraisal Journal, July 1975 Mimeo

E. "Water Rights in Relation to the Appraisal of  
Land," E.J. Skeen, The Appraisal Journal, July  
1975 Mimeo

F. "Sewage Treatment in Unsewered Areas," Richard  
Briller, Real Estate Appraiser, Mar.-Apr. 1976 Mimeo

Nov. 17, F

REVIEW FOR EXAM

Nov. 20, M

TWO HOUR FINAL EXAM ON APPRAISAL THEORY

Nov. 22, W

SINGLE FAMILY HOME APPRAISAL - FREDDIE MAC (SLIDE PRESENTATION)

Nov. 27, M

APPRAISAL FOR EMINENT DOMAIN

A. Chapter 32, Wisconsin Statutes Mimeo

B. Valuation for Real Estate Decisions, R.U. Ratcliff  
Chap. 14 Text

C. "Eminent Domain: A Kaleidoscopic View," Sidney  
Z. Searles, Real Estate Law Journal, Winter 1973 Mimeo

D. "General Guidelines for Preparation of State &  
Federal Highway Condemnation Appraisal Forms" Mimeo

E. "The Impact of Public Announcement on Value," Mimeo  
William D. Davis, Sr., Appraisal Journal, Oct. 1976

Nov. 29, W

APPRAISAL IN THE COURTROOM

- A. "The Expert Witness from a Lawyer's Viewpoint," Fred M. Winner, Condemnation Appraisal Practice, pp. 445-452 Mimeo
- B. "What is Expected of the Expert Witness?" John D. Cochran, Condemnation Appraisal Practice, pp.453-460 Mimeo
- C. Rules of Comepnsability and Valuation Evidence For Highway Land Acquisition, Highway Research Program Report, Dean T. Massey, University of Wisconsin, Madison, Wis.
  - Chap. 2: Qualifications of Witnesses Giving Opinion Evidence
  - Chap. 4: Admissibility of Evidence of Sales of Similar Properties
  - Chap. 5: Admissibility of Evidence of Sales of the Subject Property
  - Chap. 6: Admissibility of Evidence of Offers to Buy & Sell
  - Chap. 8: Admissibility of Evidence of Income
  - Chap. 11: Admissibility of Evidence of Reputation or Sentimental Value
  - Chap. 12: Admissibility of Evidence of Highest and Best Use of Property
  - Chap. 13: Admissibility of Photographs of Other Visual Aids
- D. "What Is Just Compensation for the Taking of Trade Fixtures?", Michael Rikon, Real Estate Law Journal, Summer 1976 Mimeo

Dec. 1, F

APPRAISAL REPORT GRAPHICS

- A. Real Estate Graphics, Society of Real Estate Appraisers Handout
- B.

Dec. 4, M

APPRAISAL IN THE COURTROOM (CONTINUED)

- A. TV tape of CEI seminar on appraisers in the courtroom

Dec. 6, W

PROFESSIONAL STRUCTURE OF AN APPRAISAL

- A. "Report and Recommendations: Ninth Annual Young Men's Advisory Council
  - "What is Market Value?" J. Carl Shultz, Jr.
  - "Review of the Appraisal Process, Michael D. Farrell
  - "Pursuing a Career Path in Appraising," John H. Davis, III
  - Real Estate Appraiser, Nov.-Dec., 1977 Mimeo

## Business 856

- Dec. 6, W con't B. "A Critical Analysis of The Codes of Ethics  
Of the SREA and the AIREA, Charles R. Bartlett,  
The Real Estate Appraiser, May-June, 1972 Mimeo
- C. The 1978 SREA Code of Ethics Handout
- Dec. 8, F THE BUSINESS OF APPRAISAL
- A. "Real Estate Service Firms Must Sell Themselves,"  
Park Weaver, Jr., Real Estate Review Mimeo
- B. "Managing An Appraisal Office," Harry Lewman,  
Published by American Institute of Real Estate  
Appraisers Mimeo
- C. "Fee Appraiser's Contract Form Developed,"  
The Real Estate Appraiser, March-April 1976 Mimeo
- Dec. 11, M GOVERNMENT STANDARDS OF APPRAISAL
- A. "Data Documentation and Appraisal Reporting  
Standards," Standard Federal Real Estate  
Acquisition Procedures, U.S. Printing Office Handout
- B. What the Real Estate Appraiser Should Know  
About Real Estate Securities, The American  
Appraisal Institute Mimeo
- Dec. 13, W HAND IN REDRAFT OF APPRAISAL REPORT (LATE REPORT WILL BE PENALIZED)
- Dec. 15, F ONE HOUR EXAM ON EMINENT DOMAIN AND APPRAISAL PRACTICE

Appraisal Seminar - Semester I

First Semester 1979

Instructor: J. A. Graaskamp

I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

II. General Course Format

There will be two lectures and reading assignments each week. It is advised that you read the material in advance of class. There will be two 1-2 hour written exams on this material. On each Friday there will be a 50 min. workshop on English composition and on report techniques. There will be two property appraisal reports: each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely re-done as a final report. Final grade will be based on total points scored on the first draft appraisal (40%), the re-draft appraisal (20%), and 40% on 2 exams.

III. Textbooks

Recommended for purchase:

Valuation for Real Estate Decisions, Richard U. Ratcliff, Democrat Press, Santa Cruz, California, 1972 (\$7.00)

Real Estate Appraisal: Review and Outlook, Paul F. Wendt, Univ. of Georgia Press, Athens, Georgia, 1974 (\$ )

The Appraisal of 25 N. Pinckney: A Demonstration Case for Contemporary Appraisal Methods, James A. Graaskamp, 1977 (\$9.00)

Real Estate Terminology, compiled and edited by Burl N. Boyce, American Institute of Real Estate Appraisers & Society of Real Estate Appraisers, Ballinger Publishing Co., Cambridge, Mass., 1975 (\$10.00)

Packet of mimeos and assorted text materials (\$ )

Wisconsin Administrative Code, Building and HVAC

(Books can be purchased from the UW Real Estate Club in Room 118. No credit!)

Recommended for purchase at book store:

The Elements of Style, William Strunk, Jr. & E.B. White, MacMillan Publishing Co., Inc., New York 1972.

A Manual for Writers of Term Papers, Theses, and Research Papers, Kate L. Turabian, 4th Edition, University of Chicago Press.

NOTE: ALL PAPERS AND EXERCISES TO BE HANDED IN SHOULD BE STAPLED AT UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT PLASTIC BINDERS OR OTHER SIMILAR COVERS.



# ADVANCED REAL ESTATE APPRAISAL - BUSINESS 856

## Topic Schedule - Fall 1979

|       |        |       |                                                    |
|-------|--------|-------|----------------------------------------------------|
| Sept. | 5 - W  |       | THE APPRAISAL PROCESS - INTRODUCTION               |
| "     | 7 - F  |       | VALUE CONCEPTS REFINED                             |
| "     | 10 - M |       | THE RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS  |
| "     | 12 - W |       | BASIC ELEMENTS OF THE APPRAISAL PROCESS AND REPORT |
| "     | 14 - F | (LAB) | LAB - ALUMNI SEMINAR - LOWELL HALL                 |
| "     | 17 - M |       | OTHER CRITICS OF THE APPRAISAL PROCESS             |
| "     | 19 - W |       | MOST PROBABLE USE MATRIX                           |
| "     | 21 - F | (LAB) | WRITING LAB - FRAN LARSON                          |
| "     | 24 - M |       | MOST PROBABLE USE (CONTINUED)                      |
| "     | 26 - W |       | MOST PROBABLE BUYER                                |
| "     | 28 - F | (LAB) | WRITING LAB - FRAN LARSON (EXERCISE #1 DUE)        |
| Oct.  | 1 - M  |       | NO CLASS                                           |
| "     | 3 - W  | (LAB) | WRITING LAB - FRAN LARSON (EXERCISE #2 DUE)        |
| "     | 5 - F  |       | PROBABLE MARKET PRICE AND STATISTICAL TECHNIQUE    |
| "     | 8 - M  |       | SIMULATION OF PROBABLE BUYER CALCULUS              |
| "     | 10 - W |       | STATISTICAL AND APPRAISAL TOOLS ON WITTS           |
| "     | 12 - F | (LAB) | WRITING LAB - FRAN LARSON (EXERCISE #3 DUE)        |
| "     | 15 - M |       | NORMATIVE METHODS - INVESTMENT SIMULATION          |
| "     | 17 - W |       | NORMATIVE METHODS (CONTINUED)                      |
| "     | 19 - F | (LAB) | DCF APPRAISAL DEBATES                              |
| "     | 22 - M |       | NORMATIVE METHODS - THE COST APPROACH              |
| "     | 24 - W |       | TESTING APPRAISAL PREDICTIONS                      |
| "     | 26 - F |       | MULTIPLE REGRESSION AND APPRAISAL                  |
| "     | 29 - M |       | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)      |
| "     | 31 - W |       | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)      |
| Nov.  | 2 - F  |       | NO CLASS                                           |

|      |              |                                                                    |
|------|--------------|--------------------------------------------------------------------|
| Nov. | 5 - M        | FIRST DRAFT APPRAISAL REPORT DUE                                   |
| Nov. | 7 - W        | MARKET COMP ALTERNATIVE THEORY                                     |
| Nov. | 9 - F        | POLITICS AND REAL ESTATE VALUES---SPECIAL REAL ESTATE CLUB PROGRAM |
| Nov. | 12 - M       | MKTCOMP ALTERNATIVE - PRACTICE                                     |
| Nov. | 14 - W       | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT                           |
| Nov. | 16 - F       | RETURN AND DISCUSS FIRST DRAFT                                     |
| Nov. | 19 - M       | TWO HOUR FINAL EXAM ON APPRAISAL THEORY                            |
| Nov. | 21 - W       | NO CLASS                                                           |
| Nov. | 23 - F       | THANKSGIVING RECESS                                                |
| Nov. | 26 - M       | LAND VALUATION                                                     |
| Nov. | 28 - W       | APPRAISAL FOR EMINENT DOMAIN                                       |
| Nov. | 30 - F (LAB) | LAB - APPRAISAL REPORT GRAPHICS                                    |
| Dec. | 3 - M        | APPRAISAL IN THE COURTROOM                                         |
| Dec. | 5 - W        | APPRAISAL IN THE COURTROOM (CONTINUED)                             |
| Dec. | 7 - F        | PROFESSIONAL STRUCTURE OF APPRAISAL                                |
| Dec. | 10 - M       | THE BUSINESS OF APPRAISAL                                          |
| Dec. | 12 - W       | GOVERNMENT STANDARDS OF APPRAISAL                                  |
| Dec. | 14 - F       | ONE HOUR EXAM ON EMINENT DOMAIN AND APPRAISAL PRACTICE             |
| Dec. | 17 - M       | HAND IN REDRAFT OF APPRAISAL REPORT                                |

| <u>Class Period</u> | <u>Readings</u>                                                                                                                                                                               | <u>Source</u>    |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Sept. 5, W          | THE APPRAISAL PROCESS - INTRODUCTION                                                                                                                                                          |                  |
|                     | A. "A Rational Approach to Feasibility Analysis,"<br>J.A. Graaskamp, <u>Appraisal Journal</u> , Oct. 1972.                                                                                    | Mimeo            |
|                     | ✓ B. Chapter 1, "What Is Value?", Chapter 2,<br>"The Development of Appraisal Theory"<br><u>Real Estate Appraisal: Review and Outlook</u> ,<br>Paul Wendt, University of Georgia Press, 1974. | Text             |
| Sept. 7, F          | VALUE CONCEPTS REFINED                                                                                                                                                                        |                  |
|                     | ✓ A. <u>Valuation for Real Estate Decisions</u> ,<br>R.U. Ratcliff, Chapter 1-3.                                                                                                              | Text             |
|                     | B. "A Statistically Oriented Definition of<br>Market Value," Peter F. Colwell, <u>Appraisal<br/>Journal</u> , Jan. 1979, pp. 53-58.                                                           | 6-24-81<br>Mimeo |
|                     | ✓ C. Chapter 9, "The Appraisal Process," and<br>Chapter 10, "Summary & Conclusion", <u>Real<br/>Estate Appraisal: Review and Outlook</u> , Paul<br>Wendt, University of Georgia Press, 1974.  | Text             |
| Sept. 10, M         | THE RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS                                                                                                                                             |                  |
|                     | ✓ A. "Is There a 'New School' of Appraisal Thought?"<br>R.U. Ratcliff, <u>The Appraisal Journal</u> ,<br>Oct. 1972, pp. 522-528.                                                              | AL<br>Mimeo      |
|                     | ✓ B. "Appraisal Is Market Analysis," Richard U.<br>Ratcliff, <u>Appraisal Journal</u> , October 1975.                                                                                         | SM<br>Mimeo      |
| Sept. 12, W         | BASIC ELEMENTS OF THE APPRAISAL PROCESS AND REPORT                                                                                                                                            |                  |
|                     | ✓ A. Section One and Two, <u>The Appraisal of 25 N.<br/>Pinckney</u> .                                                                                                                        | Text             |
|                     | ✓ B. <u>Valuation for Real Estate Decisions</u> , R.U.<br>Ratcliff, Chapter 4                                                                                                                 | Text             |
| Sept. 14, F         | LAB - ALUMNI SEMINAR - LOWELL HALL                                                                                                                                                            |                  |
|                     | A. "The Written Appraisal Concept," <u>Real Estate<br/>Appraiser</u> , Jan.-Feb., 1977.                                                                                                       | 10-11<br>Mimeo   |
|                     | B. "How to Write a Poor Report," Charles B. Smith,<br><u>Appraisal Journal</u> , April 1973.                                                                                                  | *<br>Mimeo       |
| Sept. 17, M         | OTHER CRITICS OF THE APPRAISAL PROCESS                                                                                                                                                        |                  |
|                     | A. "Should the Traditional Appraisal Process be<br>Re-Structured?" H.C. Smith & R.L. Racster, <u>The<br/>Real Estate Appraiser</u> , Nov.-Dec. 1970.                                          | Crosby<br>Mimeo  |

| <u>Class Period</u>    | <u>Readings</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <u>Source</u>                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Sept. 17, M<br>(Con'd) | B. "The Three Approaches," Frederick M. Babcock.<br>C. "Annotated Bibliography for Modernization in Valuation of Investment Classed Real Estate," McCloud B. Hodges, Jr., August 1979.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mimeo<br>Mimeo                           |
| Sept. 19, W            | MOST PROBABLE USE MATRIX<br>A. "Highest & Best Use: A New Definition, a New Opportunity," John E. Bohling, <u>The Real Estate Appraiser</u> , Jan.-Feb. 1976, pp. 33-37.<br>B. "Highest and Best Use - Fact or Fancy," Paul F. Wendt, <u>Appraisal Journal</u> , April 1972.<br>C. "The Importance of the Highest & Best Use Analysis," Paul S. Tischler, <u>Real Estate Appraiser</u> , May-June, 1972.<br>D. "An Analytical Process of Real Estate Projects," Samir Abboud, <u>The Appraisal Journal</u> , July 1979.<br>✓ E. Chapter 3, "Economic Base Analysis in Appraisal Theory," Chapter 4, "Analyzing the Internal Structure of Cities," <u>Real Estate Appraisal</u> , Paul Wendt, 1974. | Mimeo<br>Mimeo<br>Mimeo<br>Mimeo<br>Text |
| Sept. 21, F            | WRITING LAB - FRAN LARSON<br>A. <u>The Elements of Style</u> , Strunk and White                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Text                                     |
| Sept. 24, M            | MOST PROBABLE USE (CONTINUED)<br>✓ A. <u>The Appraisal of 25 N. Pinckney</u> , pp. 14-62<br>B. <u>Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code</u> , Chapter 50, Administration and Enforcement, Chapter 52, 53, and 54.                                                                                                                                                                                                                                                                                                                                                                                                                              | Text<br>Text                             |
| Sept. 26, W            | MOST PROBABLE BUYER<br>✓ A. <u>The Appraisal of 25 N. Pinckney</u> , pp. 63-71<br>✓ B. <u>Valuation for Real Estate Decisions</u> , Ratcliff, Chapters 6 & 7.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Text<br>Text                             |
| Sept. 28, F            | WRITING LAB - FRAN LARSON (EXERCISE #1 DUE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                          |
| Oct. 1, M              | NO CLASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          |
| Oct. 3, W              | WRITING LAB - FRAN LARSON (EXERCISE #2 DUE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                          |
| Oct. 5, F              | PROBABLE MARKET PRICE AND STATISTICAL TECHNIQUE<br>A. "Theory and Methods of Social Measurement," Clyde H. Coombs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mimeo                                    |

| <u>Class Period</u>  | <u>Readings</u>                                                                                                                                                                         | <u>Source</u> |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Oct. 5, F<br>(Con'd) | B. "Do Not Demean the Mean," Robert C. Mason,<br><u>The Appraisal Journal</u> , Jan. 1977.                                                                                              | Mimeo         |
|                      | C. "Some Quick and Easy Statistical Procedures<br>for the Real Estate Analyst," Wayne W. Daniel,<br><u>Appraisal Journal</u> , April 1974.                                              | Mimeo         |
|                      | D. <u>The New Approach to Real Estate Appraising</u> ,<br>Gene Dilmore, Chapters XIV, XV, 16<br>Sims, 22, 23                                                                            | Mimeo         |
|                      | E. <u>Appraisal of 25 N. Pinckney</u> , pp. 71-81,<br>p. 106-123.                                                                                                                       | Text          |
| Oct. 8, M            | SIMULATION OF PROBABLE BUYER CALCULUS                                                                                                                                                   |               |
|                      | A. "Don't Underrate the Gross Income Multiplier," Neil<br>Richard U. Ratcliff, <u>Appraisal Journal</u> ,<br>April 1971.                                                                | Mimeo         |
|                      | ✓ B. Chapter 5, "The Market Comparison Method,"<br><u>Real Estate Appraisal</u> , Paul Wendt, 1974.                                                                                     | Text          |
| Oct. 10, W           | STATISTICAL AND APPRAISAL TOOLS ON WITTS                                                                                                                                                |               |
|                      | A. Witt Statistical Manual                                                                                                                                                              | Mimeo         |
|                      | B. Report to Room 203                                                                                                                                                                   |               |
| Oct 12, F            | WRITING LAB - FRAN LARSON (EXERCISE #3 DUE)                                                                                                                                             |               |
| Oct. 15, M           | NORMATIVE METHODS - INVESTMENT SIMULATION                                                                                                                                               |               |
|                      | A. "Babcock Revisited - A Return to Fundamentals," <i>Crocker</i><br>Edited by M.B. Hodges.                                                                                             | Mimeo         |
|                      | ✓ B. <u>Valuation for Real Estate Decisions</u> , R.U.<br>Ratcliff, Chapters, 8-10.                                                                                                     | Text          |
|                      | C. "The Behavior of Appraisers in Valuing Income <i>Fred</i><br>Property: A Status Report," Kenneth M. Lusht,<br><u>The Real Estate Appraiser &amp; Analyst</u> , July-<br>August 1979. | Mimeo         |
|                      | ✓ D. "Counseling Investor-Clients Through Mortgage- <i>Dave</i><br>Equity Analysis," William N. Kinnard, Jr.,<br><u>Appraisal Journal</u> , July 1972.                                  | Mimeo         |
| Oct. 17, W           | NORMATIVE METHODS (CONTINUED)                                                                                                                                                           |               |
|                      | A. "Financial Theory and the Valuation of Real <i>John</i><br>Estate Under Conditions or Risk," Steven D.<br>Kapplin, <u>The Real Estate Appraiser</u> , Sept.-Oct.<br>1976.            | Mimeo         |
|                      | B. "Condominiums Revisited," Robert J. Callaway, <i>Grice</i><br><u>Appraisal Journal</u> , Oct. 1975.                                                                                  | Mimeo         |

| <u>Class Period</u>   | <u>Readings</u>                                                                                                                                   | <u>Source</u> |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Oct. 17, W<br>(Con'd) | C. Chapter 6, "The Capitalization-of-Income Method," Chapter 7, "Gross-Rent Multipliers," <u>Real Estate Appraisal</u> , Paul Wendt, 1974.        | Text          |
| Oct. 19, F            | LAB - DCF APPRAISAL DEBATES                                                                                                                       |               |
| Oct. 22, M            | NORMATIVE METHODS - THE COST APPROACH                                                                                                             |               |
|                       | A. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff, Chapters 5, 12, 13.                                                                | Text          |
|                       | B. "Building Design Trade-Offs: Initial Cost Vs. Operating Cost Vs. Rental Income," Clayform T. Grimm, <u>The Appraisal Journal</u> , April 1976. | Mimeo         |
|                       | C. "Kahn on the Entrepreneur," Sanders A. Kahn, <u>The Appraisal Journal</u> , 1973.                                                              | Mimeo         |
|                       | D. Chapter 8, "The Replacement-Cost Method," <u>Real Estate Appraisal</u> , Paul Wendt, 1974.                                                     | Text          |
| Oct. 24, W            | TESTING APPRAISAL PREDICTIONS                                                                                                                     |               |
| Oct. 26, F            | MULTIPLE REGRESSION AND APPRAISAL                                                                                                                 |               |
|                       | A. <u>The New Approach to Real Estate Appraising</u> , Gene Dilmore, Chaps. 14-16.                                                                | Mimeo         |
|                       | B. "Appraising Houses," Gene Dilmore, <u>Real Estate Appraiser</u> , July-Aug. 1974.                                                              | Mimeo         |
| Oct. 29, M            | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)                                                                                                     |               |
|                       | A. "E.S.P. and the Appraiser," Robert Gustafson                                                                                                   | Mimeo         |
|                       | B. "Multiple Regression Analysis & the Appraisal Process," Jerome Dasso, <u>The Real Estate Appraiser</u> , March-April 1973.                     | Mimeo         |
| Oct. 31, W            | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)                                                                                                     |               |
|                       | A. "The Use of Multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, <u>Assessors Journal</u> , Sept. 1976.                 | Mimeo         |
|                       | B. "A 'Final' Word in Multiple Regression and Appraisal," Jack Lessinger, <u>The Appraisal Journal</u> , July 1972.                               | Mimeo         |
| Nov. 2, F             | NO CLASS                                                                                                                                          |               |
| Nov. 5, M             | FIRST DRAFT APPRAISAL REPORT DUE                                                                                                                  |               |
| Nov. 7, W             | MARKET COMP ALTERNATIVE - THEORY                                                                                                                  |               |
|                       | A. EDUCARE MKTCOMP Manual                                                                                                                         | Mimeo         |
|                       | B. "Comparable Sales Selection--A Computer Approach," Arnold Tchira, <u>The Appraisal Journal</u> , Jan. 1979.                                    | Mimeo         |

| <u>Class Period</u> | <u>Readings</u>                                                                                                                                            | <u>Source</u> |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Nov. 9, F           | POLITICS AND REAL ESTATE VALUES--SPECIAL REAL ESTATE CLUB PROGRAM. ALL FRIDAY AFTERNOON. (Bob Worthington of Rauenhorst Corporation)                       |               |
| Nov. 12, M          | MKTCOMP ALTERNATIVE - PRACTICE                                                                                                                             |               |
|                     | A. Sample Maple Bluff Output                                                                                                                               | Mimeo         |
|                     | B. Sample Mulvar Output                                                                                                                                    | Mimeo         |
| Nov. 14, W          | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT                                                                                                                   |               |
|                     | A. Chapter 19, "Realty Taxes, Kahn & Case, <u>Real Estate Appraisal and Investment</u>                                                                     | Mimeo         |
|                     | B. "Aspects of Property Taxation," John B. Rackham, <u>The Real Estate Appraiser</u> , Jan.-Feb. 1973, pp. 31-37.                                          | Mimeo         |
|                     | C. "FHA 236 Housing Projects: Some Thoughts on Valuation," William B. Jackson.                                                                             | Mimeo         |
|                     | D. "Inner City Valuation Study," Richard Bowler, et. al., <u>Real Estate Appraiser</u> , May-June 1975, pp. 19-38.                                         | Mimeo         |
|                     | E. Proposed State of Wisconsin Automated Residential System                                                                                                | Mimeo         |
|                     | F. Wild, Inc. Vs. City of Madison Board of Review                                                                                                          | Mimeo         |
| Nov. 16, F          | RETURN AND DISCUSS FIRST DRAFT                                                                                                                             |               |
| Nov. 19, M          | TWO HOUR FINAL EXAM ON APPRAISAL THEORY                                                                                                                    |               |
| Nov. 21, W          | NO CLASS                                                                                                                                                   |               |
| Nov. 23, F          | THANKSGIVING RECESS                                                                                                                                        |               |
| Nov. 26, M          | LAND VALUATION                                                                                                                                             |               |
|                     | ✓ A. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff, Chapter 11.                                                                               | Text.         |
|                     | B. "A Basic Methodology for Estimating the Market Value of a Subdivision Land Development," Dan Swango, <u>The Real Estate Appraiser</u> , Nov.-Dec. 1971. | Mimeo         |
|                     | C. "Development Method of Land Appraisal," James H. Boykin, <u>Appraisal Journal</u> , April 1976.                                                         | Mimeo         |
|                     | D. "Some Economic Implications of Land-Use Planning for Real Estate Owners and Investors," Donald R. Levi, <u>The Appraisal Journal</u> , July 1975.       | Mimeo         |
|                     | E. "Water Rights in Relation to the Appraisal of Land," E.J. Skeen, <u>The Appraisal Journal</u> , July 1975.                                              | Mimeo         |

| <u>Class Period</u>   | <u>Readings</u>                                                                                                                                                               | <u>Source</u> |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Nov. 26, M<br>(Con'd) | F. "Sewage Treatment in Unsewered Areas," Richard Briller, <u>Real Estate Appraiser</u> , Mar.-Apr. 1976.                                                                     | *Mimeo        |
| Nov. 28, W            | APPRAISAL FOR EMINENT DOMAIN                                                                                                                                                  |               |
|                       | A. Chapter 32, Wisconsin Statutes                                                                                                                                             | Mimeo         |
|                       | B. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff, Chapter 14.                                                                                                    | Text          |
|                       | C. "Eminent Domain: A Kaleidoscopic View," Sidney Z. Searles, <u>Real Estate Law Journal</u> , Winter 1973.                                                                   | Mimeo         |
|                       | D. "General Guidelines for Preparation of State & Federal Highway Condemnation Appraisal Forms"                                                                               | Mimeo         |
|                       | E. "The Impact of Public Announcement on Value," William D. Davis, Sr., <u>Appraisal Journal</u> , Oct. 1976                                                                  | Mimeo         |
| Nov. 30, F            | LAB - APPRAISAL REPORT GRAPHICS                                                                                                                                               |               |
|                       | A. <u>Real Estate Graphics</u> , Society of Real Estate Appraisers                                                                                                            | Handout       |
| Dec. 3, M             | APPRAISAL IN THE COURTROOM                                                                                                                                                    |               |
|                       | A. "The Expert Witness from a Lawyer's Viewpoint," Fred M. Winner, <u>Condemnation Appraisal Practice</u> , pp. 445-452.                                                      | Mimeo         |
|                       | B. "What is Expected of the Expert Witness?" John D. Cochran, <u>Condemnation Appraisal Practice</u> , pp. 453-460.                                                           | Mimeo         |
|                       | C. Rules of Compensability and Valuation Evidence for Highway Land Acquisition, Highway Research Program Report, Dean T. Massey, University of Wisconsin, Madison, Wisconsin. |               |
|                       | Chap. 2: Qualifications of Witnesses Giving Opinion Evidence                                                                                                                  |               |
|                       | Chap. 4: Admissibility of Evidence of Sales of Similar Properties                                                                                                             |               |
|                       | Chap. 5: Admissibility of Evidence of Sales of the Subject Property                                                                                                           |               |
|                       | Chap. 6: Admissibility of Evidence of Offers to Buy & Sell                                                                                                                    |               |
|                       | Chap. 8: Admissibility of Evidence of Income                                                                                                                                  |               |
|                       | Chap. 11: Admissibility of Evidence of Reputation or Sentimental Value                                                                                                        |               |
|                       | Chap. 12: Admissibility of Evidence of Highest and Best Use of Property                                                                                                       |               |
|                       | Chap. 13: Admissibility of Photographs or Other Visual Aids                                                                                                                   |               |
|                       | D. "What Is Just Compensation for the Taking of Trade Fixtures?" Michael Rikon, <u>Real Estate Law Journal</u> , Summer 1976.                                                 | Mimeo         |



| <u>Class Period</u> | <u>Readings</u>                                                                                                                                                                                                                                                                               | <u>Source</u> |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Dec. 5, W           | APPRAISAL IN THE COURTROOM (CONTINUED)                                                                                                                                                                                                                                                        |               |
|                     | A. TV tape of CEI seminar of appraisers in the courtroom                                                                                                                                                                                                                                      |               |
| Dec. 7, F           | PROFESSIONAL STRUCTURE OF APPRAISAL                                                                                                                                                                                                                                                           |               |
|                     | A. "Report and Recommendations: Ninth Annual Young Advisory Council":<br><br>"What Is Market Value?" J. Carl Shultz, Jr.<br>"Review of the Appraisal Process, Michael D. Farrell<br>"Pursuing a Career Path in Appraising," John H. Davis, III, <u>Real Estate Appraiser</u> , Nov.-Dec. 1977 | Mimeo         |
|                     | B. "A Critical Analysis of the Codes of Ethics of the SREA and the AIREA, Charles R. Bartlett, <u>The Real Estate Appraiser</u> , May-June, 1972.                                                                                                                                             | Mimeo         |
|                     | C. The 1978 SREA Code of Ethics                                                                                                                                                                                                                                                               | Handout       |
| Dec. 10, M          | THE BUSINESS OF APPRAISAL                                                                                                                                                                                                                                                                     |               |
|                     | A. "Real Estate Service Firms Must Sell Themselves," Park Weaver, Jr., <u>Real Estate Review</u> .                                                                                                                                                                                            | Mimeo         |
|                     | B. "Managing An Appraisal Office," Harry Lewman, Published by American Institute of Real Estate Appraisers                                                                                                                                                                                    | Mimeo         |
|                     | C. "Fee Appraiser's Contract Form Developed," <u>The Real Estate Appraiser</u> , March-April 1976.                                                                                                                                                                                            | Mimeo         |
| Dec. 12, W          | GOVERNMENT STANDARDS OF APPRAISAL                                                                                                                                                                                                                                                             |               |
|                     | A. "The Demand for and Supply of Real Estate Analyst Reports," Herman Ketting, <u>Real Estate Appraiser &amp; Analyst</u> , Jan.-Feb. 1979.                                                                                                                                                   | Mimeo         |
|                     | B. "Data Documentation and Appraisal Reporting Standards," <u>Standard Federal Real Estate Acquisition Procedures</u> , U.S. Printing Office                                                                                                                                                  | Handout       |
| Dec. 14, F          | ONE HOUR EXAM ON EMINENT DOMAIN AND APPRAISAL PRACTICE                                                                                                                                                                                                                                        |               |
| Dec. 17, M          | HAND IN REDRAFT OF APPRAISAL REPORT (LATE REPORT WILL BE PENALIZED)                                                                                                                                                                                                                           |               |

## Business 856

### Appraisal Seminar - Semester I

First Semester 1980

Instructor: J. A. Graaskamp

#### I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

#### II. General Course Format

There will be two lectures and reading assignments each week. It is advised that you read the material in advance of class. There will be two 1-2 hour written exams on this material. On each Friday there will be a 50 min. workshop on English composition and on report techniques. There will be two property appraisal reports: each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely redone as a final report. Final grade will be based on total points scored on the first draft appraisal (30%), the re-draft appraisal (20%), and 50% on two exams.

#### III. Textbooks

Recommended for purchase:

Ratcliff Readings on Appraisal and Its Foundation Economics, R.U. Ratcliff,  
Landmark Research, Madison, Wisconsin 1979 (\$9.00)  
The Appraisal of 25 N. Pinckney: A Demonstration Case For Contemporary  
Appraisal Methods, James A. Graaskamp, 1977 (\$9.00)  
A Guide to Appraising For Federal Agencies, (\$4.00)  
Packet of mimeos and assorted text materials (\$10.00)  
Wisconsin Administrative Code, Building and HVAC (\$4.00)  
Techniques For Writing Business Reports, Frances Larson, Landmark Research,  
Madison, Wisconsin, 1979 (\$7.00)

(Books can be purchased from the UW Real Estate Club in Room 118. No credit!)

Recommended for purchase at book store:

The Elements of Style, William Strunk, Jr. & E.B. White, MacMillan Publishing  
Co., Inc., New York 1972.  
A Manual for Writers of Term Papers, Theses, and Research Papers, Kate L.  
Turabian, 4th Edition, University of Chicago Press.

NOTE: ALL PAPERS AND EXERCISES TO BE HANDED IN SHOULD BE STAPLED AT UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT PLASTIC BINDERS OR OTHER SIMILAR COVERS.

ADVANCED REAL ESTATE APPRAISAL - BUS 856  
Topic Schedule, Fall 1980

|            |                                                        |
|------------|--------------------------------------------------------|
| Sept. 3, W | THE APPRAISAL PROCESS - INTRODUCTION                   |
| 5, F       | NO CLASS                                               |
| 8, M       | EVOLUTION OF VALUE CONCEPTS                            |
| 10, W      | THE RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS      |
| 12, F      | BASIC ELEMENTS OF THE APPRAISAL PROCESS AND THE REPORT |
| 15, M      | OTHER CRITICS OF THE APPRAISAL PROCESS                 |
| 17, W      | INSPECTION OF PROPERTY TO BE APPRAISAL                 |
| 19, F      | (LAB) WRITING LAB #1 - FRAN LARSON                     |
| 22, M      | MOST PROBABLE USE MATRIX                               |
| 24, W      | MOST PROBABLE USE (CONTINUED)                          |
| 26, F      | MOST PROBABLE BUYER SCENARIO                           |
| 29, M      | WRITING LAB - FRAN LARSON (EXERCISE #1 DUE)            |
| Oct. 1, W  | WRITING LAB (EXERCISE #2 DUE)                          |
| 3, F       | MARKET PRICE COMPARISONS                               |
| 6, M       | STATISTICAL APPRAISAL TOOLS ON WITS                    |
| 8, W       | PRESENTATION OF MARKET COMPARABLES AND ADJUSTMENTS     |
| 10, F      | WRITING LAB - FRAN LARSON (EXERCISE #3 DUE)            |
| 13, M      | SIMULATION OF PROBABLE BUYER CALCULUS                  |
| 15, W      | NORMATIVE METHODS - INVESTMENT SIMULATION              |
| 17, F      | WRITING LAB - FRAN LARSON (EXERCISE #4 DUE)            |
| 20, M      | NORMATIVE METHODS - THE COST APPROACH                  |
| 22, W      | TESTING APPRAISAL PRICE CONCLUSIONS                    |
| 24, F      | NO CLASS                                               |
| 27, M      | APPRAISAL REPORT GRAPHICS                              |
| 29, W      | RESOLUTION OF APPRAISAL REPORT ISSUES                  |
| 31, F      | NO CLASS                                               |

|           |                                                                                  |
|-----------|----------------------------------------------------------------------------------|
| Nov. 3, M | FIRST DRAFT OF APPRAISAL REPORT DUE AT BEGINNING OF CLASS; LATE PAPERS PENALIZED |
| 5, W      | MULTIPLE REGRESSION AND APPRAISAL                                                |
| 7, F      | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)                                    |
| 10, M     | MARKET COMP - AN AUTOMATED ALTERNATIVE-THEORY                                    |
| 12, W     | MARKET COMP - AN AUTOMATED ALTERNATIVE-PRACTICE                                  |
| 14, F     | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT                                         |
| 17, M     | LAND VALUATION                                                                   |
| 19, W     | LAND VALUATION (CONTINUED)                                                       |
| 21, F     | RETURN APPRAISALS AND DISCUSS FIRST DRAFT                                        |
| 24, M     | TWO-HOUR FINAL EXAM ON APPRAISAL THEORY                                          |
| 26, W     | NO CLASS                                                                         |
| * * * *   | THANKSGIVING RECESS * * * *                                                      |
| Dec. 1, M | APPRAISAL FOR CONDEMNATION                                                       |
| 3, W      | APPRAISAL FOR CONDEMNATION (CONTINUED)                                           |
| 5, F      | APPRAISAL IN THE COURTROOM                                                       |
| 8, M      | GOVERNMENT STANDARDS FOR APPRAISAL PRODUCTS                                      |
| 10, W     | THE BUSINESS OF APPRAISAL PRACTICE                                               |
| 12, F     | ONE-HOUR EXAM ON EMINENT DOMAIN AND APPRAISAL PRACTICE                           |
| 15, M     | HAND IN FINAL DRAFT OF APPRAISAL REPORT                                          |

ADVANCED REAL ESTATE APPRAISAL - BUS 856  
Reading Assignments

Fall Semester 1980

Prof. James A. Graaskamp

| <u>Class Period</u> | <u>Readings</u>                                                                                                                                                                | <u>Source</u> |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Sept. 3, W          | THE APPRAISAL PROCESS - INTRODUCTION                                                                                                                                           |               |
|                     | A. "A Rational Approach to Feasibility Analysis," J.A. Graaskamp, <u>Appraisal Journal</u> , Oct. 1972.                                                                        | Mimeo         |
|                     | B. Chap. 1, "What is Value?" Chap. 2, "The Development of Appraisal Theory," <u>Real Estate Appraisal: Review and Outlook</u> , Paul Wendt, University of Georgia Press, 1974. | Bus. Res.     |
| Sept. 5, F          | NO CLASS                                                                                                                                                                       |               |
| Sept. 8, M          | EVOLUTION OF VALUE CONCEPTS                                                                                                                                                    |               |
|                     | A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chapters 1-3.                                                                                                          | R-Text        |
|                     | B. "Appraisal: Is It Measurement or Prediction?" <u>The Real Estate Appraiser</u> , Nov.-Dec. 1972.                                                                            | R-Text        |
|                     | C. "A Statistically Oriented Definition of Market Value," Peter F. Colwell, <u>Appraisal Journal</u> , Jan. 1979, pp. 53-58.                                                   | Mimeo         |
|                     | D. Chap. 9, "The Appraisal Process," and Chap. 10, "Summary and Conclusion," <u>Real Estate Appraisal: Review and Outlook</u> , Paul Wendt, University of Georgia Press, 1974. | Bus. Res.     |
|                     | E. "A Critique of the Prevailing Definition of Market Value," Albritton Harold, <u>Appraisal Journal</u> , April, 1980, pp. 199-205.                                           | Mimeo         |
| Sept. 10, W         | RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS                                                                                                                                  |               |
|                     | A. "Institutionalism and Urban Land Economics," <u>Recent Perspectives in Urban Land Economics</u> , Vancouver, British Columbia: University of British Columbia, 1976.        | R-Text        |
|                     | B. "Is There a 'New School' of Appraisal Thought?" <u>The Appraisal Journal</u> , Oct., 1972.                                                                                  | R-Text        |
|                     | C. "Appraisal Is Market Analysis," <u>The Appraisal Journal</u> , Oct., 1975.                                                                                                  | R-Text        |
|                     | D. <u>Valuation for Real Estate Decisions</u> , R.U. Ratcliff, Chap. 4.                                                                                                        | R-Text        |

- Sept. 12, F                    BASIC ELEMENTS OF THE APPRAISAL PROCESS & THE REPORT
- A. Section One and Two, The Appraisal of 25 N. Pinckney                    Text
  - B. "Guidelines for Understanding and Reviewing Real Estate Appraisal Reports," Edwin Rams, Appraisal Review Journal, pp. 60-67.                    Mimeo
  - C. "The Written Appraisal Concept," Real Estate Appraiser, Jan.-Feb. 1977.                    Mimeo
  - D. "How to Write a Poor Report," Charles B. Smith, Appraisal Journal, April 1973.                    Mimeo
- Sept. 15, M                    OTHER CRITICS OF THE APPRAISAL PROCESS
- A. "Should the Traditional Appraisal Process Be Re-Structured?" H.C. Smith and R.L. Racster, The Real Estate Appraiser, Nov.-Dec. 1970.                    Mimeo
  - B. "The Three Approaches," Frederick M. Babcock.                    Mimeo
  - C. "Annotated Bibliography for Modernization in Valuation of Investment Classed Real Estate," McCloud B. Hodges, Jr., August 1979.                    Mimeo
- Sept. 17, W                    FIELD INSPECTION OF PROPERTY TO BE APPRAISED
- Sept. 19, F                    WRITING LAB #1 - FRAN LARSON
- A. The Elements of Style, Strunk & White                    Text
- Sept. 22, M                    MOST PROBABLE USE MATRIX
- A. "Highest and Best Use: A New Definition, A New Opportunity," John E. Bohling, The Real Estate Appraiser, Jan.-Feb. 1976, pp. 33-37.                    Mimeo
  - B. "Highest and Best Use - Fact or Fancy," Paul F. Wendt, Appraisal Journal, April 1972.                    Mimeo
  - C. "The Importance of the Highest and Best Use Analysis," Paul S. Tischler, Real Estate Appraiser, May-June, 1972.                    Mimeo
  - D. "Highest and Best Use in the Appraisal Profession," Halbert C. Smith & Mark A. Maurais, The Real Estate Appraiser and Analyst, Mar.-Apr. 1980.                    Mimeo
- Sept. 24, W                    MOST PROBABLE USE (CONTINUED)
- A. The Appraisal of 25 N. Pinckney, pp. 14-62.                    Text

- B. Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code, Chapter 50, Administration and Enforcement, Chapter 52, 53, and 54. Text
- C. "Highest and Best Use: A Critical Reexamination," James R. Webb, The Appraisal Journal, January, 1980, pp. 57-63. Mimeo
- Sept. 26, F MOST PROBABLE BUYER SCENARIO
- A. The Appraisal of 25 N. Pinckney, pp. 63-71. Text
- B. Valuation for Real Estate Decisions, R. U. Ratcliff, Chapters 6 and 7. R-Text
- Sept. 29, M WRITING LAB - FRAN LARSON - (EXERCISE #1 DUE)
- Oct. 1, W WRITING LAB - FRAN LARSON - (EXERCISE #2 DUE)
- Oct. 3, F MARKET PRICE COMPARISON
- A. Appraisal of 25 N. Pinckney, pp. 71-81, 106-123. Text
- B. "Do Not Demean the Mean," Robert C. Mason, The Appraisal Journal, Jan. 1977. Mimeo
- C. "Seller Financing and Cash Equivalence," Jack Friedman and Bruce Lindeman, The Real Estate Appraiser and Analyst, May-June, 1979, pp. 46-50. Mimeo
- D. "Theory and Methods of Social Measurement," Clyde H. Coombs. Mimeo
- E. "The Worth Method of Valuation The Weed Tree Test," Jeffrey Jahns, Real Estate Review, pp. 85-87. Mimeo
- Oct. 6, M STATISTICAL APPRAISAL TOOLS
- A. "Some Quick and Easy Statistical Procedures for the Real Estate Analyst," Wayne W. Daniel, Appraisal Journal, April 1974. Mimeo
- B. The New Approach to Real Estate Appraising, Gene Dilmore, Chaps. XIV, XV. Mimeo
- C. "The Application of Correlation Matrix Analysis to Real Estate Appraisal," Walter Chudleigh III, The Appraisal Journal, Oct., 1979, pp. 523-531. Mimeo

- Oct. 8, W                      PRESENTATION OF MARKET COMPARABLES AND  
ADJUSTMENTS
- A.
- Oct. 10, F                      WRITING LAB - FRAN LARSON (EXERCISE #3 IS DUE)
- Oct. 13, M                      SIMULATION OF PROBABLE BUYER CALCULUS
- A. Don't Underrate the Gross Income Multiplier,"  
R. U. Ratcliff, Appraisal Journal, Apr., 1971.                      R-Text
- B. "The Behavior of Appraisers in Valuing Income  
Property: A Status Report," Kenneth M.  
Lusht, The Real Estate Appraiser and Analyst,  
July-Aug., 1979.                      Mimeo
- Oct. 15, W                      INVESTMENT SIMULATION
- A. "Babcock Revisited - A Return to Funda-  
mentals," Edited by M. B. Hodges.                      Mimeo
- B. Valuation for Real Estate Decisions, R. U.  
Ratcliff, Chaps. 8-10.                      R-Text
- C.
- D. Chap. 6, "The Capitalization-of-Income  
Method," Chap. 7, "Gross-Rent Multipliers,"  
Real Estate Appraisal, Paul Wendt, 1974.                      Bus. Res.
- Oct. 17, F                      WRITING LAB - FRAN LARSON - (EXERCISE #3 DUE)
- Oct. 20, M                      NORMATIVE METHODS - THE COST APPROACH
- A. Valuation for Real Estate Decisions, R. U.  
Ratcliff, Chaps. 5, 12, 13.                      Text
- B. "Building Design Trade-Offs: Initial Cost  
Vs. Operating Cost Vs. Rental Income,"  
Clayform T. Grimm, The Appraisal Journal,  
April, 1976.                      Mimeo
- C. "Kahn on the Entrepreneur," Sanders A. Kahn,  
The Appraisal Journal, 1973.                      Mimeo
- D. Marshall & Swift Computerized Cost Estimating  
System, Case Example                      Handout



|            |                                                                                                                                   |         |
|------------|-----------------------------------------------------------------------------------------------------------------------------------|---------|
| Oct. 22, W | TESTING APPRAISAL PRICE CONCLUSIONS                                                                                               |         |
|            | A. BFCF                                                                                                                           | Mimeo   |
|            | B. Front Door Approach - MR CAP                                                                                                   |         |
| Oct. 24, F | NO CLASS                                                                                                                          |         |
| Oct. 27, M | APPRAISAL GRAPHICS (guest speaker)                                                                                                |         |
|            | A. Real Estate Graphic Aids (SREA)                                                                                                | Handout |
|            | B.                                                                                                                                |         |
| Oct. 29, W | RESOLUTION OF APPRAISAL REPORT ISSUES                                                                                             |         |
| Oct. 31, F | NO CLASS                                                                                                                          |         |
| Nov. 3, M  | FIRST DRAFT OF APPRAISAL REPORT DUE AT BEGINNING OF CLASS; LATE PAPERS PENALIZED                                                  |         |
| Nov. 5, W  | MULTIPLE REGRESSION AND APPRAISAL                                                                                                 |         |
|            | A. <u>The New Approach to Real Estate Appraising, Gene Dilmore, Chaps. 14-16.</u>                                                 | Mimeo   |
|            | B. "E.S.P. and the Appraiser," Robert Gustafson.                                                                                  | Mimeo   |
|            | C. "Appraising Houses," Gene Dilmore, <u>Real Estate Appraiser</u> , July-Aug. 1974.                                              | Mimeo   |
|            | D. "Multiple Regression Analysis & the Appraisal Process," Jerome Dasso, <u>The Real Estate Appraiser</u> , March-April 1973.     | Mimeo   |
| Nov. 7, F  | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)                                                                                     |         |
|            | A. "The Use of Multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, <u>Assessors Journal</u> , Sept. 1976. | Mimeo   |
| Nov. 10, M | MKTCOMP - AN AUTOMATED ALTERNATIVE - THEORY                                                                                       |         |
|            | A. "Comparable Sales Selection--A Computer Approach," Arnold Tchira, <u>The Appraisal Journal</u> , Jan. 1979                     | Mimeo   |
|            | B. MKTCOMP kit for WITS case problem                                                                                              |         |
| Nov. 12, W | MKTCOMP - AN AUTOMATED ALTERNATIVE - PRACTICE                                                                                     |         |
|            | A. Sample Duluth assessment output                                                                                                | Mimeo   |

- B. Sample Maple Bluff output Mimeo
- C. Sample Mulvar output Mimeo
- Nov. 14, F APPRAISALS FOR REAL ESTATE TAX ASSESSMENT
- A. Chap. 19, "Realty Taxes," Kahn & Case,  
Real Estate Appraisal and Investment. Mimeo
- B. Wild, Inc., Vs. City of Madison Board of Review Mimeo
- C. "FHA 236 Housing Projects: Some Thoughts on  
Valuation," William B. Jackson. Mimeo
- D. Proposed State of Wisconsin Automated  
Residential System Mimeo
- Nov. 17, M LAND VALUATION
- A. Valuation for Real Estate Decisions, R. U.  
Ratcliff, Chap. 11. R-Text
- B. "A Basic Methodology for Estimating the  
Market Value of a Subdivision Land Develop-  
ment," Dan Swango, The Real Estate Appraiser,  
Nov.-Dec., 1971. Mimeo
- C. "Development Method of Land Appraisal,"  
James H. Boykin, Appraisal Journal, Apr., 1976 Mimeo
- D. "Condominium/Developed Lot Discounting  
Concepts...Again," Richard Hewitt, III, The  
Real Estate Appraiser and Analyst, Jan.-Feb.,  
1980, pp. 7-12. Mimeo
- Nov. 19, W LAND VALUATION (CONTINUED)
- A. "Lease and Fee-Hold Price Differentials in  
Hawaii," Richard A. Palfin, The Appraisal  
Journal, April, 1979, pp. 227-242. Mimeo
- B. "Some Economic Implications of Land Use  
Planning for Real Estate Owners and Investors,"  
Donald R. Levi, The Appraisal Journal,  
July, 1975. Mimeo
- C. "Water Rights in Relation to the Appraisal of  
Land," E. J. Skeen, The Appraisal Journal,  
July, 1975. Mimeo
- Nov. 21, F RETURN FIRST DRAFT APPRAISALS AND DISCUSS
- Nov. 24, M TWO-HOUR FINAL EXAM ON APPRAISAL THEORY

\* \* \* \* \* THANKSGIVING RECESS \* \* \* \* \*

Dec. 1, M

APPRAISAL FOR CONDEMNATION

- A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chap. 14. R-Text
- B. "Eminent Domain: A Kaleidoscopic View," Sidney Z. Searles, Real Estate Law Journal, Winter, 1973. Mimeo
- C. Chapter 32, Wisconsin Statutes. Mimeo

Dec. 3, W

APPRAISAL FOR CONDEMNATION (CONTINUED)

- A. Rules of Compensability and Valuation Evidence for Highway Land Acquisition, Highway Research Program Report, Dean T. Massey, University of Wisconsin, Madison, Wisconsin.
  - Chap. 2: Qualifications of Witnesses Giving Opinion Evidence
  - Chap. 4: Admissibility of Evidence of Sales of Similar Properties
  - Chap. 5: Admissibility of Evidence of Sales of the Subject Property
  - Chap. 6: Admissibility of Evidence of Offers to Buy and Sell
  - Chap. 8: Admissibility of Evidence of Income
  - Chap. 11: Admissibility of Evidence of Reputation or Sentimental Value
  - Chap. 12: Admissibility of Evidence of Highest and Best Use of Property
  - Chap. 13: Admissibility of Photographs or Other Visual Aids Mimeo
- B.

Dec. 5, F

APPRAISAL IN THE COURTROOM

- A. "The Expert Witness from a Lawyer's Viewpoint," Fred M. Winner, Condemnation Appraisal Practice, pp. 445-452. Mimeo
- B. "What is Expected of the Expert Witness?" John D. Cochran, Condemnation Appraisal Practice, pp. 453-460. Mimeo
- C. Video tape - The Art of the Cross Examination

Dec. 8, M

GOVERNMENT STANDARDS FOR APPRAISAL PRODUCTS

- A. "The Demand for and Supply of Real Estate Analyst Reports," Herman Ketting, Real Estate Appraiser & Analyst, Jan.-Feb., 1979. Mimeo

- B. A Guide to Appraising For Federal Agencies Text
- Dec. 10, W THE BUSINESS OF APPRAISAL PRACTICE
- A. "Real Estate Service Firms Must Sell Themselves," Park Weaver, Jr., Real Estate Review Mimeo
- B. "Managing An Appraisal Office," Harry Lewman, Published by American Institute of Real Estate Appraisers Mimeo
- C. "Fee Appraiser's Contract Form Developed," The Real Estate Appraiser, March-April 1976. Mimeo
- D. The 1978 SREA Code of Ethics Handout
- E. "Sue the ?\*&?!," Hulbert F. Rice, The Real Estate Appraiser and Analyst, Mar.-Apr, 1979, pp 4-7 Mimeo
- Dec. 12, F ONE HOUR FINAL EXAM ON EMINENT DOMAIN & APPRAISAL PRACTICE
- 15, M HAND IN FINAL COPY OF APPRAISAL REPORT (Late reports will be penalized)

## Business 856

### Appraisal Seminar - Semester I

First Semester 1982

Instructors: J. A. Graaskamp  
J. Mittnacht

#### I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

#### II. General Course Format

There will be two lectures and reading assignments each week. It is advised that you read the material in advance of class. There will be two 1-2 hour written exams on this material. On each Friday there will be a 50 min. workshop on English composition and on report techniques. There will be two property appraisal reports: Each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely redone as a final report. Final grade will be based on total points scored on the first draft appraisal (30%), the redraft appraisal (20%), and 50% on two exams.

#### III. Textbooks

Recommended for purchase:

Ratcliff Readings on Appraisal and Its Foundation Economics, R. U. Ratcliff,  
Landmark Research, Madison, Wisconsin 1979 (\$9.00)  
The Appraisal of 25 N. Pinckney: A Demonstration Case For Contemporary  
Appraisal Methods, James A. Graaskamp, 1977 (\$9.00)  
A Guide to Appraising for Federal Agencies, (\$4.00)  
Packet of mimeos and assorted text materials (\$10.00)  
Wisconsin Administrative Code, Building and HVAC (\$4.00)  
Techniques For Writing Business Reports, Frances Larson, Landmark Research,  
Madison, Wisconsin 1979 (\$8.00)

(Books can be purchased from the UW Real Estate Club in Room 118. (No credit!))

Recommended for purchase at book store:

The Elements of Style, William Strunk, Jr. & E. B. White, McMillan  
Publishing Co., Inc., New York 1972.  
A Manual For Writers of Term Papers, Theses, and Research Papers,  
Kate L. Turabian, 4th Edition, University of Chicago Press.

NOTE: ALL PAPERS AND EXERCISES TO HANDED IN SHOULD BE STAPLED AT  
UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT  
PLASTIC BINDERS OR OTHER SIMILAR COVERS.

ADVANCED REAL ESTATE APPRAISAL - BUS 856  
Topic Schedule, Fall 1982

|            |                                                                                      |
|------------|--------------------------------------------------------------------------------------|
| Aug. 30, M | THE APPRAISAL PROCESS - INTRODUCTION                                                 |
| Sept. 1, W | EVOLUTION OF VALUE CONCEPTS                                                          |
| 6, M       | * * LABOR DAY * *                                                                    |
| 8, W       | RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS                                        |
| 10, F      | FIELD INSPECTION OF PROPERTY TO BE APPRAISED                                         |
| 13, M      | OTHER CRITICS OF THE APPRAISAL PROCESS                                               |
| 15, W      | (LAB) BASIC ELEMENTS OF THE APPRAISAL PROCESS & THE REPORT                           |
| 17, F      | WRITING LAB #1 - JENNIFER MITTNACHT                                                  |
| 20, M      | MOST PROBABLE USE MATRIX                                                             |
| 22, W      | MOST PROBABLE USE (CONTINUED)                                                        |
| 24, F      | WRITING LAB - JENNIFER MITTNACHT (EXERCISE #1, DUE)                                  |
| 27, M      | MOST PROBABLE BUYER PROFILE                                                          |
| 29, W      | MARKET PRICE COMPARISON                                                              |
| Oct. 1, F  | WRITING LAB - JENNIFER MITTNACHT (EXERCISE #2 IS DUE)                                |
| 4, M       | PRESENTATION OF MARKET COMPARABLES AND ADJUSTMENTS                                   |
| 6, W       | STATISTICAL APPRAISAL TOOLS (PACK RIVER TECHNIQUES - ROBBINS)                        |
| 8, F       | WRITING LAB - JENNIFER MITTNACHT (EXERCISE #3 IS DUE)                                |
| 11, M      | SIMULATION OF PROBABLE BUYER CALCULUS                                                |
| 13, W      | INVESTMENT SIMULATION                                                                |
| 15, F      | IMPACT OF PUBLIC INVESTMENT                                                          |
| 18, M      | NORMATIVE METHODS - THE COST APPROACH                                                |
| 20, W      | TESTING APPRAISAL PRICE CONCLUSIONS                                                  |
| 22, F      | APPRAISAL GRAPHICS (GUEST SPEAKER)                                                   |
| 25, M      | FIRST DRAFT OF APPRAISAL REPORT DUE AT BEGINNING OF CLASS -<br>LATE PAPERS PENALIZED |
| 27, W      | REVIEW FOR EXAM                                                                      |
| Nov. 1, M  | * * MID-SEMESTER EXAM * *                                                            |
| 3, W       | MULTIPLE REGRESSION AND APPRAISAL                                                    |
| 5, F       | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)                                        |

BUS 856 - Fall 1982

Topic Schedule

|      |       |                                                      |
|------|-------|------------------------------------------------------|
| Nov. | 8, M  | RETURN OF FIRST DRAFT OF APPRAISALS                  |
|      | 10, W | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT             |
|      | 12, F | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT (CONTINUED) |
|      | 15, M | MKTCOMP - AN AUTOMATED ALTERNATIVE                   |
|      | 17, W | DEMONSTRATION OF MKTCOMP PROGRAM                     |
|      | 19, F | VIDEO FILM - ART OF THE CROSS-EXAMINATION            |
|      | 22, M | LAND VALUATION                                       |
|      | 24, W | LAND VALUATION (CONTINUED)                           |
|      | 26, F | * * THANKSGIVING RECESS * *                          |
|      | 29, M | APPRAISAL FOR CONDEMNATION                           |
| DEC. | 1, W  | APPRAISAL FOR CONDEMNATION (CONTINUED)               |
|      | 6, M  | GOVERNMENT STANDARDS FOR APPRAISAL PRODUCTS          |
|      | 8, W  | THE BUSINESS OF APPRAISAL PRACTICE                   |
|      | 10, F | * * <u>FINAL EXAM</u> * *                            |

# ADVANCED REAL ESTATE APPRAISAL - BUS 856

Prof. James A. Graaskamp

Fall Semester 1982

| <u>Class Period</u> | <u>Readings</u>                                                                                                                                                                | <u>Source</u> |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Aug. 30, Mon.       | THE APPRAISAL PROCESS - INTRODUCTION                                                                                                                                           |               |
|                     | A. "Institutionalism and Urban Land Economics," <u>Recent Perspectives in Urban Land Economics</u> , Vancouver, British Columbia: University of British Columbia, 1976.        | R-Text        |
|                     | B. "A Rational Approach to Feasibility Analysis," J. A. Graaskamp, <u>Appraisal Journal</u> , Oct. 1972.                                                                       | Mimeo         |
|                     | C. Chap. 1, "What is Value?" Chap. 2, "The Development of Appraisal Theory," <u>Real Estate Appraisal: Review and Outlook</u> , Paul Wendt, University of Georgia Press, 1974. | Bus. Res.     |
| Sept. 1, Wed.       | EVOLUTION OF VALUE CONCEPTS                                                                                                                                                    |               |
|                     | A. <u>Valuation for Real Estate Decisions</u> , R. U. Ratcliff, Chapters 1-3.                                                                                                  | R-Text        |
|                     | B. "Appraisal: Is It Measurement of Prediction?" <u>The Real Estate Appraiser</u> , Nov.-Dec. 1972.                                                                            | R-Text        |
|                     | C. "A Statistically Oriented Definition of Market Value," Peter F. Colwell, <u>Appraisal Journal</u> , Jan. 1979, pp. 53-58.                                                   | Mimeo         |
|                     | D. "Data, The Appraisal Process, and the Market Value Definition," Kenneth M. Lusht, <u>Appraisal Journal</u> , Oct., 1981.                                                    | Mimeo         |
|                     | E. "A Critique of the Prevailing Definition of Market Value," Harold Albritton, <u>Appraisal Journal</u> , April, 1980, pp. 199-205.                                           | Mimeo         |
| Sept. 8, Wed.       | RATLCIFF RESTATEMENT OF THE APPRAISAL PROCESS                                                                                                                                  |               |
|                     | A. "Is There a 'New School' of Appraisal Thought?" <u>The Appraisal Journal</u> , Oct., 1972.                                                                                  | R-Text        |
|                     | B. "Appraisal Is Market Analysis," <u>The Appraisal Journal</u> , Oct., 1975.                                                                                                  | R-Text        |
|                     | C. <u>Valuation for Real Estate Decisions</u> , R. U. Ratcliff, Chap. 4.                                                                                                       | R-Text        |



Bus. 856 - Fall 1982

Sept. 10, Fri. FIELD INSPECTION

Sept. 13, Mon. OTHER CRITICS OF THE APPRAISAL PROCESS

- A. "Should the Traditional Appraisal Process Be Re-Structured?" H.C. Smith and R.L. Racster, The Real Estate Appraiser, Nov.-Dec. 1970 Mimeo
- B. "The Three Approaches," Frederick M. Babcock Mimeo
- C. "Annotated Bibliography for Modernization in Valuation of Investment Classed Real Estate," McCloud B. Hodges, Jr., February 1981. Mimeo

Sept. 15, Wed. BASIC ELEMENTS OF THE APPRAISAL PROCESS & THE REPORT

- A. Section One and Two, The Appraisal of 25 N. Pinckney. Text
- B. "Guidelines for Understanding and Reviewing Real Estate Appraisal Reports," Edwin Rams, Appraisal Review Journal, pp. 60-67. Mimeo
- C. "The Written Appraisal Concept," Real Estate Appraiser, Jan.-Feb. 1977. Mimeo
- D. "How to Write a Poor Report," Charles B. Smith, Appraisal Journal, April 1973. Mimeo

Sept. 17, Fri. WRITING LAB #1 - JENNIFER MITTNACHT

- A. The Elements of Style, Strunk & White Text

Sept. 20, Mon. MOST PROBABLE USE MATRIX

- A. "Highest and Best Use: A New Definition, A New Opportunity," John E. Bohling, The Real Estate Appraiser, Jan.-Feb. 1976, pp. 33-37 Mimeo
- B. "Highest and Best Use - Fact or Fancy," Paul F. Wendt, Appraisal Journal, April 1972. Mimeo
- C. "Toward Analytically Precise Definitions of Market Value and Highest and Best Use," Kerry D. Vandell, Appraisal Journal, April 1982. Mimeo
- D. "Highest and Best Use in the Appraisal Profession," Halbert C. Smith & Mark A. Maurais, The Real Estate Appraiser and Analyst, Mar.-Apr. 1980. Mimeo
- E. "The Dynamic Nature of Highest and Best Use," N. Ordway & J. Harris, Appraisal Journal, July 1981. Mimeo

Bus. 856 - Fall 1982

Sept. 22, Wed. MOST PROBABLE USE (CONTINUED)

- A. The Appraisal of 25 N. Pinckney, pp. 14-62 Text
- B. Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code, Chapter 50, Administration and Enforcement, Chapter 52, 53, and 54. Text
- C. "Highest and Best Use: A Critical Reexamination," James R. Webb, The Appraisal Journal, January, 1980, pp. 57-63. Mimeo

Sept. 24, Fri. WRITING LAB #2 JENNIFER MITTNACHT ( EXERCISE #1, DUE)

Sept. 27, Mon. MOST PROBABLE BUYER PROFILE

- A. Appraisal of 25 N. Pinckney, pp. 63-71. Text
- B. Valuation for Real Estate Decisions, R. U. Ratcliff, Chapters 6 & 7. R-Text

Sept. 29, Wed. MARKET PRICE COMPARISON

- A. Appraisal of 25 N. Pinckney, pp. 71-81, 106-123. Text
- B. "Do Not Demean the Mean," Robert C. Mason, The Appraisal Journal, Jan. 1977. Mimeo
- C. "Seller Financing and Cash Equivalence," Jack Friedman and Bruce Lindeman, The Real Estate Appraiser and Analyst, May-June, 1979, pp. 46-50. Mimeo
- D. "Theory and Methods of Social Measurement," Clyde H. Coombs. Mimeo
- E. "The Fourth Method of Valuation: The Weed Tree Test," Jeffrey Jahns, Real Estate Review, pp. 85-87. Mimeo

Oct. 1, Fri. WRITING LAB - JENNIFER MITTNACHT (EXERCISE # 2 DUE)

Oct. 4, Mon. PRESENTATION OF MARKET COMPARABLES & ADJUSTMENTS

A.

B.

C.

Bus. 856 - Fall 1982

Oct. 6, Wed. STATISTICAL APPRAISAL TOOLS

- A. "Some Quick and Easy Statistical Procedures for the Real Estate Analyst," Wayne W. Daniel, Appraisal Journal, April 1974. Mimeo
- B. Chapters 1 and 4, Quantitative Techniques in Real Estate Counseling, Gene Dilmore, Lexington Books, Lexington, MA 1981. Mimeo
- C. "The Application of Correlation Matrix Analysis to Real Estate Appraisal," Walter Chudleigh III, The Appraisal Journal, Oct., 1979, pp. 523-531. Mimeo

Oct. 8, Fri. WRITING LAB - JENNIFER MITTNACHT (EXERCISE #3, DUE)

Oct. 11, Mon. SIMULATION OF PROBABLE BUYER CALCULUS

- A. "Don't Underrate the Gross Income Multiplier," R. U. Ratcliff, Appraisal Journal, Apr., 1971. R-Text
- B. "The Behavior of Appraisers in Valuing Income Property: A Status Report," Kenneth M. Lusht, The Real Estate Appraiser and Analyst, July-Aug., 1979. Mimeo

Oct. 13, Wed. INVESTMENT SIMULATION

- A. "Babcock Revisited - A Return to Fundamentals," Edited by M. B. Hodges. Mimeo
- B. Valuation for Real Estate Decisions, R. U. Ratcliff, Chaps. 8-10. R-Text
- C. "DCR/R Capitalization Rate Tables For Today's Financing," Robert Steele, Appraisal Journal, Jan., 1981, pp. 15-22. Mimeo
- D. "Discount Rates for Cash Equivalent Analysis," Joseph Lipscomb, Appraisal Journal, Jan. 1981. Mimeo
- E. "Valuing Real Estate Subject to Tax-Free Financing," Bruce Coin, Appraisal Journal, Apr., 1980, pp. 261-266. Mimeo

Oct. 15, Fri. IMPACT OF PUBLIC INVESTMENT AND INCENTIVES

- A. "Historic Properties: Variable Valuations," Sally G. Oldham, The Appraisal Journal, July, 1982. Mimeo
- B. "Appraising the Best Tax Shelter in History," R. J. Roddewig & Jared Shlaes, The Appraisal Journal, Jan., 1982. Mimeo

Bus. 856, Fall 1982

Oct. 18, Mon.     NORMATIVE METHODS - THE COST APPROACH

- A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chaps. 5, 12, 13. Text
- B. "Building Design Trade-Offs: Initial Cost Vs. Operating Cost Vs. Rental Income," Clayform T. Grimm, The Appraisal Journal, April, 1976. Mimeo
- C. "Kahn on the Entrepreneur," Sanders A. Kahn, The Appraisal Journal, 1973. Mimeo
- D. Marshall & Swift Computerized Cost Estimating System, Case Example Handout

Oct. 20, Wed.     TESTING APPRAISAL PRICE CONCLUSIONS

- A. BFCF
- B. Front Door Approach - MR CAP

Oct. 22, Fri.     APPRAISAL GRAPHICS (GUEST SPEAKER)

- A. Real Estate Graphic Aids (SREA) Handout

Oct. 25, Mon.     RESOLUTION OF APPRAISAL REPORT ISSUES

Oct. 27, Wed.     FIRST DRAFT OF APPRAISAL REPORT DUE AT BEGINNING OF CLASS: LATE PAPERS PENALIZED

Nov. 1, Mon.     MID-SEMESTER EXAM

Nov. 3, Wed.     MULTIPLE REGRESSION AND APPRAISAL

- A. Chapter 5, Quantitative Techniques in Real Estate Counseling, Gene Dilmore, Lexington Books, Lexington, MA. 1981. Mimeo
- B. "E.S.P. and the Appraiser," Robert Gustafson. Mimeo
- C. "Appraising Houses," Gene Dilmore, Real Estate Appraiser, July-Aug. 1974. Mimeo
- D. "Multiple Regression Analysis & The Appraisal Process," Jerome Dasso, The Real Estate Appraiser, March-April 1973. Mimeo

Nov. 5, Fri.     MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)

- A. "The Use of Multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, Assessors Journal, Sept. 1976. Mimeo

|               |                                                                                                                                                                       |        |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Nov. 8, Mon.  | RETURN OF FIRST DRAFT OF APPRAISALS                                                                                                                                   |        |
| Nov. 10, Wed. | APPRAISALS FOR REAL ESTATE TAX ASSESSMENT                                                                                                                             |        |
|               | A. Chap. 19, "Realty Taxes," Kahn & Case,<br><u>Real Estate Appraisal and Investment.</u>                                                                             | Mimeo  |
|               | B. Wild, Inc., VS City of Madison Board of Review                                                                                                                     | Mimeo  |
|               | C. "FHA 236 Housing Projects: Some Thoughts on<br>Valuation," William B. Jackson.                                                                                     | Mimeo  |
|               | D. Proposed State of Wisconsin Automated<br>Residential System                                                                                                        | Mimeo  |
| Nov. 12, Fri. | APPRAISALS FOR REAL ESTATE TAX ASSESSMENT (CONTINUED)                                                                                                                 |        |
|               | A.                                                                                                                                                                    |        |
|               | B.                                                                                                                                                                    |        |
| Nov. 15, Mon. | MKTCOMP - AN AUTOMATED ALTERNATIVE - THEORY                                                                                                                           |        |
|               | A. "Comparable Sales Selection--A Computer<br>Approach," Arnold Tchira, <u>The Appraisal<br/>Journal</u> , Jan. 1979                                                  | Mimeo  |
|               | B. MKTCOMP kit for WITS case problem                                                                                                                                  |        |
| Nov. 17, Wed. | MKTCOMP - AN AUTOMATED ALTERNATIVE - PRACTICE                                                                                                                         |        |
|               | A. Sample Duluth assessment output                                                                                                                                    | Mimeo  |
|               | B. Sample Maple Bluff output                                                                                                                                          | Mimeo  |
|               | C. Sample Mulvar output                                                                                                                                               | Mimeo  |
| Nov. 19, Fri. | VIDEO FILM - ART OF THE CROSS-EXAMINATION                                                                                                                             |        |
| Nov. 22, Mon. | LAND VALUATION                                                                                                                                                        |        |
|               | A. <u>Valuation for Real Estate Decisions</u> , R. U.<br>Ratcliff, Chap. 11.                                                                                          | R-Text |
|               | B. "Subdivision Analysis: A Case Study," Marvin<br>A. Maes, <u>The Appraisal Journal</u> , Jan. 1982.                                                                 | Mimeo  |
|               | C. "A Basic Methodology for Estimating the<br>Market Value of a Subdivision Land Develop-<br>ment," Dan Swango, <u>The Real Estate Appraiser</u> ,<br>Nov.-Dec., 1971 | Mimeo  |

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- D. "Developmental Method of Land Appraisal," James H. Boykin, Appraisal Journal, Apr. 1976. Mimeo
- E. "Condominium/Developed Lot Discounting Concept...Again," Richard Hewitt, III, The Real Estate Appraiser and Analyst, Jan.-Feb., 1980, pp. 7-12. Mimeo

Nov. 24, Wed. LAND VALUATION (CONTINUED)

- A. "Lease and Fee-Hold Price Differentials in Hawaii," Richard A. Palfin, The Appraisal Journal, April, 1979, pp. 227-242.
- B. "Some Economic Implications of Land Use Planning for Real Estate Owners and Investors," Donald R. Levi, The Appraisal Journal, July, '75. Mimeo
- C. "Water Rights in Relation to the Appraisal of Land," E. J. Skeen, The Appraisal Journal, July, 1975. Mimeo

Nov. 26, Fri. \* \* THANKSGIVING RECESS \* \*

Nov. 29, Mon. APPRAISAL FOR CONDEMNATION

- A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chap. 14. R - Text
- B. "Eminent Domain: A Kaleidoscopic View," Sidney Z. Searles, Real Estate Law Journal, Winter, 1973. Mimeo
- C. Chapter 32, Wisconsin Statutes.
- D. "Markets, Market Value, and Just Compensation," E.M. Rams, ASA Valuation, Oct-Nov. 1975. Mimeo

Dec. 1, Wed. APPRAISAL FOR CONDEMNATION (CONTINUED)

- A. Rules of Compensability and Valuation Evidence for Highway Land Acquisition, Highway Research Program Report, Dean T. Massey, University of Wisconsin, Madison, Wisconsin.
  - Chap. 2: Qualifications of Witnesses Giving Opinion Evidence
  - Chap. 4: Admissibility of Evidence of Sales of Similar Properties
  - Chap. 5: Admissibility of Evidence of Sales of the Subject Property
  - Chap. 6: Admissibility of Evidence of Income
  - Chap. 11: Admissibility of Evidence of Reputation or Sentimental Value
  - Chap. 12: Admissibility of Evidence of Highest and Best Use of Property
  - Chap. 13: Admissibility of Photographs or Other Visual Aids

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- B. "The Expert Witness From A Lawyer's Viewpoint,"  
Fred M. Winner, Condemnation Appraisal Practice,  
pp. 445-452. Mimeo
- C. "What is Expected of the Expert Witness?"  
John D. Cochran, Condemnation Appraisal Practice,  
pp. 453-460. Mimeo

Dec. 6, Mon. GOVERNMENT STANDARDS FOR APPRAISAL PRODUCTS

- A. "The Demand for and Supply of Real Estate  
Analyst Reports," Herman Kelting, Real Estate  
Appraiser & Analyst, Jan.-Feb., 1979. Mimeo
- B. A Guide to Appraising For Federal Agencies Text

Dec. 8, Wed. THE BUSINESS OF APPRAISAL PRACTICE

- A. "Real Estate Service Firms Must Sell  
Themselves," Park Weaver, Jr., Real Estate  
Review. Mimeo
- B. "Managing An Appraisal Office," Harry Lewman,  
published by American Institute of Real Estate  
Appraisers. Mimeo
- C. "Fee Appraiser's Contract Form Developed," The  
Real Estate Appraiser, March-April 1976. Mimeo
- D. "Standards of Professional Practice & Conduct,"  
Real Estate Appraiser & Analyst, Jan.-Feb. 1980,  
pp. 18-33. Mimeo
- E. "The Liability of the Appraiser (1933),"  
J. George Head, "Appraisal Liability (1982):  
Who May Sue?", Morgan D. S. Prickett, The  
Appraisal Journal, July 1982. Mimeo
- F. "The Role of the Professional Appraiser in the  
1980's," Carroll Pennell, II, The Appraisal  
Journal, Apr. 1981, pp. 205-213. Mimeo
- G. "Certification of Appraisers: Issues,  
Dilemmas, & Prospects," David Nielsen, Appraisal  
Journal, Apr. 1981, pp. 259-270. Mimeo

Dec. 10, Fri. \* \* FINAL EXAM \* \*

## Business 856

### Appraisal Seminar - Semester 1

First Semester 1983

Instructors: J. A. Graaskamp  
G. Mittnacht

#### I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

#### II. General Course Format

It is advised that you read the material in advance of class. There will be two 1-2 hour written exams on this material. On each Friday there will be a 50 min. workshop on English composition and on report techniques. There will be two property appraisal reports: Each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely redone as a final report. Final grade will be based on total points scored on the first draft appraisal (30%), the redraft appraisal (20%), and 50% on two exams.

#### III. Textbooks

Recommended for purchase:

Ratcliff Readings on Appraisal and Its Foundation Economics,  
R. U. Ratcliff, Landmark Research, Madison, WI 1979 (\$9.00)  
The Appraisal of 25 N. Pinckney: A Demonstration Case For  
Contemporary Appraisal Methods, J.A. Graaskamp, 1977 (\$9.00)  
A Guide to Appraising Federal Agencies, (\$4.00)  
Packet of mimeos and assorted text materials (\$10.00)  
Wisconsin Administrative Code, Building and HVAC (\$4.00)  
Techniques for Writing Business Reports, Frances Larson,  
Landmark Research, Madison, WI 1979 (\$8.00)

(Books can be purchased from the UW Real Estate Club in Room 118. (No credit!))

Recommended for purchase at book store:

The Elements of Style, William Strunk, Jr. & E. B. White,  
McMillan Publishing Co., Inc. New York 1972



Manual for Writers of Term Papers, Theses, and Research Papers, Kate L. Turabian, 4th Edition, University of Chicago Press.

NOTE: ALL PAPERS AND EXERCISES TO BE HANDED IN SHOULD BE STAPLED AT UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT PLASTIC BINDERS OR OTHER SIMILAR COVERS.

ADVANCED REAL ESTATE APPRAISAL - BUS 856  
Topic Schedule, Fall 1983

|            |                                                            |
|------------|------------------------------------------------------------|
| Aug. 29, M | THE APPRAISAL PROCESS - INTRODUCTION                       |
| 31, W      | EVOLUTION OF VALUE CONCEPTS                                |
| Sept. 5, M | * * LABOR DAY * *                                          |
| 7, W       | RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS              |
| 9, F       | FIELD INSPECTION OF PROPERTY TO BE APPRAISED               |
| 12, M      | OTHER CRITICS OF THE APPRAISAL PROCESS                     |
| 14, W      | (LAB) BASIC ELEMENTS OF THE APPRAISAL PROCESS & THE REPORT |
| 16, F      | WRITING LAB #1 - GENNY MITTNACHT                           |
| 19, M      | MOST PROBABLE USE MATRIX                                   |
| 21, W      | MOST PROBABLE USE (CONTINUED)                              |
| 23, F      | WRITING LAB - GENNY MITTNACHT (EXERCISE #1, DUE)           |
| 26, M      | MOST PROBABLE BUYER PROFILE                                |
| 28, W      | MARKET PRICE COMPARISON                                    |
| 30, F      | WRITING LAB - GENNY MITTNACHT (EXERCISE #2, DUE)           |
| Oct. 3, M  | PRESENTATION OF MARKET COMPARABLES AND ADJUSTMENTS         |
| 5, W       | STATISTICAL APPRAISAL TOOLS                                |
| 7, F       | WRITING LAB - GENNY MITTNACHT (EXERCISE # 3 DUE)           |
| 10, M      | SIMULATION OF PROBABLE BUYER CALCULUS                      |
| 12, W      | INVESTMENT SIMULATION                                      |

|      |       |                                                                                      |
|------|-------|--------------------------------------------------------------------------------------|
|      | 14, F | MARKET COMPARISON--WILDERNESS                                                        |
|      | 17, M | NORMATIVE METHODS - THE COST APPROACH                                                |
|      | 19, W | TESTING APPRAISAL PRICE CONCLUSIONS                                                  |
|      | 21, F | ATTEND ALUMNI SEMINAR IN LOWELL HALL                                                 |
|      | 24, M | REVIEW FOR EXAM                                                                      |
|      | 26, W | FIRST DRAFT OF APPRAISAL REPORT DUE AT BEGINNING<br>OF CLASS - LATE PAPERS PENALIZED |
|      | 28, F |                                                                                      |
|      | 31, M | * * MID-SEMESTER EXAM * *                                                            |
| Nov. | 2, W  | MULTIPLE REGRESSION AND APPRAISAL                                                    |
|      | 4, F  | MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)                                        |
|      | 7, M  | RETURN OF FIRST DRAFT OF APPRAISALS                                                  |
|      | 9, W  | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT                                             |
|      | 11, F | APPRAISAL FOR REAL ESTATE TAX ASSESSMENT -<br>(SUBSIDIZED HOUSING)                   |
|      | 14, M | MKTCOMP - AN AUTOMATED ALTERNATIVE                                                   |
|      | 16, W | DEMONSTRATION OF MKTCOMP PROGRAM                                                     |
|      | 18, F | VIDEO FILM - ART OF THE CROSS-EXAMINATION                                            |
|      | 21, M | LAND VALUATION                                                                       |
|      | 23, W | LAND VALUATION (CONTINUED)                                                           |
|      | 25, F | * * THANKSGIVING RECESS * *                                                          |
|      | 28, M | APPRAISAL FOR CONDEMNATION                                                           |
|      | 30, W | APPRAISAL FOR CONDEMNATION (CONTINUED)                                               |
| Dec  | 2, F  | GOVERNMENT STANDARDS FOR APPRAISAL PRODUCTS                                          |
|      | 5, M  | THE BUSINESS OF APPRAISAL PRACTICE                                                   |
|      | 7, W  | * * FINAL EXAM * *                                                                   |
|      | 9, F  | * * FINAL APPRAISAL REPORT DUE BY 5:00 P.M.* *                                       |

## Class Period Readings

## Source

Aug. 29, Mon. THE APPRAISAL PROCESS - INTRODUCTION

- A. "Institutionalism and Urban Land Economics,"  
Recent Perspectives in Urban Land Economics,  
Vancouver, British Columbia: University of  
British Columbia, 1976. R-Text
- B. "A Rational Approach to Feasibility Analysis,"  
J.A. Graaskamp, Appraisal Journal, Oct. 72
- C. "A Critique of the Prevailing Definition of  
Market Value," Harold Albritton, Appraisal  
Journal, April, 1980, pp. 199-205. Mimeo
- D. "Data, The Appraisal Process, and the Market  
Value Definition," Kenneth M. Lusht, Appraisal  
Journal, Oct., 1981. Mimeo
- E. "Value Spread: The Effects of Occupancy,  
Financing, and Buyer/Seller Motivations on Most  
Probable Selling Price", Eric T. Reenstierna,  
The Real Estate Appraiser and Analyst,  
Summer, 1983, pp. 39-43. Mimeo
- F. "The Semantics Debate: Highest & Best Use Vs.  
Most Probable Use," Terry V. Grissom, The  
Appraisal Journal, Jan. 1983, pp. 45-54. Mimeo
- G. "Most Probable Selling Price", Kenneth M. Lusht,  
The Appraisal Journal, July, 1983,  
pp. 346-354. Mimeo

Aug. 31, Wed. EVOLUTION OF VALUE CONCEPTS

- A. Valuation for Real Estate Decisions, R.U.  
Ratcliff, Chapters 1-3 R-Text
- B. "Appraisal: Is It Measurement of Prediction?"  
The Real Estate Appraiser, Nov.-Dec. 1972 R-Text
- C. "A Statistically Oriented Definition of Market  
Value," Peter F. Colwell, Appraisal Journal,  
Jan. 1979, pp. 53-58 Mimeo
- D. "Data, The Appraisal Process, and the Market  
Value Definition," Kenneth M. Lusht, Appraisal  
Journal, Oct., 1981 Mimeo
- E. "A Critique of the Prevailing Definition of  
Market Value," Harold Albritton, Appraisal  
Journal, April, 1980, pp. 199-205. Mimeo

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- Sept. 5, Wed.      RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS
- A. "Is There a 'New School' of Appraisal Thought?"  
The Appraisal Journal, Oct., 1972.      R-Text
  - B. "Appraisal Is Market Analysis," The Appraisal Journal, Oct. 1975.      R-Text
  - C. Valuation for Real Estate Decisions, R.U.  
Ratcliff, Chap. 4      R-Text
- Sept. 9, Fri.      FIELD INSPECTION
- Sept. 12, Mon.      OTHER CRITICS OF THE APPRAISAL PROCESS
- A. "Should the Traditional Appraisal Process Be Re-Structured?" H.C. Smith and R. L. Racster,  
The Real Estate Appraiser, Nov.-Dec. 1970.      Mimeo
  - B. "The Three Approaches, Frederick M. Babcock      Mimeo
  - C. "Annotated Bibliography for Modernization in Valuation of Investment Classed Real Estate,"  
McCloud B. Hodges, Jr., February 1981.      Mimeo
- Sept. 14, Wed.      BASIC ELEMENTS OF THE APPRAISAL PROCESS & THE REPORT
- A. Section One and Two, The Appraisal of 25 N. Pinckney.      Text
  - B. "Guidelines for Understanding and Reviewing Real Estate Appraisal Reports," Edwin Rams,  
Appraisal Review Journal, pp. 60-67.      Mimeo
  - C. "The Written Appraisal Concept," Real Estate Appraiser, Jan.-Feb. 1977.      Mimeo
  - D. "How to Write a Poor Report," Charles B. Smith,  
Appraisal Journal, April 1973.      Mimeo
- Sept. 16, Fri.      WRITING LAB #1 - GENNY MITTNACH
- A. The Elements of Style, Strunk & White      Text
- Sept. 19, Mon.      MOST PROBABLE USE MATRIX
- A. "Highest and Best Use: A New Definition, A New Opportunity," John E. Bohling, The Real Estate Appraiser, Jan.-Feb. 1976, pp 33-37.      Mimeo
  - B. "Highest and Best Use - Fact or Fancy," Paul F. Wendt, Appraisal Journal, April 1972.      Mimeo

- C. "Toward Analytically Precise Definitions of Market Value and Highest and Best Use," Kerry D. Vandell, Appraisal Journal, April 1982. Mimeo
- D. "Highest and Best Use in the Appraisal Profession," Halbert C. Smith & Mark A. Maurais, The Real Estate Appraiser and Analyst, Mar.-Apr. 1980. Mimeo
- E. "The Dynamic Nature of Highest and Best Use," Ordway & Harris, Appraisal Journal, July '81. Mimeo

Sept. 21, Wed. MOST PROBABLE USE (CONTINUED)

- A. The Appraisal of 25 N. Pinckney, pp. 14-62. Text
- B. Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code, Chapter 50, Administration and Enforcement, Chapter 52, 53, and 54. Text
- C. "Highest and Best Use: A Critical Reexamination," James R. Webb, The Appraisal Journal, January, 1980, pp 57-63. Mimeo

Sept. 23, Fri. WRITING LAB #2 GENNY MITTNACHT (EXERCISE #1 DUE)

Sept. 26, Mon. MOST PROBABLE BUYER PROFILE

- A. Appraisal of 25 N. Pinckney, pp. 63-71. Text
- B. Valuation for Real Estate Decisions, R. U. Ratcliff, Chapters 6 & 7. R-Text

Sept. 28, Wed. MARKET PRICE COMPARISON

- A. Appraisal of 25 N. Pinckney, pp. 71-81, 106-123. Text
- B. "Do Not Demean the Mean," Robert C. Mason, The Appraisal Journal, Jan. 1977. Mimeo
- C. "Seller Financing and Cash Equivalence," Jack Friedman and Bruce indeman, The Real Estate Appraiser and Analyst, May-June, 1979, pp. 46-50. Mimeo
- D. "Theory and Methods of Social Measurement," Clyde H. Coombs. Mimeo
- E. "The Fourth Method of Valuation The Weed Tree Test," Jeffrey Jahns, Real Estate Review, pp. 85-87. Mimeo

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Sept. 30, Fri. WRITING LAB - GENNY MITTNACHT (EXERCISE #2 DUE)

Oct. 5, Wed. STATISTICAL APPRAISAL TOOLS

- A. "Error and Risk in Property Value Estimates",  
W. Porcher Miles, The Appraisal Journal,  
October, 1980, pp. 540-548. Mimeo
- B. Chapters 1 and 4, Quantitative Techniques in  
Real Estate Counseling, Gene Dillmore, Lexington  
Books, Lexington, MA 1981. Mimeo
- C. "The Application of Correlation Matrix Analysis  
to Real Estate Appraisal," Walter Chudleigh III,  
The Appraisal Journal, Oct., 1979, pp 523-531. Mimeo

Oct. 7, Fri. WRITING LAB - GENNY MITTNACHT (EXERCISE #3 DUE)

Oct. 10, Mon. SIMULATION OF PROBABLE BUYER CALCULUS

- A. "Don't Underrate the Gross Income Multiplier,"  
R. U. Ratcliff, Appraisal Journal, Apr., 1971. R-Text
- "The Behavior of Appraisers in Valuing Income  
Property: A Status Report," Kenneth M. Lusht,  
The Real Estate Appraiser and Analyst, July-  
Aug., 1979. Mimeo

Oct. 12, Wed. INVESTMENT SIMULATION

- A. "Babcock Revisited - A Return to Fundamentals,"  
Edited by . B. Hodges. Mimeo
- B. Valuation for Real Estate Decisions, R. U.  
Ratcliff, Chaps. 8-10. R-Text
- C. "Changing Emphasis in Appraisal Techniques:  
The Transition to Discounted Cash Flow," Korpacz  
& Roth, Appraisal Journal, Jan.'83, pp 21-44 Mimeo
- D. "Discount Rates for Cash Equivalent Analysis,"  
Joseph Lipscomb, Appraisal Journal, Jan. 1981. Mimeo
- E. "Valuing Real Estate Subject to Tax-Free  
Financing," Bruce Coin, Appraisal Journal,  
Apr., 1980, pp. 261-266. Mimeo

Oct. 14, Fri. IMPACT OF PUBLIC INVESTMENT AND INCENTIVES

- A. "Historic Properties: Variable Valuations,"  
Sally G. Idham, The Appraisal Journal,  
July, 1982. Mimeo

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- B. "Appraising the Best Tax Shelter in History,"  
Roddewig Shlaes, Appraisal Journal, Jan.'82. Mimeo

Oct. 17, Mon. NORMATIVE METHODS - THE COST APPROACH

- A. Valuation for Real Estate Decisions,  
R. U. Ratcliff, Chaps. 5, 12, 13. Text
- B. "Building Design Trade-Offs: Initial Cost  
Vs. Operating Cost Vs. Rental Income,"  
Clayform T. Grimm, The Appraisal Journal,  
April, 1976. Mimeo
- C. "Kahn on the Entrepreneur," Sanders A. Kahn,  
The Appraisal Journal, 1973. Mimeo
- D. Marshall & Swift Computerized Cost Estimating  
System, Case Example. Handout

Oct. 19, Wed. TESTING APPRAISAL PRICE CONCLUSIONS

- A. BFCF
- B. Front Door Approach - MR CAP

Oct. 21, Fri. APPRAISAL GRAPHICS (GUEST SPEAKER)

- A. Real Estate Graphic Aids (SREA)

Oct. 24, Mon. RESOLUTION OF APPRAISAL REPORT ISSUES

Oct. 26, Wed. FIRST DRAFT OF APPRAISAL REPORT DUE AT BEGINNING  
OF CLASS: LATE PAPERS PENALIZED

Oct. 28, Fri. REVIEW FOR EXAM

Oct. 31, Mon. MID-SEMESTER EXAM

Nov. 2, Wed. MULTIPLE REGRESSION AND APPRAISAL

- A. Chapter 5, Quantitative Techniques in Real  
Estate Counseling, Gene Dilmore, Lexington  
Books, Lexington, MA 1981. Mimeo
- B. "E.S.P. and the Appraiser" Robert Gustafson Mimeo
- C. "Appraising Houses," Gene Dilmore, Real  
Estate Appraiser, July-Aug. 1974. Mimeo
- D. "Multiple Regression Analysis & The Appraisal  
Process," Jerome Dasso, The Real Estate  
Appraiser, March-April 1973. Mimeo

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Nov. 4, Fri.      MULTIPLE REGRESSION AND APPRAISAL (CONTINUED)

A. "The Use of Multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, Appraisal Journal, Sept. 1976.

Mimea

Nov. 7, Mon.      RETURN OF FIRST DRAFT OF APPRAISALS

Nov. 9, Wed.      APPRAISALS FOR REAL ESTATE TAX ASSESSMENT

A. Chap. 19, "Realty Taxes," Kahn & Case  
Real Estate Appraisal and Investment.

Mimeo

B. Wild, Inc., Vs City of Madison Board of Review Mimeo

C. "FHA 236 Housing Projects: Some Thoughts on Valuation," William B. Jackson.

Mimea

D. Proposed State of Wisconsin Automated Residential System

Mimer

Nov. 11, Fri. APPRAISALS FOR REAL ESTATE TAX ASSESSMENT (CONTINUED)

A. LaFollette Section 8 Apartments

B.

Nov. 14, Mon. MKT - AN AUTOMATED ALTERNATIVE - THEORY

A. "Comparable Sales Selection--A Computer Approach," Arnold Tchira, The Appraisal Journal, Jan. 1979

Mined

B. MKTCOMP kit for WITS case problem

Nov. 16, Wed. MKTCOMP - AN AUTOMATED ALTERNATIVE - PRACTICE

A. Sample Duluth assessment output

Mimeo

B. Sample Maple Bluff output

Mimeo

### C. Sample Mulvar output

M i t e d

Nov. 18, Fri. VIDEO FILM - ART OF THE CROSS-EXAMINATION

Nov. 21. Mon. LAND VALUATION

A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chap. 11.

R-Text

B. "Subdivision Analysis: A Case Study," Marvin A. Maes, The Appraisal Journal, Jan. 1982.

Mimeo



- C. "A Basic Methodology for Estimating the Market Value of a Subdivision and Development," Dan Swango, The Real Estate Appraiser, Nov.-Dec., 1971. Mimeo
- D. "Development Method of Land Appraisal," James H. Boykin, Appraisal Journal, Apr.'76 Mimeo
- E. "Condominium/Developed Lot Discounting Concept...Again," Richard Hewitt, III, The Real Estate Appraiser and Analyst, Jan.-Feb., 1980, pp 7-12. Mimeo

Nov. 23, Wed. LAND VALUATION (CONTINUED)

- A. "Lease and Fee-Hold Price Differentials in Hawaii," Richard A. Palfin, The Appraisal Journal, April, 1979, pp. 227-242. Mimeo
- B. "Some Economic mplications of Land Use Planning for Real Estate wners and Investors," Donald R. Levi, The Appraisal Journal, July, 1975. Mimeo
- C. "Water Rights in Relation to the Appraisal of Land," E. J. Skeen, The Appraisal Journal, July, 1975. Mimeo

Nov. 25, Fri. \* \* THANKSGIVING RECESS \* \*

Nov. 28, Mon. APPRAISAL FOR CONDEMNATION

- A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chap. 14. R-Text
- B. "Eminent Domain: A Kaleidoscopic View," Sidney Z. Searles, Real Estate Law Journal, Winter, 1973. Mimeo
- C. Chapter 32, Wisconsin Statutes.
- D. "Markets, Market Value, and Just Compensation," E. M. Rams, ASA Valuation, Oct.-ov. 1975. Mimeo

Nov. 30, Wed. APPRAISAL FOR CONDEMNATION (CONTINUED)

- A. Rules of Compensability and Valuation Evidence for Highway and Acquisition, Highway Research Program Report, Dean T. Massey, University of Wisconsin, Madison, WI
- Chap. 2: Qualifications of Witnesses Giving Opinion Evidence

- Chap. 4: Admissibility of Evidence of Sales of Similar Properties
- Chap. 5: Admissibility of Evidence of Sales of the Subject Property
- Chap. 6: Admissibility of Evidence of Income
- Chap. 11: Admissibility of Evidence of Reputation or Sentimental Value
- Chap. 12: Admissibility of Evidence of Highest and Best Use of Property
- Chap. 13: Admissibility of Photographs or Other Visual Aids

- B. "The Expert Witness From A Lawyer's Viewpoint," Fred . Winner, Condemnation Appraisal Practice, pp. 445-452. Mimeo
- C. "What is Expected of the Expert Witness?" John D. Cochran, Condemnation Appraisal Practice, pp. 453-460. Mimeo

Dec. 2, Fri.

#### GOVERNMENT STANDARDS FOR APPRAISAL PRODUCTS

- A. "The Demand for and Supply of Real Estate Analyst Reports," Herman Kelting, Real Estate Appraiser & Analyst, Jan.-Feb., 1979. Mimeo
- B. A Guide to Appraising For Federal Agencies Text

Dec. 5, Mon.

#### THE BUSINESS OF APPRAISAL PRACTICE

- A. Real Estate Service Firms Must Sell Themselves," Park Weaver, Jr., Real Estate Review. Mimeo
- B. "Managing An Appraisal Office," Larry Lewman, published by American Institute of Real Estate Appraisers. Mimeo
- C. "Fee Appraiser's Contract Form Developed," The Real Estate Appraiser, March-April 1976. Mimeo
- D. "Standards of Professional Practice Conduct," Real Estate Appraiser & Analyst, Jan.-Feb., 1980, pp. 18-33. Mimeo
- E. "The Liability of the Appraiser (1933)," J. George ead, "Appraisal Liability (1982): Who May Sue?", Morgan D. S. Prickett, The Appraisal Journal, July 1982. Mimeo
- F. "The Role of the Professional Appraiser in the 1980's," Carroll Pennell, II, The Appraisal Journal, Apr. 1981, pp. 205-213. Mimeo

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G. "Certification of Appraisers: Issues,  
Dilemmas, & Prospects," David Nielsen, Appraisal  
Journal, Apr. 1981, pp. 259-270. Mimeo

Dec. 7, Wed.

\* \* FINAL EXAM \* \*

Dec. 9, Fri.

\* \* FINAL APPRAISAL REPORT DUE BY 5 P.M. \* \*

## Business 856

### Appraisal Seminar - Semester 1

First Semester 1985

Instructors: J. A. Graaskamp  
G. Mittnacht

#### I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

#### II. General Course Format

It is advised that you read the material in advance of class. There will be two two-hour written exams on this material. On each Tuesday there will be a seventy-five minute workshop on English composition and on report techniques. There will be two property appraisal reports: Each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely redone as a final report. Final grade will be based on total points scored on the first draft appraisal (30%), the redraft appraisal (20%), and 50% on two exams.

#### III. Textbooks

Recommended for purchase:

- THE COMPLETE PROBLEM SOLVER, John R. Hayes, The Franklin Press Institute, 1981
- \*RATCLIFF READINGS ON APPRAISAL AND ITS FOUNDATION ECONOMICS, R. U. Ratcliff, Landmark Research, Madison, WI 1979 (\$12.00)
- \*THE APPRAISAL OF 25 N. PINCKNEY: A DEMONSTRATION CASE FOR CONTEMPORARY APPRAISAL METHODS, J. A. Graaskamp, 1977 (\$10.00)
- Packet of mimeos and assorted text materials (See Bob's Copy Shop, 1314 W. Johnson Street)
- \*TECHNIQUES FOR WRITING BUSINESS REPORTS, Frances Larson, Landmark Research, Madison, WI 1979 (\$9.00)
- THE ELEMENTS OF STYLE, William Strunk, Jr. & E. B. White, McMillan Publishing Co., Inc., New York, 1972
- MANUAL FOR WRITERS OF TERM PAPERS, THESES, AND RESEARCH PAPERS, Kate L. Turabian, 4th Edition, University of Chicago Press

\*Books can be purchased from the UW Real Estate Club in Room 118. No Credit!

NOTE: ALL PAPERS AND EXERCISES TO BE HANDED IN SHOULD BE STAPLED IN UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT PLASTIC BINDERS OR OTHER SIMILAR COVERS.

ADVANCED REAL ESTATE APPRAISAL - BUS 856  
Topic Schedule, Fall 1985

- Sept. 4, W THE APPRAISAL PROCESS - INTRODUCTION  
5, R WRITING LAB #1 - MITTNACHT  
9, M DECISION - MAKING MODELS  
10, T WRITING LAB #2 (Exercise #1 Due)  
11, W RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS  
16, M RATCLIFF RESTATEMENT CONTINUED  
17, T WRITING LAB # 3 (EXERCISE #2 DUE)  
18, W DEFINING THE APPRAISAL PROBLEM AND CONSTRAINTS  
23, M PROPERTY DESCRIPTION, AND IDENTIFICATION OF ALTERNATIVE USES  
24, T WRITING LAB #4 (EXERCISE #3 DUE)  
25, W MOST PROBABLE USE MATRIX  
30, M MOST PROBABLE BUYER PROFILE
- Oct. 1, T WRITING LAB #5 (EXERCISE #4 DUE)  
2, W MARKET PRICE COMPARISON METHODS  
7, M MARKET PRICE COMPARISON METHODS CONTINUED  
8, T WRITING LAB # 6 -- DATA REVIEW FOR APPRAISAL  
9, W INTRODUCTION TO MKTCOMP - ROBBINS  
14, M MKTCOMP AND MAPLE BLUFF - DAVIS  
15, T WRITING LAB #7 (EXERCISE 6 DUE)  
STATISTICAL APPRAISAL TOOLS  
16, W SIMULATION OF BUYER CALCULUS -- THE INCOME APPROACH  
18, F ATTEND REAL ESTATE ALUMNI SEMINAR -- LOWELL HALL  
21, M DISCOUNTED CASH FLOW APPROACH  
22, T WRITING LAB #8 (EXERCISE 7 DUE)  
REVIEW OF ATV MODELS  
23, W DISCOUNT RATES AND CAP RATES  
28, M TESTING APPRAISAL PRICE CONCLUSIONS

29, T WRITING LAB #9  
REVIEW FOR EXAM

30, W MIDTERM EXAM

Nov. 4, M NORMATIVE METHODS -- THE COST APPROACH

5, T NO CLASS

6, W NORMATIVE METHODS == LAND VALUATION

11, M FIRST DRAFT OF APPRAISAL REPORT DUE BY START OF CLASS -- LATE PAPERS PENALIZED

12, T WRITING LAB # 10  
PROPER TITLES FOR CHARTS AND GRAPHS

13, W NORMATIVE METHODS -- MULTIPLE REGRESSION

18, M APPRAISAL FOR REAL ESTATE TAX ASSESSMENT APPEAL

19, T APPRAISAL GRAPHICS, LAB 11

20, W APPRAISAL FOR CONDEMNATION

25, M APPRAISAL FOR CONDEMNATION CONTINUED

26, T ART OF CROSS EXAMINATION - VIDEO: LAB 12

27, W APPRAISAL FOR LITIGATION

Dec. 2, M STANDARDS FOR THE APPRAISAL PRODUCT

4, W STANDARDS FOR THE APPRAISAL PRODUCT CONTINUED

9, M STANDARDS FOR APPRAISAL ETHICS

11, W FINAL EXAM

18, W FINAL APPRAISAL REPORT DUE BY 5 P.M. -- LATE PAPERS PENALIZED

BUS 856 - Fall 1985

Prof. James A. Graaskamp

Class Period Readings

- |               |                                                                                                                                                               |        |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Sept. 4, Wed. | THE APPRAISAL PROCESS - INTRODUCTION                                                                                                                          |        |
|               | A. <u>The Complete Problem Solver</u> , John R. Hayes, Ch. 1-3, Pp. 1-70                                                                                      | Text   |
|               | B. "Institutional and Urban Land Economics," <u>Recent Perspectives in Urban Land Economics</u> , Vancouver, British Columbia: University of British Columbia | R-Text |
|               | C. "Technology of Information Processing & Data Basing," Gene Dilmore, <u>Value Colloquium</u> , 1984, Pp. 1-7                                                | Mimeo  |
| 5, Thurs.     | WRITING LAB #1                                                                                                                                                |        |
|               | A. <u>The Elements of Style</u> , Strunk and White                                                                                                            | Text   |
|               | B. "Writing Appraisal Reports" by E. Leon Mason, Bureau of Reclamation, pp. 1-29                                                                              | Mimeo  |
| 9, Mon.       | DECISION - MAKING MODELS                                                                                                                                      |        |
|               | A. <u>The Complete Problem Solver</u> , Ch. 7-9, P. 145-196                                                                                                   | Text   |
|               | B. "A Rational Approach to Feasibility Analysis," J. A. Graaskamp, <u>Appraisal Journal</u> , Oct. '72                                                        | Mimeo  |
|               | C. <u>Valuation for Real Estate Decisions</u> , R. U. Ratcliff, Ch. 1-3                                                                                       | R-Text |
|               | D. "Appraisal: Is it Measurement or Prediction?" <u>The Real Estate Appraiser</u> , Nov.-Dec. 1972                                                            | R-Text |
|               | E. "Development of Value Theory to its Present State," James H. Boykin, <u>Value Colloquium</u> , Boston, June, 1984                                          | Mimeo  |
| 10, Tues.     | WRITING LAB #2                                                                                                                                                |        |
|               | A. Exercise #1 is due                                                                                                                                         |        |
| 11, Wed.      | Ratcliff Restatement of the Appraisal Process                                                                                                                 |        |
|               | A. Section One and Two, <u>The Appraisal of 25 N. Pinckney</u>                                                                                                | Text   |
|               | B. "Is There A 'New School' of Appraisal Thought?" <u>The Appraisal Journal</u> , Oct., 1972                                                                  | R-Text |
|               | C. "Appraisal is Market Analysis," <u>The Appraisal Journal</u> , Oct., 1975                                                                                  | R-Text |
|               | D. <u>Valuation for Real Estate Decisions</u> , Ch. 4                                                                                                         | R-Text |

- 16, Mon. THE RATCLIFF RESTATEMENT CONTINUED
- A. "A Critique of the Prevailing Definition of Market Value," Harold Albritton, Appraisal Journal, April, 1980, Pp. 199-205 Mimeo
  - B. "Data, The Appraisal Process, and the Market Value Definition," Kenneth M. Lusht, Appraisal Journal, Oc., 1981 Mimeo
  - C. "A Statistically Oriented Definition of Market Value," Peter F. Colwell, Appraisal Journal, Jan. 1979, Pp. 53-58 Mimeo
  - D. "Most Probable Selling Price," Kenneth M. Lusht, Appraisal Journal, July 1983, Pp. 346-354. Mimeo
  - E. "The Market in Market Value" by Jared Shaes, MAI, October, 1984, The Appraisal Journal, pp. 494-518
- 17, Tues. WRITING LAB #3
- A. Exercise #2 is due.
- 18, Wed. DEFINING THE APPRAISAL PROBLEM AND CONSTRAINTS
- A. "Guidelines for Understanding and Reviewing Real Estate Appraisal Reports," Edwin Rams, Appraisal Review Journal, Pp. 60-67 Mimeo
  - B. "How to Write a Poor Report," Charles B. Smith, Appraisal Journal, April 1973 Mimeo
  - C. "Problem Definition Between the Appraiser and Client," Haskell Berry Jr., Appraisal Journal, April 1984 Mimeo
- 23, Mon. PROPERTY DESCRIPTION AND IDENTIFICATION OF ALTERNATIVE USES
- A. "The Semantics Debate: Highest and Best Use Vs. Most Probable Use," Terry V. Grissom, Appraisal Journal, Jan., 1983. Mimeo
  - B. "Highest and Best Use - Fact or Fancy," Paul F. Wendt, Appraisal Journal, April 1972 Mimeo
  - C. "The Dynamic Nature of Highest and Best Use," Ordway and Harris, Appraisal Journal, July 1981. Mimeo
  - D. The Appraisal of 25 N. Pinckney, Pp. 14-62 Text
  - E. Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code, Chapter 50, Administration and Enforcement, Chapters 52, 53, 54. Bus. Libra



- 24, Tues. WRITING LAB #4
- A. Exercise #3 is due.
- 25, Wed. MOST PROBABLE USE MATRIX
- A. "The Interactive Design/Marketing Model in Determining Highest and Best Use," James R. DeLisle, Appraisal Journal, July 1985 Mimeo
- B. "Toward Analytically Precise Definitions of Market Value and Highest and Best Use," Kerry D. Vandell, Appraisal Journal, April 1982. Mimeo
- C. "The Decision-tree Payoff: A Graphic Approach to Highest and Best Use," Brian Goodheim, Appraisal Journal, Oct., 1982 Mimeo
- 30, Mon. MOST PROBABLE BUYER PROFILE
- A. "Market Value: A Contemporary Perspective," Peter F. Korpacz and Richard Marchitelli, Appraisal Journal, October 1984. Mimeo
- B. "Market Value: Contemporary Applications," Korpacz and Marchitelli, Appraisal Journal, July, 1985 Mimeo
- C. Appraisal of 25 N. Pinckney, Pp. 63-71. Text
- D. Valuation for Real Estate Decisions, R.U. Ratcliff, Chapters 6 and 7. Text
- E. "Value Spread: The Effects of Occupancy, Financing, and Buyer/Seller Motivations on Most Probable Selling Price," Eric T. Reenstierna, Real Estate Appraiser and Analyst, Summer 1983, Pp. 39-43 Mimeo
- Oct. 1, Tues. WRITING LAB #5
- A. Exercise #4 is due.
- 2, Wed. MARKET PRICE COMPARISON METHOD
- A. Appraisal of 25 N. Pinckney, pp. 71-81, 106-123. Text
- B. "Don't Underrate the Gross Income Multiplier," R.U. Ratcliff, Appraisal Journal, Apr., 1971. R-Text
- C. The Ratgram Model with a Dilmore Algorithm Mimeo
- 7, Mon. MARKET PRICE COMPARISON METHODS (CONTINUED)
- A. "Common Sense About Cash Equivalency," Peter J. Patchin, Appraisal Journal, July 1985, pp. 340-346 Mimeo

- B. "Discount Rates for Cash Equivalent Analysis," Joseph Lipscomb, Appraisal Journal, Jan. 1981. Mimeo
- C. "Seller Financing and Cash Equivalence," Jack Friedman and Bruce Indeman, The Real Estate Appraiser and Analyst, May/June, 1979, pp. 46-50. Mimeo
- 8, Tues. LAB #6 DATA POOL REVIEW FOR APPRAISAL
- 9, Wed. INTRODUCTION TO MKTCOMP
- A. "Comparable Sales Selection--A Computer Approach," Arnold Tchira, The Appraisal Journal, Jan. 1979. Mimeo
- B. "Automating the Market Comparison Approach," George Gipe, Assessors Journal, Sept. 1978, pp. 123-133. Mimeo
- C. Sample Mulvar output Mimeo
- D. "Appraising Houses," Gene Dilmore, Real Estate Appraiser, July -Aug. 1974. Mimeo
- 14, Mon. MKTCOMP AND MAPLE BLUFF - DAVIS
- A. Sample Maple Bluff assessment package Mimeo
- 15, Tues. LAB #7 STATISTICAL APPRAISAL TOOLS
- A. "Do Not Demean the Mean," Robert C. Mason, The Appraisal Journal, Jan. 1977. Mimeo
- B. "Technology of Information Processing & Data Basing," Gene Dilmore, 1984 Valuation Colloquium, pp. 8-49. Mimeo
- C. "Theory and Methods of Social Measurement," Clyde H. Coombs. Mimeo
- D. "Error and Risk in Property Value Estimates," W. Porcher Miles, The Appraisal Journal, October, 1980, pp. 540-548. Mimeo
- E. Chapters 1 and 4, Quantitative Techniques in Real Estate Counseling, Gene Dilmore, Lexington Books, Lexington, MA 1981. Mimeo
- 16, Wed. SIMULATION OF BUYER CALCULUS - THE INCOME APPROACH
- A. Valuation for Real Estate Decisions, R.U. Ratcliff, Chapters 8-10. R-Text
- B. "Babcock Revisited - A Return to Fundamentals," Edited by M.B. Hodges. Mimeo

- C. "The Behavior of ppraisers in Valuing Income Property: A Status Report," Kenneth M. Lusht, The Real Estate Appraiser and Analyst, July -Aug., 1979. Mimeo
- D. "Annotated Bibliography for Modernization in Valuation of Investment Classed Real Estate," McCloud B. Hodges, Jr., Feb. 1981. Mimeo
- 18, Fri. REAL ESTATE ALUMNI SEMINARS
- 21, Mon. DISCOUNTED CASH FLOW APPROACH
- A. "Changing Emphasis in Appraisal Techniques: The Transition to Discounted Cash Flow," Korpacz & Roth, Appraisal Journal, Jan. '83, pp. 21-44. Mimeo
- B. "Debt Financing, Syndication & Real Property Value," Ken Lusht, pp. 1-23. Mimeo
- C. "Appraising the Best Tax Shelter in History," Roddewig & Shlaes, Appraisal Journal, Jan. '82. Mimeo
- D. "Simultaneous Valuation: A New Capitalization Technique for Hotel & Other Income Properties," Suzanne Mellen, The Appraisal Journal, Apr. 1983, pp. 165-189. Mimeo
- 22, Tues. LAB #8 - REVIEW OF ATV MODELS
- A. ATV Valuation Model Mimeo
- B. VALTEST Mimeo
- C. Grant Systems - Rent Roll Analysis Mimeo
- D. Lotus 1-2-3 to feed MRCAP Mimeo
- 23, Wed. DISCOUNT RATES AND CAP RATES
- A. "Component Capitalization," Gene Dilmore, Real Estate Issues, Spring/Summer 1985. Mimeo
- B.
- 28, Mon. TESTING APPRAISAL PRICE CONCLUSIONS
- A. VALTEST
- 29, Tues. LAB #9 - OPTIONAL REVIEW FOR EXAM
- 30, Wed. MID-TERM EXAM

Nov. 4, Mon.

## NORMATIVE METHODS - THE COST APPROACH

- A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chapters 5, 12, 13. Text
- B. "Kahn on the Entrepreneur," Sanders A. Kahn, The Appraisal Journal, 1973. Mimeo
- C. Marshall & Swift Computerized Cost Estimating System, Case Example Handout

5, Tues.

NO CLASS

6, Wed.

## NORMATIVE METHODS - LAND VALUATION

- A. Valuation for Real Estate Decisions, R.U. Ratcliff, Chapter 11. R-Text
- B. "The Sales Comparison Versus the Market Data Approach to Farm Real Estate Values," Robert C. Suter, The Real Estate Appraiser and Analyst, Fall, 1983, pp. 22-30 Mimeo
- C. "Lease and Fee-Hold Price Differentials in Hawaii," Richard A. Palfin, The Appraisal Journal, April, 1979, pp. 227-242
- D. "Development Method of Land Appraisal," James H. Boykin, Appraisal Journal, Apr. '76 Mimeo
- E. "Subdivision Analysis: A Case Study," Marvin A. Maes, The Appraisal Journal, Jan. 1982. Mimeo

11, Mon.

FIRST DRAFT OF APPRAISAL REPORT DUE AT CLASS TIME - LATE PAPERS PENALIZED

12, Tues.

LAB #10 - PROPER TITLES FOR CHARTS AND GRAPHS

13, Wed.

## NORMATIVE METHODS - MULTIPLE REGRESSION

- A. Chapter 5, Quantitative Techniques in Real Estate Counseling, Gene Dilmore, Lexington Books, Lexington, MA 1981 Mimeo
- B. "Multiple Regression Analysis & The Appraisal Process, Jerome Dasso, The Real Estate Appraiser, March-April 1973 Mimeo
- C. "The Use of multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, Appraisal Journal, Sept. 1976 Mimeo

18, Mon.

## APPRAISAL FOR TAX ASSESSMENT APPEAL

- A. LaFollet Section 8 Apartments
- B. "Appraisal for Assessment of a Major Industrial Property," S.M. Dix, Assessors Journal, March 1979, pp. 1-14. Mimeo

- C. "FHA 236 Housing Projects: Some Thoughts on Valuation," William B. Jackson, State of California, Board of Equalization. Mimeo
- 19, Tues. LAB #11 - APPRAISAL REPORT GRAPHICS
- 20, Wed. APPRAISAL FOR CONDEMNATION (CONTINUED)
- A. Valuation for Real Estate Decisions, R.U. Ratcliff, Chapter 14. R-Text
- B. Chapter 32, Wisconsin Statutes Mimeo
- C. Chapters 1-6, Real Estate Valuation Litigation, J. D. Eaton, pp. 1-100 Mimeo
- D. Chapter 11, "Damages in Partial Taking Cases," Real Estate Valuation in Litigation, J.D. Eaton, 1982, pp. 175-200 Mimeo
- 25, Mon. APPRAISAL FOR CONDEMNATION, CONTINUED
- A. Rules of Compensability and Valuation Evidence for Highway and Acquisition, Highway Research Program Report, Dean T. Masseyk University of Wisconsin, Madison, WI
- Chap. 2: Qualifications of Witnesses Giving Opinion Evidence
- Chap. 4: Admissibility of Evidence of Sales of Similar Properties
- Chap. 5: Admissibility of Evidence of Sales
- Chap. 6: Admissibility of Evidence of INcome of the Subject Property
- Chap.11: Admissibility of Evidence of Reputation or Sentimental Value
- Chap.12: Admissibility of Evidence of Highest and Best Use of Property
- Chap.13: Admissibility of Photographics or Other Visual Aids
- 26, Tues. ART OF CROSS EXAMINATION - VIDEO LAB #12
- 27, Wed. APPRAISAL FOR LITIGATION
- A. "The Expert Witness From A Lawyer's Viewpoint," Fred Winner, Condemnation Appraisal Practice, pp. 445-452. Mimeo
- B. "What is Expected of the Expert Witness ? John D. Cochran, Condemnation Appraisal Practice, pp. 453-460. Mimeo

## STANDARDS FOR THE APPRAISAL PRODUCT

4. Med.

## ECONOMICS OF THE APPRAISAL BUSINESS

9. Mon.

## STANDARDS FOR APPRAISAL ETHICS

- A. "Standards of Professional Practice Conduct,  
Real Estate Appraiser and Analyst,  
Jan.-Feb., 1980, pp. 18-33. Mimeo
- B. "The Liability of the Appraiser (1933),"  
J. George Mead, "Appraisal Liability (1982):  
Who May Sue," Morgan D. S. Prickett,  
The Appraisal Journal, July, 1982 Mimeo
- C. "The Role of the Professional Appraiser in the  
1980's," Carroll Pennell, II, The Appraisal  
Journal, April, 1981, pp. 205-213. Mimeo
- D. "Certification of Appraisers: Issues,  
Dilemmas, and Prospects," David Nielsen,  
Appraisal Journal, April, 1981, pp. 259-270. Mimeo
- E. "Tax Counsel's Responsibility to Review Appraisals  
in Offering Materials," Committee on Real Estate  
Tax Problems, Section of Taxation, American Bar  
Assoc., 1984, pp. 1-52. Mimeo
- F. 9051. Abusive Tax Shelter Promoters Subject to  
Penalty and Injunction, IRS Administrative Rules. Mimeo

11, Wed.

## FINAL EXAM

18. Wed.

FINAL APPRAISAL REPORT DUE BY 5:00 p.m.

## Business 856

### Appraisal Seminar - Semester I

First Semester 1986

Instructors: J. A. Graaskamp  
G. Mittnacht

#### I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

#### II. General Course Format

It is advised that you read the material in advance of class. There will be two two-hour written exams on this material. On each Tuesday there will be a seventy-five minute workshop on English composition and on report techniques. There will be two property appraisal reports: Each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely redone as a final report. Final grade will be based on total points scored on the first draft appraisal (30%), the redraft appraisal (20%), and 50% on two exams.

#### III. Textbooks

Recommended for purchase:

- \* THE COMPLETE PROBLEM SOLVER, John R. Hayes, The Franklin Press Institute, 1981
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- \* THE APPRAISAL OF 25 N. PINCKNEY: A DEMONSTRATION CASE FOR CONTEMPORARY APPRAISAL METHODS, J. A. Graaskamp, 1977 (\$10.00)  
Packet of mimeos and assorted text materials (See Bob's Copy Shop, 1314 W. Johnson Street)
- \* TECHNIQUES FOR WRITING BUSINESS REPORTS, Frances Larson, Landmark Research, Madison, WI 1979 (\$9.00)
- THE ELEMENTS OF STYLE, William Strunk, Jr. & E. B. White, McMillan Publishing Co., Inc., New York, 1972
- MANUAL FOR WRITERS OF TERM PAPERS, THESES, AND RESEARCH PAPERS, Kate L. Turabian, 4th Edition, University of Chicago Press

\*Books can be purchased from the University Book Store. No Credit!

NOTE: ALL PAPERS AND EXERCISES TO BE HANDED IN SHOULD BE STAPLED IN UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT PLASTIC BINDERS OR OTHER SIMILAR COVERS.

ADVANCED REAL ESTATE APPRAISAL - BUS 856  
Topic Schedule, Fall 1986

- Sept. 3, W THE APPRAISAL PROCESS - INTRODUCTION  
8, M DECISION - MAKING MODELS  
9, T WRITING LAB #1 (Exercise #1 assigned)  
10, W RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS  
15, M RATCLIFF RESTATEMENT CONTINUED  
16, T WRITING LAB #2 (Exercise #1 due)  
17, W DEFINING THE APPRAISAL PROBLEM AND CONSTRAINTS  
22, M PROPERTY DESCRIPTION, AND IDENTIFICATION OF ALTERNATIVE USES  
23, T WRITING LAB #3 (Exercise #2 due)  
24, W MOST PROBABLE USE MATRIX  
29, M MOST PROBABLE BUYER PROFILE  
30, T WRITING LAB #4 (Exercise #3 due)
- Oct. 1, W MARKET PRICE COMPARISON METHODS  
6, M MARKET PRICE COMPARISON METHODS CONTINUED  
7, T WRITING LAB #5 -- DATA REVIEW FOR APPRAISAL  
8, W INTRODUCTION TO MKTCOMP - ROBBINS  
13, M MKTCOMP AND MAPLE BLUFF - DAVIS  
14, T WRITING LAB #6 (Exercise #5 due)  
STATISTICAL APPRAISAL TOOLS  
15, W SIMULATION OF BUYER CALCULUS -- THE INCOME APPROACH  
20, M DISCOUNTED CASH FLOW APPROACH  
21, T WRITING LAB #7 (Exercise 6 due)  
REVIEW OF ATV MODELS  
22-25 ULI - CHICAGO  
27, M TESTING APPRAISAL PRICE CONCLUSIONS



28, T WRITING LAB #8  
REVIEW FOR EXAM

29, W MIDTERM EXAM

Nov. 3, M NORMATIVE METHODS -- THE COST APPROACH

4, T NO CLASS

5, W NORMATIVE METHODS -- LAND VALUATION

10, M FIRST DRAFT OF APPRAISAL REPORT DUE BY START OF CLASS -- LATE  
PAPERS PENALIZED

11, T WRITING LAB #9  
PROPER TITLES FOR CHARTS AND GRAPHS

12, W NORMATIVE METHODS -- MULTIPLE REGRESSION

17, M APPRAISAL FOR REAL ESTATE TAX ASSESSMENT APPEAL

18, T APPRAISAL GRAPHICS, LAB 10

19, W APPRAISAL FOR CONDEMNATION

24, M APPRAISAL FOR CONDEMNATION CONTINUED

25, T ART OF CROSS EXAMINATION - VIDEO: LAB 11

26, W APPRAISAL FOR LITIGATION

Dec. 1, M STANDARDS FOR THE APPRAISAL PRODUCT

3, W STANDARDS FOR THE APPRAISAL PRODUCT CONTINUED

8, M STANDARDS FOR APPRAISAL ETHICS

10, W FINAL EXAM

11, W FINAL APPRAISAL REPORT DUE BY 5 P.M. -- LATE PAPERS PENALIZED

BUS 856 - Fall 1986

Prof. James A. Graaskamp

Class Period Readings

- Sept. 3, Wed.      THE APPRAISAL PROCESS - INTRODUCTION
- A. The Complete Problem Solver, John R. Hayes, Chap. 1-3, pp. 1-70. Mimeo
  - B. "Institutional and Urban Land Economics" Recent Perspectives in Urban Land Economics, Vancouver, British Columbia: University of British Columbia. R-Text
  - C. Program B - Contemporary Income Property Approach, James A. Graaskamp, July 9-12, 1986. Mimeo
  - D. "Technology of Information Processing & Data Basing," Gene Dillmore, Value Colloquium, 1984, pp. 1-7. Mimeo
- 8, Mon.      DECISION-MAKING MODELS
- A. The Complete Problem Solver, Chap. 7-9, pp. 145-196. Mimeo
  - B. "A Rational Approach to Feasibility Analysis," J. A. Graaskamp, Appraisal Journal, Oct. '72. Mimeo
  - C. Valuation for Real Estate Decisions, R.U. Ratcliff, Chap. 1-3. R-Text
  - D. "Development of Value Theory to its Present State," James H. Boykin, Value Colloquium, Boston, June, 1984. Mimeo
- 9, Tues.      WRITING LAB #1
- A. The Elements of Style, Strunk and White Text
  - B. "Writing Appraisal Reports," by E. Leon Mason, Bureau of Reclamation, pp. 1-29. Mimeo
- 10, Wed.      RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS
- A. Section One and Two, The Appraisal of 25 N. Pinckney Text
  - B. Valuation for Real Estate Decisions, Chap. 4 R-Text

Bus. 856 Fall 1986

Sept. 15, Mon. THE RATCLIFF RESTATEMENT CONTINUED

- A. "A Critique of the Prevailing Definition of Market Value," Harold Albritton, Appraisal Journal, April, 1980, pp. 199-205. Mimeo
- B. "Data, The Appraisal Process, and the Market Value Definition," Kenneth M. Lusht, Appraisal Journal, Oct., 1981. Mimeo
- C. A Statistically Oriented Definition of Market Value," Peter F. Colwell, Appraisal Journal, Jan. 1979, pp. 53-58. Mimeo
- D. "The Market in Market Value," by Jared Shlaes, MAI, Oct., 1984, The Appraisal Journal, pp. 494-518. Mimeo

16, Tues. WRITING LAB #2 (EXERCISE #1 DUE)

17, Wed. DEFINING THE APPRAISAL PROBLEM AND CONSTRAINTS

- A. "Guidelines for Understanding and Reviewing Real Estate Appraisal Reports," Edwin Rams, Appraisal Review Journal, pp. 60-67. Mimeo
- B. "How to Write a Poor Report," Charles B. Smith, Appraisal Journal, April 1973. Mimeo
- C. "Problem Definition Between the Appraiser and Client," Haskell Berry Jr., Appraisal Journal, April 1984. Mimeo

22, Mon. PROPERTY DESCRIPTION AND IDENTIFICATION OF ALTERNATIVE USES

- A. "The Semantics Debate: Highest and Best Use Vs. Most Probable Use," Terry V. Grissom, Appraisal Journal, Jan., 1983. Mimeo
- B. The Appraisal of 25 N. Pinckney, pp. 14-62. Text
- C. Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code, Chapter 50, Administration and Enforcement, Chapters 52, 53, 54. Bus. Lib.

23, Tues. WRITING LAB #3 (EXERCISE #2 IS DUE)

24, Wed. MOST PROBABLE USE MATRIX .

- A. "Toward Analytically Precise Definitions of Market Value and Highest and Best Use," Kerry D. Vandell, Appraisal Journal, April 1982. Mimeo
- B. "The Decision-tree Payoff: A Graphic Approach to Highest and Best Use," Brian Goodheim, Appraisal Journal, Oct., 1982. Mimeo

Bus. 856 Fall 1986

Sept. 29, Mon.

MOST PROBABLE BUYER PROFILE

- A. "Market Value: A Contemporary Perspective,"  
Peter F. Korpacz and Richard Marchitelli,  
Appraisal Journal, October 1984. Mimeo
- B. "Market Value: Contemporary Applications,"  
Peter F. Korpacz and Richard Marchitelli,  
Appraisal Journal, July, 1985 Mimeo
- C. Appraisal of 25 N. Pinckney, pp. 63-71. Text
- D. Valuation for Real Estate Decisions, R.U.  
Ratcliff, Chap. 6-7. Text
- E. "Value Spread: The Effects of Occupancy,  
Financing, and Buyer/Seller Motivations on  
Most Probable Selling Price," Eric T. Reenstierna,  
Real Estate Appraiser and Analyst, Summer 1983,  
pp. 39-43. Mimeo

30, Tues.

WRITING LAB #4 (EXERCISE #3 IS DUE)

Oct. 1, Wed.

MARKET PRICE COMPARISON METHOD

- A. Appraisal of 25 N. Pinckney, pp. 71-81, 106-123. Text
- B. "Don't Underrate the Gross Income Multiplier,"  
R.U. Ratcliff, Appraisal Journal, April 1971. R-Text
- C. The Ratgram Model with a Dilmore Algorithm Mimeo

6, Mon.

MARKET PRICE COMPARISON METHODS (CONTINUED)

- A. "Common Sense About Cash Equivalency," Peter  
J. Patchin, Appraisal Journal, July 1985,  
pp. 340-346. Mimeo

7, Tues.

WRITING LAB #5 DATA POOL REVIEW FOR APPRAISAL  
(EXERCISE #4 IS DUE)

8, Wed.

INTRODUCTION TO MKTCOMP - ROBBINS

- A. "Comparable Sales Selection--A Computer  
Approach," Arnold Tchira, The Appraisal  
Journal, Jan. 1979. Mimeo
- B. MULVAR - The computer assisted appraisal  
system Mimeo
- C. "Appraising Houses," Gene Dilmore, Real  
Estate Appraiser, July-Aug. 1974. Mimeo

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Oct. 13, Mon.

MKTCOMP AND MAPLE BLUFF - DAVIS

- A. Sample Maple Bluff assessment package Mimeo

14, Tues.

LAB #6 STATISTICAL APPRAISAL TOOLS  
(EXERCISE #5 IS DUE)

- A. "Do Not Demean the Mean," Robert C. Mason,  
The Appraisal Journal, Jan. 1977. Mimeo
- B. "Technology of Information Processing & Data  
Basing," Gene Dilmore, 1984 Valuation  
Colloquium, pp. 8-49. Mimeo
- C. "Theory and Methods of Social Measurement,"  
Clyde H. Coombs. Mimeo
- D. "Error and Risk in Property Value Estimates,"  
W. Porcher Miles, The Appraisal Journal,  
October, 1980, pp. 540-548. Mimeo
- E. Chapters 1 and 4, Quantitative Techniques in  
Real Estate Counseling, Gene Dilmore,  
Lexington Books, Lexington, MA 1981. Mimeo

15, Wed.

SIMULATION OF BUYER CALCULUS - THE INCOME APPROACH

- A. Valuation for Real Estate Decisions, R.U.  
Ratcliff, Chapters 8-10. R-Text
- B. "Babcock Revisited - A Return to Fundamentals,"  
Edited by M.B. Hodges. Mimeo
- C. "The Behavior of Appraisers in Valuing Income  
Property: A Status Report," Kenneth M. Lusht,  
The Real Estate Appraiser and Analyst,  
July-Aug., 1979. Mimeo
- E. "Annotated Bibliography for Modernization in  
Valuation of Investment Classed Real Estate,"  
McCloud B. Hodges, Jr., Feb. 1981. Mimeo

20, Mon.

DISCOUNTED CASH FLOW APPROACH

- A. "Changing Emphasis in Appraisal Techniques:  
The Transition to Discounted Cash Flow,"  
Korpacz & Roth, Appraisal Journal, Jan. '83,  
pp. 21-44. Mimeo
- B. "Debt Financing, Syndication & Real Property  
Value," Ken Lusht, pp. 1-23. Mimeo
- C. "Appraising the Best Tax Shelter in History,"  
Roddewig & Shlaes, Appraisal Journal, Jan. '82. Mimeo

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- Oct. 20, Mon. DISCOUNTED CASH FLOW APPROACH  
(continued)
- D. "Simultaneous Valuation: A New Capitalization Technique for Hotel & Other Income Properties," Suzanne Meilen, The Appraisal Journal, Apr. 1983, pp. 165-189. Mimeo
  - E. "Component Capitalization," Gene Dilmore, Real Estate Issues, Spring/Summer 1985. Mimeo
- 21, Tues. LAB #7 - REVIEW OF ATV MODELS
- A. ATV Valuation Model
  - B. VALTEST
- 22-25 ULI CHICAGO TRIP
- 27, Mon. TESTING APPRAISAL PRICE CONCLUSIONS
- A. VALTEST
- 28, Tues. LAB #8 - OPTIONAL REVIEW FOR EXAM
- 29, Wed. \* \* MID-TERM EXAM \* \*
- 
- Nov. 3, Mon. NORMATIVE METHODS - THE COST APPROACH
- A. Valuation for Real Estate Decisions, R.U. Ratcliff, Chapters 5, 12, 13. Text
  - B. "The Entrepreneur," Sanders A. Kahn, The Appraisal Journal, 1973. Mimeo
- 4, Tues. NO CLASS
- 5, Wed. NORMATIVE METHODS - LAND VALUATION
- A. Valuation for Real Estate Decisions, R.U. Ratcliff, Chapter 11. R-Text
  - B. "The Sales Comparison Versus the Market Data Approach to Farm Real Estate Values," Robert C. Suter, The Real Estate Appraiser and Analyst, Fall, 1983, pp. 22-30. Mimeo
  - C. "Lease and Fee-Hold Price Differentials in Hawaii," Richard A. Palfin, The Appraisal Journal, April, 1979, pp. 117-242. Mimeo
  - D. "Development Method of Land Appraisal," James Boykin, Appraisal Journal, Apr. '76. Mimeo

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- Nov. 5, Wed. NORMATIVE METHODS - LAND VALUATION  
(continued)
- E. "Subdivision Analysis: A Case Study," Marvin A. Maes, The Appraisal Journal, Jan. 1982. Mimeo
- 10, Mon. FIRST DRAFT OF APPRAISAL REPORT DUE AT CLASS TIME - LATE PAPERS PENALIZED
- 11, Tues. LAB #9 - PROPER TITLES FOR CHARTS AND GRAPHS
- 12, Wed. NORMATIVE METHODS - MULTIPLE REGRESSION
- A. Chapter 5, Quantitative Techniques in Real Estate Counseling, Gene Dilmore, Lexington Books, Lexington, MA 1981 Mimeo
- B. "Multiple Regression Analysis & The Appraisal Process," Jerome Dasso, The Real Estate Appraiser March-April 1973. Mimeo
- C. "The Use of Multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, Appraisal Journal, Sept. 1976. Mimeo
- 17, Mon. APPRAISAL FOR TAX ASSESSMENT APPEAL
- A. LaFollette Section 8 Apartments Mimeo
- B. "Appraisal for Assessment of a Major Industrial Property," S.M. Dix, Assessors Journal, March 1979, pp. 1-14. Mimeo
- C. "FHA 236 Housing Projects: Some Thoughts on Valuation," William B. Jackson, State of California, Board of Equalization. Mimeo
- 18, Tues. LAB #10 - APPRAISAL REPORT GRAPHICS
- 19, Wed. APPRAISAL FOR CONDEMNATION (CONTINUED)
- A. Valuation for Real Estate Decisions, R.U. Ratcliff, Chapter 14. R-Text
- B. Chapter 32, Wisconsin Statutes Mimeo
- C. Chapters 1-6, Real Estate Valuation Litigation, J. D. Eaton, pp. 1-100 Mimeo
- D. Chapter 11, "Damages in Partial Taking Cases," Real Estate Valuation in Litigation, J.D. Eaton, 1982, pp. 175-200 Mimeo

Bus. 856 Fall 1986

24, Mon.

APPRAISAL FOR CONDEMNATION, CONTINUED

- A. Rules of Compensability and Valuation Evidence for Highway and Acquisition, Highway Research Program Report, Dean T. Masseyk University of Wisconsin, Madison, WI

Chap. 2: Qualifications of Witnesses Giving Opinion Evidence

Chap. 4: Admissibility of Evidence of Sales of Similar Properties

Chap. 5: Admissibility of Evidence of Sales

Chap. 6: Admissibility of Evidence of Income of the Subject Property

Chap.11: Admissibility of Evidence of Reputation or Sentimental Value

Chap.12: Admissibility of Evidence of Highest and Best Use of Property

Chap.13: Admissibility of Photographics or Other Visual Aids

25, Tues.

ART OF CROSS EXAMINATION - VIDEO LAB #12

26, Wed.

APPRAISAL FOR LITIGATION

- A. "The Expert Witness From A Lawyer's Viewpoint," Fred Winner, Condemnation Appraisal Practice, pp. 445-452.

Mimeo

- B. "What is Expected of the Expert Witness ?" John D. Cochran, Condemnation Appraisal Practice, pp. 453-460.

Mimeo

Dec. 1, Mon.

STANDARDS FOR THE APPRAISAL PRODUCT

- A. "Why All the Ruckus Over R41 b," David Lennhoff, The Appraisal Journal, July, 1984, pp. 443-447.

Mimeo

- B. "What the Real Estate Appraiser Should Know About Real Estate Securities," Fred Chippendale, AIREA, 1974.

Mimeo

- C. "Guidance Notes on the Valuation of Assets," 2nd Edition, The Assets Valuation Standards Committee, Royal Institute of Chartered Surveyors, April, 1981.

Mimeo

- D. Examples of Letters of Engagement



Bus. 856 Fall 1986

Dec. 3, Wed.

# STANDARDIZATION OF THE APPRAISAL BUSINESS

- A. "Institutional Constraints on Redefinition and Reform of the Appraisal Process," James A. Graaskamp, Appraisal Colloquium, 1984.

Mimeo

8, Mon.

# STANDARDS FOR APPRAISAL ETHICS

- A. "Standards of Professional Practice Conduct, : Real Estate Appraiser and Analyst, Jan.-Feb., 1980, pp. 18-33.

Mimeo

- B. "The Liability of the Appraiser (1933)," J. George Mead, "Appraisal Liability (1982): Who May Sue," Morgan D. S. Prickett, The Appraisal Journal, July, 1982

Mimeo

- C. "The Role of the Professional Appraiser in the 1980's," Carroll Pennell, II, The Appraisal Journal, April, 1981, pp. 205-213.

Mimeo

- D. "Certification of Appraisers: Issues, Dilemmas, and Prospects," David Nielsen, Appraisal Journal, April, 1981, pp. 259-270.

Mimeo

10, Wed.

\* \* FINAL EXAM \* \*

17, Wed.

FINAL APPRAISAL REPORT DUE BY 5:00--LATE PAPERS PENALIZED

Appraisal Seminar - Semester I

First Semester 1987

Instructors: J. A. Graaskamp  
G. Mittnacht

I. Objectives

The purpose of this course is to provide the student with advanced appraisal techniques and possible reforms of appraisal theory currently prescribed by the professional appraisal organizations. The course assumes the student has successfully completed 556 or two basic professional courses on the standard mechanics of appraisal. The course will stress a complex field problem and English composition for report writing.

II. General Course Format

It is advised that you read the material in advance of class. there will be two two-hour written exams on this material. On each Tuesday there will be a seventy-five minute workshop on English composition and on report techniques. There will be two property appraisal reports: Each student will do a complete first draft appraisal utilizing Ratcliff-Graaskamp approach and outline. The report will be graded on appraisal and on composition and returned to be completely redone as a final report. Final grade will be based on total points scored on the first draft appraisal (30%), the redraft appraisal (20%), and 50% on two exams.

III. Textbooks

Recommended for purchase:

\*RATCLIFF READINGS ON APPRAISAL AND ITS FOUNDATION ECONOMICS, R. U. Ratcliff, Landmark Research, Madison, WI, 1979.

\*THE APPRAISAL OF 25 N. PINCKNEY: A DEMONSTRATION CASE FOR CONTEMPORARY APPRAISAL METHODS, J. A. Graaskamp, 1977.

Packet of mimeos and assorted text materials (See Bob's Copy Shop, 1314 W. Johnson Street)

\*TECHNIQUES FOR WRITING BUSINESS REPORTS, Frances Larson, Landmark Research, Madison, WI, 1979.

ELEMENTS OF STYLE, William Strunk, Jr. & E. B. White, McMillan Publishing Co., Inc., New York, 1972.

MANUAL FOR WRITERS OF TERM PAPERS, THESES, AND RESEARCH PAPERS, Kate L. Turabian, 4th Edition, University of Chicago Press.

\*Books can be purchased from the University Book Store. No Credit!

NOTE: ALL PAPERS AND EXERCISES TO BE HANDED IN SHOULD BE STAPLED IN UPPER LEFT HAND CORNER AND GIVEN A TITLE PAGE BUT LEFT WITHOUT PLASTIC BINDERS OR OTHER SIMILAR COVERS.

ADVANCED REAL ESTATE APPRAISAL - BUS 856  
Topic Schedule, Fall 1987

|       |    |   |                                                                         |
|-------|----|---|-------------------------------------------------------------------------|
| Sept. | 2  | W | THE APPRAISAL PROCESS - INTRODUCTION                                    |
|       | 9  | W | DECISION MAKING MODELS                                                  |
|       | 14 | M | RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS                           |
|       | 15 | T | WRITING LAB #1                                                          |
|       | 16 | W | RATCLIFF RESTATEMENT - CONTINUED                                        |
|       | 21 | M | DEFINING THE APPRAISAL PROBLEM & CONSTRAINTS                            |
|       | 22 | T | WRITING LAB #2 (EXERCISE #1 DUE)                                        |
|       | 23 | W | PROPERTY DESCRIPTION & IDENTIFICATION OF ALTERNATIVE USES               |
|       | 28 | M | MOST PROBABLE USE MATRIX & MOST PROBABLE BUYER PROFILE                  |
|       | 29 | T | WRITING LAB #3 (EXERCISE #2 DUE)                                        |
|       | 30 | W | MARKET PRICE COMPARISON METHODS - DEFINING COMPARABLES                  |
| Oct   | 5  | M | MARKET PRICE COMPARISON METHODS - TRADITIONAL                           |
|       | 6  | T | WRITING LAB #4 (EXERCISE #3 DUE)                                        |
|       | 7  | W | MARKET PRICE COMPARISON - QP METHOD                                     |
|       | 12 | M | MARKET COMPARISON METHODS - MKTCOMP (ROBBINS)                           |
|       | 13 | T | WRITING LAB #5 (EXERCISE #4 DUE)                                        |
|       | 14 | W | MARKET COMP AND MAPLE BLUFF (DAVIS)                                     |
|       | 19 | M | SIMULATION OF BUYER CALCULUS - THE INCOME APPROACH                      |
|       | 20 | T | WRITING LAB #6 (EXERCISE #5 DUE)                                        |
|       | 21 | W | DEFINING NET INCOME, CASH THROWOFF, AND THIRD PARTY FINANCING           |
|       | 23 | F | REAL ESTATE ALUMNI SEMINAR - CONCOURSE HOTEL                            |
|       | 26 | M | MARKET RENTS VS. CONTRACT RENTS - LEASE ANALYSIS & ROLLOVER ASSUMPTIONS |
|       | 28 | W | CONVERTING INCOME PROJECTIONS TO PROBABLE PRICE                         |

|      |    |   |                                                                                                                                                                                           |
|------|----|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nov. | 2  | M | * * <u>MID-SEMESTER EXAM</u> * *                                                                                                                                                          |
|      | 3  | T | WRITING LAB #7 - FINAL REVIEW OF APPRAISAL DATA                                                                                                                                           |
|      | 4  | W | TESTING APPRAISAL PRICE CONCLUSIONS                                                                                                                                                       |
|      | 9  | M | FIRST DRAFT OF APPRAISAL REPORT DUE AT START OF CLASS -<br>LATE PAPERS PENALIZED                                                                                                          |
|      | 11 | W | NORMATIVE METHODS - THE COST APPROACH                                                                                                                                                     |
|      | 16 | M | NORMATIVE METHODS - LAND VALUATION AND SUBDIVISIONS                                                                                                                                       |
|      | 18 | W | APPRAISAL FOR REAL ESTATE ASSESSMENT - ISSUES AND CONSTRAINTS                                                                                                                             |
|      | 23 | M | APPRAISAL FOR CONDEMNATION AND LITIGATION                                                                                                                                                 |
|      | 24 | T | WRITING LAB - VIDEO - ART OF CROSS EXAMINATION                                                                                                                                            |
|      | 25 | W | APPRAISAL FOR CONDEMNATION - CONTINUED                                                                                                                                                    |
|      | 30 | M | PUBLIC AND PRIVATE CONTROLS ON THE APPRAISAL PROCESS                                                                                                                                      |
| Dec. | 2  | W | CHANGING STANDARDS FOR APPRAISAL PROFESSIONAL GROUPS                                                                                                                                      |
|      | 7  | M | THE BUSINESS OF APPRAISAL                                                                                                                                                                 |
|      | 9  | W | LETTERS OF ENGAGEMENT                                                                                                                                                                     |
|      | 14 | M | * * * <u>FINAL EXAM</u> * * *                                                                                                                                                             |
|      | 23 | W | FINAL APPRAISAL REPORT DUE BY 5:00 P.M. IF YOU EXPECT TO<br>GRADUATE IN DECEMBER OF 1987. FAILURE TO MAKE THE CUTOFF MEANS<br>THE UNIVERSITY WILL CHARGE YOU EXTRA FOR GRADUATING IN MAY. |

Class Period Reading

Prof. James A. Graaskamp

Sept. 2, Wed. THE APPRAISAL PROCESS - INTRODUCTION

- A. The Complete Problem Solver, John R. Hayes, Chap. 1-3, pp. 1-70. Mimeo
- B. "Institutional and Urban Land Economics," Recent Perspectives in Urban Land Economics, Vancouver, British Columbia: University of British Columbia. R-Text
- C. Program B - Contemporary Income Property Approach, James A. Graaskamp, July 1-12, 1986. Lecture Package
- D. "Technology of Information Processing & Data Basing," Gene Dilmore, Value Colloquium, 1984, pp. 1-7. Mimeo

Sept. 9, Wed. DECISION-MAKING MODELS

- A. The Complete Problem Solver, Chap. 7-9, pp. 145-196. Mimeo
- B. "A Rational Approach to Feasibility Analysis," J. A. Graaskamp, Appraisal Journal, Oct. 1972. Mimeo
- C. Valuation for Real Estate Decisions, R. U. Ratcliff, Chap. 1-3. R-Text
- D. "Development of Value Theory to Its Present State," James H. Boykin, Value Colloquium, Boston, June, 1984. Mimeo

Sept. 14, Mon. RATCLIFF RESTATEMENT OF THE APPRAISAL PROCESS

- A. Section One and Two, The Appraisal of 25 N. Pinckney. Text
- B. Valuation for Real Estate Decisions, Chap. 4. R-Text

Sept. 15, Tues. WRITING LAB #1

- A. The Elements of Style, Strunk and White. Text
- B. "Writing Appraisal Reports," by E. Leon Mason, Bureau of Reclamation, pp. 1-29. Mimeo
- C. "How to Write a Poor Report," Charles B. Smith, The Appraisal Journal, April 1973.

Sept. 16, Wed. THE RATCLIFF RESTATEMENT CONTINUED

- A. "A Critique of the Prevailing Definition of Market Value," Harold Albritton, Appraisal Journal, April, 1980, pp. 199-205. Mimeo
- B. "Data, The Appraisal Process, and the Market Value Definition," Kenneth M. Lusht, Appraisal Journal, Oct. 1981. Mimeo
- C. "The Market in Market Value," by Jared Schlaes, MAI, Oct., 1984, The Appraisal Journal, pp. 494-518. Mimeo

Sept. 21, Mon. DEFINING THE APPRAISAL PROBLEM AND CONSTRAINTS

- A. "Problem Definition Between the Appraiser and Client," Haskell Berry, Jr., Appraisal Journal, April 1984. Mimeo

Sept. 22, Tues. WRITING LAB #2 (EXERCISE #1 DUE)

Sept. 23, Wed. PROPERTY DESCRIPTION AND IDENTIFICATION OF ALTERNATIVE USES

- A. "The Semantics Debate: Highest and Best Use Vs. Most Probable Use," Terry V. Grissom, Appraisal Journal, Jan., 1983. Mimeo
- B. The Appraisal of 25 N. Pinckney, pp. 14-62. Text
- C. Wisconsin Administrative Code: Building and Heating Ventilating and Air Conditioning Code, Chapter 50, Administration and Enforcement, Chapters 52, 53, 54. Bus. Lib

Sept. 28, Mon. MOST PROBABLE USE MATRIX

- A. "The Decision-tree Payoff: A Graphic Approach to Highest and Best Use," Brian Goodheim, Appraisal Journal, Oct. 1982. Mimeo
- B. "A Practical Method for Complying With R 41c's Highest and Best Use Requirement," Thomas D. Pearson and Steve Fanning, MAI, The Appraisal Journal, April 1987. Mimeo
- C. The Marketing Myth of the Century: Location, Location, Location," Jonathon M. Rozek, Real Estate Review, 1986. Mimeo
- D. "Determining the Presence of Hazardous Materials," Janina A. Jankauskas, Andrew D. Magee, Ellen E. Moyer, William J. Rizzo, Jr., The Journal of Real Estate Development, Winter 1986. Mimeo

Sept. 29, Tues. WRITING LAB #3 (EXERCISE #2 DUE)

Sept. 30, Wed. MARKET PRICE COMPARISON METHODS - DEFINING COMPARABLES

- A. "Market Value: A Contemporary Perspective," Peter F. Korpacz and Richard Marchitelli, Appraisal Journal, October 1984. Mimeo
- B. "Market Value: Contemporary Applications," Peter F. Korpacz and Richard Marchitelli, Appraisal Journal, July, 1985. Mimeo
- C. Appraisal of 25 N. Pinckney, pp. 63-71. Text
- D. Valuation for Real Estate Decisions, R. U. Ratcliff, Chap. 6-7. Text
- E. "Value Spread: The Effects of Occupancy, Financing, and Buyer/Seller Motivations on Most Probable Selling Price," Eric T. Reenstierna, Real Estate Appraiser and Analyst, Summer 1983, pp. 39-43. Mimeo
- F. "Seller Financing and Cash Equivalence," Jack P. Friedman and J. Bruce Lindeman, The Real Estate Appraiser and Analyst, May-June 1979. Mimeo
- G. "Common Sense About Cash Equivalency," Peter J. Patchin, MAI, The Appraisal Journal, July, 1985. Mimeo

Oct. 5, Mon. MARKET PRICE COMPARISON METHOD -- TRADITIONAL

- A. Appraisal of 25 N. Pinckney, pp. 71-81, 106-123. Text
- B. "Don't Underrate the Gross Income Multiplier," R. U. Ratcliff, Appraisal Journal, April 1971. R-Text
- C. The Ratgram Model with a Dilmore Algorithm Handout
- D. "The Sales Comparison Versus the Market Data Approach to Farm Real Estate Values," Robert C. Suter, The Real Estate Appraiser and Analyst, Fall 1983. Mimeo
- E. "Error and Risk in Property Value Estimates," W. Porcher Miles, MAI, The Appraisal Journal, October 1980. Mimeo
- F. "Do Not Demean the Mean," Robert C. Mason, MAI, The Appraisal Journal, January 1977. Mimeo
- G. "Probability," Gene Dilmore, Quantitative Techniques in Real Estate Counseling. Mimeo

- Oct. 6, Tues. WRITING LAB #4 (EXERCISE #3 DUE)
- Oct. 7, Wed. MARKET PRICE COMPARISON METHODS - QP METHOD
- A. "The Use of Multivariate Statistical Methods in Appraisal Analysis," James E. Reinmuth, Statistical Methods in Appraisal Analysis. Mimeo
  - B. "Multiple Regression Analysis and the Appraisal Process," Dr. Jerome Dasso, The Real Estate Appraiser, March-April 1973. Mimeo
  - C. "Regression Analysis," Gene Dilmore, Quantitative Techniques in Real Estate Counseling. Mimeo
- Oct. 12, Mon. MARKET COMPARISON METHODS - MKTCOMP (ROBBINS)
- A. "Comparable Sales Selection--A Computer Approach," Arnold Tchira, The Appraisal Journal, January 1979. Mimeo
  - B. MULVAR - The computer assisted appraisal system. Mimeo
  - C. "Appraising Houses," Gene Dilmore, Real Estate Appraiser, July-August 1974. Mimeo
- Oct. 13, Tues WRITING LAB #5 (EXERCISE #4 DUE)
- Oct. 14, Wed. MKTCOMP AND MAPLE BLUFF
- A. Sample Maple Bluff assessment package Mimeo
- Oct. 19, Mon. SIMULATION OF BUYER CALCULUS - THE INCOME APPROACH
- A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chapters 8-10. R-Text
- Oct. 20, Tues. WRITING LAB #6 (EXERCISE #5 DUE)
- Oct. 21, Wed. DEFINING NET INCOME, CASH THROWOFF, AND THIRD PARTY FINANCING
- A. "Changing Emphasis in Appraisal Techniques: The Transition to Discounted Cash Flow," Korpacz & Roth, Appraisal Journal, January 1983, pp. 21-44. Mimeo
  - B. "Babcock Revisited - A Return to Fundamentals," Edited by M. B. Hodges. Mimeo



- Oct. 23, Fri. REAL ESTATE ALUMNI SEMINAR - CONCOURSE HOTEL
- Oct. 26, Mon. MARKET RENTS VS CONTRACT RENTS - LEASE ANALYSIS  
AND ROLLOVER ASSUMPTIONS
- A. LaFollette Section 8 Apartments Mimeo
- Oct. 28, Wed. CONVERTING INCOME PROJECTIONS TO PROBABLE PRICE
- A. "Debt Financing, Syndication and Real Property  
Value," Ken Lusht, pp. 1-23. Mimeo
- B. "Simultaneous Valuation: A New Capitalization  
Technique for Hotel and Other Income Properties  
Suzanne Mellen, The Appraisal Journal, Apr.1983. Mimeo
- Nov. 2, Mon. \* \* MID-TERM EXAM \* \*
- Nov. 3, Tues. WRITING LAB #7 - ATV VALUATION MODEL Handout
- Nov. 4, Wed. TESTING APPRAISAL PRICE CONCLUSIONS
- A. VALTEST
- Nov. 9, Mon. FIRST DRAFT OF APPRAISAL REPORT DUE AT START OF CLASS -  
LATE PAPERS PENALIZED
- Nov. 11, Wed. NORMATIVE METHODS - THE COST APPROACH
- A. Valuation for Real Estate Decisions,  
R. U. Ratcliff, Chapters 5, 12, 13. R-Text
- B. "The Entrepreneur," Sanders A. Kahn,  
The Appraisal Journal, 1973. Mimeo
- Nov. 16, Mon. NORMATIVE METHODS - LAND VALUATION AND SUBDIVISIONS
- A. Valuation for Real Estate Decisions,  
R. U. Ratcliff, Chapter 11. R-Text
- B. "Development Method of Land Appraisal,"  
James Boykin, Appraisal Journal, Apr. 1976. Mimeo
- C. "Subdivision Analysis: A Case Study," Marvin  
A. Maes, The Appraisal Journal, Jan. 1982. Mimeo
- D. "The Demographic of Subdivision Analysis,"  
J. R. Kimball, MAI, and Barbara S. Bloomberg,  
The Appraisal Journal, October 1986. Mimeo
- E. "Subdivision Analysis and Valuation, Kimball  
and Bloomberg, The Appraisal Journal, Oct. 1986. Mimeo

Nov. 18, Wed. APPRAISAL FOR REAL ESTATE ASSESSMENT - ISSUES AND CONSTRAINTS

- A. "Appraisal for Assessment of a Major Industrial Property," S. M. Dix, Assessors Journal, March 1979, pp. 1-14. Mimeo
- B. "FHA 236 Housing Projects: Some Thoughts on Valuation," William B. Jackson, State of California, Board of Equalization. Mimeo

Nov. 23, Mon. APPRAISAL FOR CONDEMNATION AND LITIGATION

- A. Valuation for Real Estate Decisions, R. U. Ratcliff, Chapter 14. R-Text
- B. Chapter 32, Wisconsin Statutes. Mimeo
- C. Chapters 1-6, Real Estate Valuation Litigation, J. D. Eaton, pp. 1-100. Mimeo
- D. Chapter 11, "Damages in Partial Taking Cases," Real Estate Valuation in Litigation, J. D. Eaton, 1982, pp. 175-200. Mimeo

Nov. 24, Tues. WRITING LAB - VIDEO - ART OF CROSS EXAMINATION

Nov. 25, Wed. APPRAISAL FOR CONDEMNATION, CONTINUED

- A. Rules of Compensability and Valuation Evidence for Highway and Acquisition, Highway Research Program Report, Dean T. Massek, University of Wisconsin, Madison, WI
  - Chap. 2: Qualifications of Witnesses Giving Opinion Evidence
  - Chap. 4: Admissibility of Evidence of Sales of Similar Properties
  - Chap. 5: Admissibility of Evidence of Sales
  - Chap. 6: Admissibility of Evidence of Income of the Subject Property
  - Chap.11: Admissibility of Evidence of Reputation or Sentimental Value
  - Chap.12: Admissibility of Evidence of Highest and Best Use of Property
  - Chap.13: Admissibility of Photographics or Other Visual Aids
- B. "The Expert Witness From a Lawyer's Viewpoint," Fred Winner, Condemnation Appraisal Practice, pp. 445-452. Mimeo

Nov. 30, Mon. PUBLIC AND PRIVATE CONTROLS ON THE APPRAISAL PROCESS

- A. Forty-Eighth Report by the Committee on Government Operations, 1986. Mimeo
- B. Standards of Professional Practice, 1986. Mimeo
- C. Uniform Standards of Professional Appraisal Practice, Peter D. Bowes, 1986. Mimeo

Dec. 2, Wed. CHANGING STANDARDS FOR APPRAISAL PROFESSIONAL GROUPS

- A. "Guidance Notes on the Valuation of Assets," 2nd Edition, The Assets Valuation Standards Committee, Royal Institute of Chartered Surveyors, April, 1981. Mimeo
- B. "The Liability of the Appraiser (1933)," J. George Mead, The Appraisal Journal, July '82. Mimeo
- C. Guidelines for Attorneys Rendering Tax Opinions Which Rely on a Real Estate Appraisal, 1985. Mimeo
- D. Proposed Additional Explanatory Comments to the Standards of Professional Practice, 1986. Mimeo

Dec. 7, Mon. THE BUSINESS OF APPRAISAL

- A. "Institutional Constraints on Redefinition and Reform of the Appraisal Process," James A. Graaskamp, Appraisal Colloquium, 1984. Mimeo
- B. "The Real Estate Appraiser - The Elusive Goal of Professionalism," John R. White, MAI, The Appraisal Journal, July 1987. Mimeo

Dec. 9, Wed. LETTERS OF ENGAGEMENT

- A. Exhibits 24-29.

Dec. 14, Mon. \* \* \* FINAL EXAM \* \* \*

Dec. 23, Wed. FINAL APPRAISAL REPORT DUE BY 5:00--LATE PAPERS PENALIZED

Business 856  
Final Exam

Monday, December 13, 1976

Professor James A. Graaskamp

- I. Write on one of the following two questions. (20%)
  - A. Discuss the relationship between analysis of a real estate project feasibility study and the contemporary appraisal format suggested by Professor Graaskamp.
  - B. Discuss the concept of highest and best use analysis as it has evolved and then, indicate how it is modified by implications of Ratcliff's most probable price within a transaction zone.
- II. Write on one of the following two questions. (20%)
  - A. Compare the recommendations of Smith and Racster for restructuring the appraisal process to the theory of Ratcliff and the report outline of Graaskamp.
  - B. Compare and contrast the recommendations and preferences of Professor Wendt to the most probable price concept and theoretical structure of Ratcliff.
- III. Write on one of the following two questions. (30%)
  - A. Identify and discuss the theoretical and practical advantages and disadvantages of price prediction using the computer program, MKT COMP.
  - B. Identify and discuss the theoretical and practical advantages and disadvantages of multiple regression analysis for predicting price.
- IV. Identify and outline the logic of Ratcliff's most probable price appraisal system and then indicate which components of most probable price theory would need to be modified or replaced when undertaking special appraisal assignments specified below. You must indicate modifications for two of the following three special appraisal problems: (30%)
  - A. Partial taking by eminent domain to be tried in court.
  - B. Valuation of an existing subdivision to be sold wholesale to a single buyer.
  - C. Valuation of an income property for a tax appeal presentation.

ADVANCED REAL ESTATE APPRAISAL-BUSINESS 856  
Mid-Semester Exam

Fall Semester 1983

Prof. James A. Graaskamp

1. Briefly define four of the following five concepts as discussed in your readings for this course: (20%)

- A. Institutional economics
- B. A critique of the prevailing definition of market value.
- C. Cash equivalency
- D. The entrepreneurial component to cost
- E. Variables in the evaluation of historic properties.

II. Write a short essay on the following topic indicating your thorough understanding of the contemporary appraisal viewpoint: (40%)

Discuss the compatibility of the most recent definition of highest and best use by the appraisal societies and the valuation concepts of Richard Ratcliff and contemporary appraisal. Be sure to reference various viewpoints in your reading on most probable use.

III. Write a short essay on two of the following questions for 20% each:

- A. Discuss the relationship of most probable price concepts to changing emphasis in appraisal in terms of the trend in discounted cash flow, cash equivalency, and valuation of tax subsidized properties?
- B. What is the relationship of data, the appraisal process and the definition of market value as seen by Ken Lusht? How does error and risk of property management relate to this?
- C. Discuss the pros and cons of the weighted point system as a method of market comparable sales comparison.
- D. Discuss the recommended quantitative tools suggested by Gene Dilmore in his chapters on Quantitative Techniques in Real Estate Counseling.

Business 856 - Final Exam

Wednesday, December 7, 1983

Prof. J. A. Graaskamp

I. (20%) Write on one of the following two questions:

- A. Discuss the changing nature of professional liability of the appraiser for negligence in the performance of his professional duties.

OR

- B. What are the institutional advantages and disadvantages for certifying and licensing appraisers?

II. (20%) Write on the following question:

Compare and contrast the appraisal report done in support of a buy/sell decision and the appraisal report done for litigation where the appraiser will serve as expert witness. Include relationship of qualifications of witness to appraisal content.

III. (20%) Write on one of the following two questions:

- A. Discuss and evaluate alternative methods for valuation of subdivision land or condominium conversion including implications of land use planning.

OR

- B. Discuss problems of applying a discounted cash flow approach to the valuation of income property for purposes of tax assessment as suggested by your assigned readings.

IV. (40%) Write a brief statement based on readings and lecture on four of the following miscellaneous concepts, articles and experiments:

1. Compare and contrast inverse condemnation and excess condemnation.
2. Interrelationship of the police power and the power of eminent domain.
3. Gene Dilmore's experiment in appraising houses.
4. Conceptual differences between MKTCOMP and multiple regression.
5. Advantages and disadvantages of multiple regression for appraisal purposes.

Business 856  
Mid-Semester Exam

Wednesday, October 30, 1985

Prof. James A Graaskamp

- (20%) I. Briefly identify or define four out of five of the following terms:
- A. Dilmore's three approaches to value
  - B. Decision methods under conditions of certainty
  - C. Dilmore's components of capitalization
  - D. Cash equivalency
  - E. Institutional economics
- (20%) II. Compare and contrast - two out of four:
- A. Traditional market value and most probable price
  - B. Highest and best use and most probable use
  - C. Cash flow simulation and direct capitalization
  - D. Value spread or transaction zone compared to statistical measurement of dispersion
- (20% each) III. Write a brief discussion on three of the following authors and concepts.
- A. "Behavior of Appraiser in Valuing Income Property: A Status Report," Ken Lusht
  - B. "Market Value: A Contemporary Perspective and Contemporary Application," Korpacz & Marchetelli
  - C. Develop a discussion on highest and best use reflecting the best articles you have read on that subject
  - D. "Development of Value Theory to its Present State," James Doykin
  - E. "The Changing Emphasis in Appraisal Techniques: The Transition to Discounted Cash Flow," Korpacz & Roth
  - F. "Debt Financing, Syndication and Real Property Value," Ken Lusht

## 856 Exam Key

### I. Four of five for 5% each

- A. Dilmore - order, chance, and beauty
- B. Dominance, lexicography, additive weighting, effectiveness index, satisficing
- C. Cash income, change in cash income, change in principal, change in net worth after tax, annual tax shelter, net cash after tax
- D. Cash equivalency - cash to the seller from independent third part financing
- E. Institutional economics assumes political forces and social trends are equally important with short term supply and demand

### II. 10% each

- A. Market value - probable price - neutrality of external conditions and bargaining power
- B. Best use versus most probable use - may be the same unless cash or political factors provide short term distortion and irrationality
- C. Direct capitalization - accrual accounting - cash flow equals cash account and irregular projections
- D. Transaction zone reflects behavior and perceived limitations while statistical measurement requires normal distribution on a random basis

### III. Lusht - Income Property 20% each

- 1. Return of original equity investment
  - 2. Growth of equity from amortization
  - 3. Growth of equity from value appreciation
  - 4. Value of cash flows at 1st year level
  - 5. Growth (decline) of cash flow stream
  - 6. Tax shelter of subject's cash flow
  - 7. Tax shelter of external income
- A. Decline of residual method and GIM's increase use of of investment band model and cash flow techniques. This evidence of evolving sophistication.
  - B. Debt financing and value - traditional theory argued debt reduced risk and therefore the capitalization rate can increase value. Modigliani argued that in a perfect market the capitalization rate is always constant so that value created by leverage depends on imperfect markets. However, it is the availability of debt and not the amount which affects value and for syndication the increment in value may reflect clientele effects and and imperfect market. Again, market value affects opportunity to syndicate.
  - C. Highest and best use essay
  - D. Transition to discounted cash flow - Buyers not interested in a contrived single NOI and the present value of increasing income due to lease rollovers. The market is emphasizing internal rate of return on discounted cash flow. Special emphasis on residual value using second ten year forecast and resale in the twentieth year with stepped discounting to the present.



Bus. 856 - Mid-Semester Examination

Oct. 29, 1986

Prof. J.A. Graaskamp

- I. Compare and contrast 5 of the following: (20%)
  - A. Institutional economics vs. traditional economics.
  - B. Fair market value vs. most probable price
  - C. "Truth, chance, and beauty" vs. "inference, simulation, and normative"
  - D. Best use vs. most probable use
  - E. Rent roll vs. revenue
  - F. Cash equivalency in theory and practice
  - G. MKTCOMP vs. MULVAR
- II. Write a short essay on one of the following subjects: (20%)
  - A. Relate the problem solving approaches of Ackoff and Hayes to the Ratcliff approach to contemporary appraisal.
  - B. To what degree does syndication and debt financing impact on real property values?
  - C. What provision can be made in appraisal for the reality of errors, risk, and omission of important data?
- III. Block out the tabs describing the various components of a pro forma revenue and expense normalized statement. Which items should be on a cash accounting basis and which items on an accrual basis and when? (20%)
- IV. What are the significant innovations in the Ratgram approach as compared to traditional appraisals? Are these matters of degree of difference or or total departures from the traditional appraisal process? (20%)
- V. Discuss market value, a contemporary perspective as developed in two articles by Peter Korpacz and Richard Marchitelli. (20%)

Business 856  
Mid-Semester Exam

November 2, 1987

Prof. James A. Graaskamp

- 20% I. Briefly define FOUR of the following terms as used in this course:
- A. Institutional economics
  - B. Compare and contrast highest and best use versus most probable use
  - C. Cash equivalence
  - D. Comparable sale
  - E. Distributable cash
- 25% II. Write on ONE of the following two questions:
- A. Discuss the relevance of methods for solving problems under conditions of certainty ala Hayes to appraisal methods
  - B. Trace the development of value theory to its present state ala James Boykin.
- 25% III. Discuss whether the Ratcliff contemporary appraisal process is a refinement of traditional appraisal theory or a whole new concept of value and the function of the appraiser.
- 30% IV. Briefly describe the basic theme of TWO of the following articles:
- A. Harold Albritton's critique of the prevailing definition of market value.
  - B. Ken Lusht and his opinions on the impact of debt financing and syndication on real property value
  - C. Korpacz and Roth on the changing emphasis in appraisal techniques to discounted cash flow
  - D. Robert Suter's comments on the sale comparison approach versus the market data approach to farm real estate values

I.-A. Institutional Economics argues economic behavior is more than the pleasure and pain of self interest. It is controlled by collective or group action and a process of social change. It is problem oriented economics, interdisciplinary, inductive, and interested in social problem solving rather than neo-classic price and distribution theory.

-B. Maximum value of what is legal, in demand, technically possible, And financially viable while most probable use is more sensitive to political constraints and subjectivity of most probable buyer.

-C. Cash equivalence is cash to the seller for real estate rights

-D. A comparable sale is a property of similar potential purchased by someone with the same motivations presumed for the most probable buyer.

-E. Distributable cash is net income on an accrual basis adjusted for non cash expenses and reinvestment is the property plus cash capital released to the project from escrows, equity subscriptions, etc.

II. -A. Conditions certain include models for dominance, lexicographic ranking, scoring, and indexing.

-B. Boykin-US history only-3 eras 1906-1944, 1945-1965, 1966-present. Era I-Fischer-present value, highest and best used. John Zangerle. Babcock urged probability, capitalized income, and attacked cost approach. Kniskern attacked allocation of income to land and building, market price vs. justified price, and a premium for financing-Thursin. Ross an investment ban theory.

Era II- Wendt, Elwood and Ratcliff

Era III.-Follows Wisconsin colloquium-Kenard-development of quantitative statistical model.

III. Ratcliff is a refinement with more emphasis on problem, context for behavior, and inductive methods of prediction within a range.

IV. -A. Herald Albritton

-D. Review of all market data relevant or selected sales to argue a bias of the appraiser.

-B. Ken Lusht- argues that the discount rate is always the same after risk adjustments are made for alternative financing arrangements are made and premiums for expanding the market by selling shares are eliminated.

-C. K and R indicate that discounted cash flow is required to deal with irregular cash flows, while CAP rates deal only with income on a mathematical line and do not simulate investor logic.

856 12 Weeks Exam Key

I. 5 points each,

- A. Institutional economics is a term to describe the Wisconsin tradition in terms of Commons, Ely, and Witte who saw economics responding to political and social institutions as well as micro price theory.
- B. A statistical oriented definition of market value considers probable price as the mean, or mode of the range. Coldwell argues that it's the mode while Ratcliff would regard central tendency to be a heuristic point rather than a statistics one.
- C. Cash equivalency is the process of discounting financial terms when the seller is willing to provide credit to the buyer at non-market rates. Fair market value requires adjustment of cash equivalent value if financial terms are not in the seller's interest.
- D. The entrepreneurial component to cost is a topic introduced by Kahn to explain the value added by entrepreneurial talent to the cost approach.
- E. Value:
  - 1. The quantity of one thing which can be obtained in exchange for another.
  - 2. The ratio of exchange of one commodity for another, e.g., one bushel of wheat in terms of a given number of bushels of corn; thus, the value of one thing may be expressed in terms of another. Money is the common denominator by which real property value is usually measured.
  - 3. It is the power of acquiring commodities in exchange, generally with a comparison of utilities - the utility of the commodity acquired in the exchange (property).
  - 4. Value also depends upon the relation of an object to unsatisfied needs, i.e., scarcity of supply and demand.
  - 5. Value is the present worth of future benefits arising out of ownership to typical users or investors.
  - 6. The verb "value": The act or process of estimating value. See valuation.

- II. Recent definitions of highest and best use maximize value with whatever is needed. Contemporary theory considers community plans and goals as one of the constraints. Requires analysis of the existence of effective demand and testing to see how a portion of the market might be captured by the subject property at a pace that maintains its financial viability.

- III. A. Land approach as though vacant is fictional and land may suffer depreciation. Building - replacement cost is arbitrary and fictional and adjustments for depreciation are highly subjective and normative so that there is no predictive power in the methodology. A subjective value on the building added to a fictitious price for the land was not likely to produce value.
- B.

- C. The weighted point system first depends on the degree of variations explained by a common unit of comparison, such as sq. ft. of building area or number of rooms. It is important to choose qualitative attribute rather than continuous variables for adjustment. Once the points are scored they become proxies for allocation of the weights which reflect market preference.

- D. Chapter 1 - Probability  
Chapter 2 - Bayesian Analysis  
Chapter 3 - Network Analysis  
Chapter 4 - Linear Programming  
Chapter 5 - Regression Analysis

ADVANCED APPRAISAL

FINAL EXAM

Monday, December 14, 1987

Professor J. Graaskamp

- (30%) I. Discuss one (1) of the following:
- A. Discuss the proper methods for appraisal of development land as discussed by Boykin, Kimball, and Bloomberg.
- OR -
- B. Discuss the major issues that need to be defined by the appraiser before beginning his/her appraisal for a partial taking of a major industrial project for eminent domain valuation.
- (30%) II. Discuss the admissibility in court for highway acquisition of the following terms:
- A. Evidence of sales.
  - B. Evidence of income and income value.
  - C. Evidence in the form of photos, models, and visual aids.
- (40%) III. In your opinion, which institutional forces will have the greatest impact in improving the professional behavior and technical competence of commercial property appraisers before the year 2000? Which institutional forces will have the least impact on current efforts at reform?

## Introductory Comments - 856

Fall 1980

### I. General administrative comments:

- A. Room 203 - graduate ready room - Friday afternoon cleanup; we are seeking lockers and money for a computer port; we need several volunteer monitors to make sure door is locked and police bulletin boards, etc.
  - B. UW Real Estate Club book sales are limited to publishers from which we gain significant discounts; mimeographs were formerly favorably priced in the School of Business but it may be in the future they will have to be done outside of the school by one of the copy services.
  - C. The bulletin board in my office will serve as a placement board but if someone wants to take responsibility to make copies we can duplicate that board in 203.
  - D. In 856 we will try to avoid Friday classes except where I need to make up for a missing lecture or two. Fran Larson will therefore meet on the following day: (refer to syllabus).
  - E. The building which will be our case study for this semester is the Commercial State Bank Building - now the Marine Commercial Bank Building on the corner of State, Mifflin, and Carroll Streets. We have an appointment for 10:00 A.M. on Tuesday, September 9 to inspect the premises and take pictures.
    1. Is anybody a cameraman in black and white?
    2. We will prepare one set of negatives and provide everybody one set of black and white prints.
    3. We will obtain a copy of blueprints which will be made available in Room 203.
- II. Upon purchase of your reading materials very carefully check off each item on your syllabus. If you have any item that you are missing now is the time to make it known because you will be held accountable in exams for having read all assignments.
- III. In the past the heavy work load in 856 have led students to take incompletes for indefinite periods of time which have become ridiculous. Therefore all work in 856 must be completed by the end of registration week for the second semester or the grade for the uncompleted work will be 0! Late first drafts will be penalized one full grade.
- IV. Each of the four writing exercises must be done on time and will be graded. Failure to do so will be penalized by  $\frac{1}{2}$  grade deduction on your final semester grade.
1. Office hours will be Monday and Wednesday morning from 8:30 to 12:00 unless I have a 550 lecture.
  2. Copies of the Wendt text are limited and includes my personal copy
  3. We will hold the 201 exam either at the end of this semester or registration week the second semester; while you receive credit automatically for it with an MS degree, you must take the exam if you want to transfer credit to the MAI.

Exhibit 2

Critical Issues That Define Appraisal Process

| Function of the Appraisal            | Property Rights                                                                                                                                                 | Relevant Definition of Value                                                     | Allocation of Productivity                                                                                      | Buyer Motivation Presumed                                                                                                                                       |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tax assessment                       | Fee simple private rights unencumbered                                                                                                                          | Cash market present value (As opposed to most probable selling price)            | Present value income attributable to land and structures only                                                   | Purchase of economic productivity                                                                                                                               |
| Mortgage loan (nonparticipating)     | Encumbered fee simple private rights plus additional rights pledged                                                                                             | Regulations - market value<br>Underwriting - solvency price or liquidating value | Fixed income pledged from all sources less costs of creative management                                         | Share of economic productivity contributed by capital                                                                                                           |
| Mortgage loan (participatory)        | Encumbered title plus nonvested interest in selected future revenues                                                                                            | Present value of all future cash flows                                           | Variable income pledged plus share of reversionary interest                                                     | Share of economic productivity contributed by capital plus share in selected management returns plus positioning against devaluation due to changing conditions |
| Sale of an investment                | Encumbered title plus vested entitlements plus going concern profit center opportunities                                                                        | Most probable price above minimum acceptable alternative opportunity             | Returns from land, structures, personalty, and selected entitlements                                            | Increase in spendable cash<br>Increase in liquidity value of estate<br>Positioning to maximize probability of survival of benefits despite changing conditions  |
| Purchase of investments              | Encumbered title plus positioning for access to entitlements                                                                                                    | Most probable price within perceived peril point limit                           | Land, structure, personalty, and intangible assets less profit centers for management                           | Increase in spendable cash<br>Increase in liquidity value of estate<br>Positioning to maximize probability of survival of benefits despite changing conditions  |
| Going concern purchase of a business | Encumbered title plus positioning for access to entitlements plus reduction in risk for business start-up plus control of monopolistic market position controls | Most probable sales price within perceived costs of creating an alternative      | Land, structure, personalty, and intangible assets and good will plus artifactual profit centers for management | Increase in spendable cash<br>Increase in liquidity value of estate<br>Positioning to maximize probability of survival of benefits despite changing conditions  |

# COMPARISON OF CRITICAL VALUATION ASSUMPTIONS FOR THREE PRESENT VALUE VIEWPOINTS IN REAL ESTATE

Prepared for Discussion at Feasibility Seminar  
St. Petersburg, Florida  
by Professor James A. Graaskamp  
January 10, 1973

| <u>Traditional Income Appraisal</u>                                           | <u>Ellwood Valuation</u>                                               | <u>Modern Capital Theory</u>                                                                                      |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 1. Instant investment                                                         | 1. Instant investment                                                  | 1. Discontinuous series of outlays                                                                                |
| 2. Productivity limited to net income from parcel before debt and income tax. | 2. Productivity limited to parcel after debt but before income tax.    | 2. Productivity is net change in spendable cash from all sources after debt and income tax traced to real estate. |
| 3. Continuous income function                                                 | 3. Continuous income function                                          | 3. Discontinuous series of tax classified receipts                                                                |
| 4. Recapture from income                                                      | 4. Recapture from income & resale                                      | 4. Payback of equity from spendable cash and debt from net revenue & resale.                                      |
| 5. Projected for full useful life of improvements                             | 5. Projected for normal turnover period 5-10 years of typical investor | 5. Projected for elapsed time of outlays and receipts for specific investor time line horizon.                    |
| 6. Arbitrary discount factor                                                  | 6. Weighted average Inwood discounting                                 | 6. Selected present value discounting based on characteristics of investor and property revenue pattern           |



3. At Wisconsin we use two concepts, one representing the ideal solution and one representing the most practical current solution.
  - a. The most fitting use is that use which is the optimal reconciliation of effective consumer demand, the cost of production, and the fiscal and environmental impact on third parties. Reconciliation involves financial impact analysis on "who pays" and "who benefits" - thus the rash of debate on how to do impact studies.
  - b. The most probable use will be something less than the most fitting use depending on topical constraints imposed by current political factors, the state of real estate technology, and short term solvency pressures on consumer, producer, or public agency. In short, the appraiser must demonstrate reasonable fit to land use controls, community politics, technical design constraints, effective demand, and viable cash flows for the project.
- B. The term "most probable price" avoids the arrogance of "highest and best use" as well as the implication of absolute certainty as to the appraisal conclusion. Moreover it recognizes that pure economic logic for the property owner will be limited by the impact on community as perceived by land use administrators and the impact on investment risk as perceived by potential investors in the market.
  1. An appraisal is first a feasibility of a site in search of a use;
  2. Alternative uses suggest alternative tenants and/or buyers
  3. Appraisal must forecast what the most probable buyer will pay to benefit from the most probable use
- C. Most probable use immediately reduces the market to a particular segment of space users and suggests both the tenancy and the investor group who will be interested.
  1. Proper market segmentation of possible tenants determines the degree of monopoly pricing and stabilized revenues which the project may enjoy.
  2. Proper segmentation of the most probable buyer leads to selection of relevant comparables or in the absence of sales data, relevant assumptions on how the most probable buyer might behave in pricing the property.
- D. Feasibility is a non-financial concept of fitting a real estate solution and service package to a context of public priorities and customer needs.
  1. The project must fit the general market, a specific consumer group, the environmental limits of the land, the nature of existing usable improvements, legal and political controls imposed by the public, the need for compatibility with the total and natural man-made environment, and the limits of physical design construction.

2. Financial viability relates to the reasonableness of a set of financial assumptions which may be bought by a knowledgeable investor, relating proforma estimates of the future to justified investment parameters.
  3. Investment risk is the variance between assumptions and future realizations and the sensitivity of success or failure to certain key factors which cannot be confirmed as fact by the appraiser as generalist or by the appraiser who is not clairvoyant.
  4. The most probable use is one which will fit basic constraints and provide financial viability with a tolerance for surprise (risk) that is acceptable to investors of a certain type.
- E. An Appraisal is a forecast of productivity of a property relative to the needs of a certain buyer group and a prediction of the price at which it would sell to the most probable buyer.
1. Anticipation of an economic behavior by the buyer leads to the highest price he would be willing to pay.
  2. Anticipation of the behavior of the seller leads to an estimate of the least he would be willing to accept.
  3. Analysis of the influence of outside factors affecting price supply and demand leads to an estimate central tendency between buyer and seller maximum.
  4. The upper and lower ranges specify a transaction zone within which a most probable price will occur. The most probable sales price does not need to be at the center of the zone nor do the alternatives need to follow a normal distribution curve. The zone and the distribution most typically are statements of verbal probability.
- F. An appraisal is therefore a feasibility study of alternative courses of action and these alternatives are matched to the most probable user/investment group to be seeking such a property opportunity at that time.

The appraisal process as a feasibility study lends itself to the following logical process;

1. What is the problem for which the appraisal is to serve as a benchmark?
2. Which definition of value would best serve the decision process?
3. What does an inventory of site attributes reveal as to the positive and negative contributions of the site to alternative uses?
4. What does an inventory of improvement attributes existing on the site reveal as to the positive and negative contributions of the improvements to alternative uses?

5. What basic alternative use programs or scenarios may be considered as plausible alternatives motivating buyers as of the date of the appraisal?
6. Which alternative use appears to be the most probable use when screened by external factors including effective market demand, political controls, forecasting risk, and potential profitability as perceived by investor/buyers.
7. What is the profile of the most probable buyer/investor for the most probable use to the degree that the profile can define the search for comparable transactions?
8. Could the appraiser simulate the purchase guidelines of a most probable buyer group if there were no sales which were thought to be comparable and appropriate to the subject situation?
9. What is the value to be justified by the appraiser using normative, traditional measures of what a buyer should do, such as the cost approach or conventional income approach?

II. Property analysis to determine alternative uses.

- A. Elements of analysis are approached as an inductive research problem moving progressively from on-site facts to external conditions. The appraiser needs to examine the following elements in sequence:
  1. Physical attributes of site and improvement.
  2. Legal-political constraints on alternative uses.
  3. Basic financial parameters of alternative uses.
  4. Existence of effective market demand for remaining alternatives.
  5. Comparative risk and return evaluation of alternatives for which there may be demand.
- B. A physical analysis of inventory of site and improvement attributes should include the five following subsets:
  1. Physical attributes (static) include site dimensions, soils, geology, topography, site improvements and capacity, and on-site flora and fauna.
  2. Legal/political attributes including not only zoning and subdividing codes at the local level but also relevant federal, state, or private controls which might direct or restrict site use. As appropriate, the appraiser should note administrative patterns relevant to use of subject site.

3. Linkage attributes identify relationships of site to networks, populations or activities centers that might generate potential demand for the subject property.
  4. Dynamic attributes are those attributes which exist in the mind of others in terms of status, anxiety, beauty, imagery, sentimentality or other perceptions which attach to the subject property to the degree that these are economically significant.
  5. Environmental attributes of the site relative to off-site natural systems of which the subject property may be a part such as riparian rights, pollution down wind, storm water runoff, etc. Even the shadow cast by the structure off-site may become significant in the era of solar energy. Impacts on others may be perceptual (i.e. dynamic) or fiscal (legal/political) as well.
- C. Static site attributes which begin to narrow the potential market to alternative uses should include both the facts and their implications for productive use in such topic areas as:
1. Size, shape, and lot area
  2. Topography, soils, geology, slope stability, and potential for subsidence, etc.
  3. Water table, wells, streams, ponds, storm water swales, shoreland edges, and bulkhead lines, floor plains designations, etc.
  4. Environmental attributes of flora and fauna which might cause environmental impact litigation
  5. Concealed utility easements, old foundations, etc.
  6. Existing utility services and capacity
  7. Access points to public thoroughfares or private right-of-ways
  8. Site improvements such as paving, retaining walls, pedestrian paths, culverts, etc.
  9. Landmark attributes or historical site features
- D. An inventory of legal attributes should move from specific site controls imposed by local zoning ordinances to state and federal regulations as well as private controls which may intervene. The appraiser has an obligation to report foreseeable attitudes or future legislation which will affect administration of these ordinances relative to future uses of the site.
1. All alternative setback lines and building envelope interpretations relative to site

EFFECT OF FEDERAL INCOME TAX REGULATIONS ON HISTORICAL RESTORATION & REMOVATION

|                                                                                                              | PRE - 1976                                                                                                                                                                                                                | 1976 - 1978<br>TAX REFORM ACT OF 1976                                                                                                                                                                                                                                                                                                                                                                                       | 1978 - 1981<br>REVENUE ACT OF 1978                                                                                                                                                                                                                                                                 | POST - 1981<br>ECONOMIC RECOVERY TAX ACT OF 1981*                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. CERTIFICATION                                                                                             | NO EFFECT: Certification existed, but was not advantageous in terms of tax treatment.                                                                                                                                     | ADVANTAGEOUS: Must Meet One of Three Criteria:<br>1. It must be listed on the National Register of Historic Places.<br>2. It must be recognized as being of architectural or historic significance to a National Register Historic District.<br>3. It must be recognized as being of architectural or historic significance to a state or local historic district that has been certified by the Secretary of the Interior. |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                             |
| B. RENOVATION (upgrading of building systems to extend the life of the existing building)                    | DETRIMENTAL: Discouraged building upgrading through non-favorable tax depreciation provisions:<br>-protracted useful life period.<br>-unattractive depreciation schedule options.<br>-land and building value allocation. | ADVANTAGEOUS: Substantial rehabilitation encouraged by 150% depreciable schedule for commercial property and 200% depreciable schedule for income-producing residential property.                                                                                                                                                                                                                                           | ADVANTAGEOUS: Similar provisions to Tax Reform Act of 1976 with a 10% Investment Tax Credit (ITC) for new capital additions related to rehabilitation of commercial properties only.                                                                                                               | ADVANTAGEOUS: The developer may qualify for a 25% Investment Tax Credit for substantially rehabilitating a certified historic structure. Straight line capital recovery must be claimed over a period of 15, 30, or 45 years. Premature disposal of building may result in recapture of excess depreciation.                                                                                |
| C. RESTORATION (rehabilitation of a building to its original condition in material, workmanship, and detail) | DETRIMENTAL: Discouraged preservation through unfavorable tax depreciation provisions:<br>-protracted useful life period.<br>-unattractive depreciation schedule options.<br>-land and building value allocation.         | MIXED EFFECT: Restoration costs for income producing residential and commercial properties may qualify for 60 month amortization. Depreciation claimed under the 60 month schedule subject to ordinary tax rate at the time of sale.                                                                                                                                                                                        | MIXED EFFECT: 60 month depreciation schedule kept intact. Accelerated depreciation taxed at the ordinary income tax rate for deductions in excess of the straight line depreciation claimed during the same period.                                                                                | MIXED EFFECT: Same as Revenue Act of 1978. Investment Tax Credit of 25% encourages rehabilitation of currently "non competitive" properties. This reduction of the depreciable basis by one-half the amount of the ITC reduces the development incentives available in 1982 but still offers substantial advantages.                                                                        |
| D. NON-HISTORIC OLDER BUILDINGS (upgrading and replacement of building systems)                              | DETRIMENTAL: Discouraged renovation through unfavorable tax depreciation provisions:<br>-protracted useful life period.<br>-unattractive depreciation schedule options.<br>-land and building value allocation.           | DETRIMENTAL: Discouraged renovation through unfavorable tax depreciation provisions:<br>-protracted useful life period.<br>-unattractive depreciation schedule options.<br>-land and building value allocation.                                                                                                                                                                                                             | ADVANTAGEOUS: Developer may qualify for a 10% Investment Tax Credit for a qualified rehabilitation. No certification of rehabilitation work is necessary. Restrictions include:<br>1. Commercial property only.<br>2. Structure must be at least 20 years old.<br>3. 75% of external walls remain. | ADVANTAGEOUS: Two additional categories of commercial renovation are now eligible for Investment Tax Credit (ITC):<br>1. 15% Investment Tax Credit if building is 30-40 years old.<br>2. 20% Investment Tax Credit if building is 40+ years old.<br>Investment tax credit is deducted from building's initial depreciable basis and thus reduces future annual capital recovery deductions. |
| E. DEMOLITION                                                                                                | DETRIMENTAL: Encouraged destruction of building through tax advantages of crediting the remaining taxable basis and demolition cost to the next year's depreciation deduction.                                            | ADVANTAGEOUS: Demolition costs and undepreciated basis of destroyed building added to the value of the land. If the building was certified, any new building must be straight line depreciation for the next 30 years.                                                                                                                                                                                                      | ADVANTAGEOUS: Similar to Tax Reform Act of 1976. To avoid demolition penalties, a building within a historic district must be certified as "non-historic."                                                                                                                                         | MIXED EFFECT: Similar provisions to Revenue Act of 1978 with accelerated capital recovery for new structures replacing demolished historical buildings allowed.                                                                                                                                                                                                                             |

\*Note: Amended by the Tax Equity and Fiscal Responsibility Act of 1982.

HISTORICAL PRESERVATION ASPECTS OF  
THE ECONOMIC RECOVERY TAX ACT OF 1981

A. Objective of the New Tax Law

1. Increase the quantity and quality of preservation.
  - a. Encourage developers, landlords, merchants and investors to consider preservation as a development option.
  - b. Encourage rehabilitation that protects and emphasizes the building's historic character.
2. Stimulate private investment in rehabilitated properties and encourage economic revitalization of historical districts.
  - a. Revitalize older localities.
  - b. Prevent further deterioration of distressed economic areas.

B. Historic Building Qualifications

1. May be certified by the Secretary of the Interior as historic if it is listed in the National Register of Historic Places.
2. May be certified if it is located in a registered historic district and the Secretary certifies that the building is of historic significance to the district.
3. May be certified if it is recognized as being of architectural or historic significance to a state or local historical district that has been certified by the Secretary of the Interior.

C. Rehabilitation Qualifications:

1. The building has been substantially rehabilitated if the rehabilitation expenditures exceed the greater of either the taxpayer's adjusted basis in the property or \$5,000 within a 24-month period.
2. The building was in use prior to the beginning of rehabilitation.
3. 75% of the existing external walls have been retained.

D. Income Tax Credit Eligibility

1. The owner of a non-historic commercial building older than 30 years, when expenditures are incurred for qualified rehabilitation.
2. The owner of a rehabilitated historic building leased and used by a tax exempt organization or governmental unit.
3. A leasee of a building with qualified rehabilitation expenditures incurred by the leasee if, on the date the rehabilitation is completed, the remaining term of the lease is at least 15 years.

- E. Investment Tax Credit for Qualified Rehabilitation  
(a direct deduction of taxes due equivalent to amount of investment tax credit)
1. 15% of the rehabilitation costs for structures at least 30 years old.
  2. 20% of the rehabilitation costs for structures at least 40 years old.
  3. 25% of the rehabilitation costs for certified historic structures.
- F. Adjustment to Depreciable Basis
1. The rehabilitation of a non-certified historic structure requires that the tax credit be subtracted from the total rehabilitation costs in computing the depreciable basis.
  2. The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) amends the IRS code for the investment tax credit provisions. Beginning January 1, 1983, the depreciable basis for qualified rehabilitation projects will still be reduced by the amount of the investment tax credit for structures at least 30 years old. However, the depreciable basis for certified historical structures will now be reduced by one half the amount of the investment tax credit.
- G. Recapture
1. No recapture of the investment tax credit is required for a qualified rehabilitated building held by the taxpayer for more than five years after the rehabilitation is completed and placed in service.
  2. Recapture of a portion of the investment tax credit is required for properties held between one and five years.

| Ownership Period | Investment Tax Credit<br>Recapture |
|------------------|------------------------------------|
| 1 year           | 100%                               |
| 2 years          | 80%                                |
| 3 years          | 60%                                |
| 4 years          | 40%                                |
| 5 years          | 20%                                |

Lecture #2  
Real Estate Valuation 856

- I. The appraisal process as described by the American Institute is deductive in its organization as it moves from the general to the particular.
  - A. Refer to mimeo #1
  - B. Definition of the problem has to do with property interest to be appraised, purpose of the appraisal, and definition of value.
  - C. Preliminary survey and appraisal plan is necessary to set fee and plan work schedule. Pragmatically it means what kind of data would be best, where is it found, and how much will it cost.
    1. Profitable appraisal require access to a data bank from past experience or current brokerage.
    2. Special data banks capture business for appraisers who become known for certain types of buildings.
  - D. Data gathering is most expensive part of appraisal process
  - E. General data is usually boilerplate which assumes the ready of the appraisal report is from out of town. There are definite relationships between economic conditions for the country and the region and value but from a writing standpoint these are better established later in the report. (ala Ratcliff)
  - F. Three approaches represent three different types of market interpretation. Correlation is an editorial evaluation of their relevance and reliability given the situation.
  - G. Final estimate of value is one number subject to a date, limiting conditions, and certification by the appraiser as to his objective viewpoint - i.e., no vested interest.
- II. An outline of the Ratcliff process shows a more logical progression from purpose to property to probable buyer to the context in which that buyer must negotiate a transaction.
  - A. Macro-market factors are selected only when they are relevant to a specific type of transaction.
  - B. Micro-market analysis is really finding tools which will predict what buyers will do by looking at their past behavior or their present situation.
    1. How do they think
    2. How do they convert action to a price
    3. What have they done in the past that supports the conclusions in 1 & 2
  - C. Simulation may be very simple or very elaborate depending on how the buyer is presumed to think and respond and what technique prove the cheapest predictive tool with acceptable reliability.



1. By locating the points scored by the subject property on the hand-fit line it is possible to read the price on the vertical axis of the scale.
  2. The statistical technique is more useful because it gives you the central tendency and the standard error of the estimate for the regression line.
- II. While most of you can do a residential appraisal much more quickly with probably the same accuracy, this technique does illustrate how to relate features and attributes to price with roughly the same emphasis that a possible buyer might place on these features. The linear regression technique is very useful in interpreting and adjusting a few comparable sales for tracts of vacant land and therefore we have created a step by step illustration for you to follow. These statistical techniques are very well explained on page 238-242 of GENERAL APPLIED STATISTICS by Fadil Zuwaylif, published by Addison Wesley.
- A. Taking your inventory of physical land features and your knowledge of buyers for that type of site, it should be possible to build a weighted rating on the important elements of SUITABILITY, CAPACITY, COMPATIBILITY, and IMPACT. (See Exhibit D)
    1. For difficult comparisons use a 1,2,3 or 1,3,5 scale with average being the middle number. The weight attached will magnify the result.
    2. A 10 point scale could be adjusted as a 0,2,4,6,8 or 10 using your judgment of how it compares to the best of available.  
NOTE: IT IS NOT COMPARED TO THE SUBJECT.
    3. While the adjustments are rough, one is relying on the theory of offsetting errors to permit some leveling of these errors in degree. It is simply a way of quantifying your judgment for an organized synthesis which the client can follow and possibly criticize.
  - B. The next step is to calculate the coefficients of the regression line to convert the points scored by the subject site to a price per gross acre (See Exhibit E).
  - C. The best way to communicate the results is with a graph as on Exhibit F.
  - D. Initially the regression equation indicates a central tendency of \$2,306 per gross acre. However, probable price requires a statement of range around which transactions might likely fall:
    1. Step VI computes the standard error of the estimate, which in this case is \$107 plus or minus. Statistically we could say that 66 times out of 100 times the price should fall between \$2259 and \$2473.
    2. 95% of the time the probable transaction price will fall between \$2152 and \$2500.
    3. The appraisers work is not done at this point since he may wish to modify this result by introducing the influence of current regional phenomenon in terms of finance, legislation, etc. as these institutional factors might be expected to modify industrial behavior. (Refer to suggested outline of appraisal in Part IV of the morning session).

- E. Step VII computes the correlation coefficient which attempts to measure the relationship of the sample to the true population. In this case it is a very high .98 which indicates the data was limited (for sales) and perhaps a little artificial.
1. A small sample of four minus one dependent variable minus one as a correction for a small sample gives us only two degrees of freedom.
  2. A statistics textbook table of significance indicates this means we have a 5% chance of rejecting or excluding the right answer in the manner in which we use our standard error. Put another way the real distribution of transaction prices could fall around a different average price and in different ranges only five out of 100 times.

2:30-2:45 REFRESHMENT BREAK

- III. As land is brought under public control, the uncertainties surrounding sale values must eventually have an impact on site value. Existing uses will enjoy monopoly premiums and future uses will be sharply discounted for delay, risk, the high front end costs of securing development approval, and potential for down zoning.
- A. The future shock of accelerating change in the ground rules of real estate are leading the professional to plant both feet and balk at any proposed regulation. Instead you as a professional should assist in the development of procedures which advance environmental objectives and concentrate your attack on regulations which are a sham and require you to deliver a product which is not suitable for the use intended.
1. Mortgage loan ratios have been around for years and is a sham used by the lenders to simplify their regulatory process and to shift the burden of mortgage lender ignorance and hypocrisy on the appraiser. Simplistic out-of-date concepts such as this you have a professional obligation to resist.
  2. When communities use regulation to exclude low income groups or less desirable land use solely on the basis of environment, cast iron zoning, or fiscal impact you have a professional duty to speak out in opposition. Appraisers are often not highly regarded because of their go-along to get-along attitude. This period of transition to public land use control gives you an excellent opportunity to reestablish yourselves as the economic impact analyst of public policy alternatives.
  3. More appraisers should consider seeking career opportunities with land regulating agencies. Many of these agencies are being staffed with anti-real estate graduates of the planning schools who teach an "us against them" type of adversary planning without ever finding out anything about real estate enterprise and how it works.
- B. The real problem with new regulations such as the development of regional impact (DRI Section) of the Florida Environmental Land and Water Management Act of 1972 (ELWS) are the two related problems of an agreed on data base and expedient processing of development plans.
1. The scope of the entire impact analysis is requiring development of mechanics for review and development of clear concise and hopefully graphic standards for impact testing. Pending that the DRI may be premature in scope.

2. Regulators are groping for easily understood standards for very complex problems but one must hope that they will not find anything so simple minded as a mortgage loan ratio.
  3. However, let us look at several basic federal systems for environmental site attributes.
- C. If you do any appraisal for or feasibility studies for FHA financed projects, the HUD noise assessment guidelines are a must. They are also extremely useful for any residential site evaluation. (Written by Theodore Schultz and Nancy McMahon, it is available from the Superintendent of Documents, U.S. Printing Office, Washington, D.C. 20402 - price 70¢ - Stock #2300-1194).
1. This project involves a 221-d4 on a five lane street in Madison. There was a stop light on one corner of the block and a bus lane devoted entirely to buses. Automatic application of the guidelines determined that trucks are 5% of vehicle count and the stop light would multiply that factor by 10 so that the site would be clearly unacceptable for residential use.
  2. HUD seriously suggested that the developer should request the city to pass an ordinance banning all through truck traffic on that segment of University Avenue!
  3. The alternative was to show them that trucks normally did not use University Avenue and that the presumption of 5% truck traffic was wrong. The city traffic count did not distinguish between vehicles. HUD defined any vehicle with dual wheels or a bus - a truck.
  4. The empirical data, analytical form, and simplified chart decision making forms Exhibit G.
- D. The federal Flood Disaster Protection Act has made it illegal for federally regulated lenders to make loans on properties in areas identified as flood plain unless the property is covered by flood insurance. It went into effect February 28, 1974.
1. In 15,000 flood prone communities only 2300 currently participate in subsidized federal flood insurance.
  2. If the community is to qualify it must provide proof of a building permit system which allows for review of new construction.
  3. HUD may identify "special flood hazard areas" where subsequent new construction will be ineligible for insurance.
  4. As an aside one can expect that earthquake zones may soon have a similar requirement.
- E. The action was required as most communities continued to ignore the reality of 25 and 50 year high water marks and because the nation can seldom afford to provide all types of unnecessary financial assistance to those who persist in tempting fate and the environmental cycle. (See attached materials)
- F. The Office of Interstate Land Sales Regulation affects the sale of projects with 50 or more lots or units. A project is to define to include a series of plats which are part of a larger master plan or are contiguous to eliminate technical avoidance. Exemptions from the act are limited and useful current information is available from two excellent sources:

- I. Issue For Which Appraisal Is Required
- II. Required Definition Of Value
- III. Professional Standards Of Practice
  - 1. Experience
  - 2. Methods
  - 3. Reporting Format
- IV. Legal Regulations And Controlling Precedence
- V. Restraints Imposed By Litigation Process
  - 1. Discovery And Confidentialty
  - 2. Desposition
  - 3. Presentation To Jury Or Judge
  - 4. Vulnerability To Cross Examination
- VI. Significance Of Appraisal Conclusion To Cost Of Methodology

I. Administrative

- A. Reminder -on Tuesday - LAB and time 3:30-5:00 Room 220
- B. State/District Highway office for traffic counts
- C. City of Madison Tally on new retail space on westside
- D. CACI numbers
- E. Market rental from: George Gialiamus, John Fladd, Ron Gross
- F. Downtown Middleton and strip stores across from Minicks.

II. Problem Solving Methods-Chapter Seven

- A. Four Types
  - 1. Decisions under certainty
  - 2. Decisions under risk
  - 3. Decisions under uncertainty
  - 4. Decisions under conflict
- B. Set Theory-Optimizing
  - 1. Dominance
  - 2. Lexographic
  - 3. Additive Weighting
  - 4. Effectiveness Index
- C. Non-optimizing
  - 1. Satisficing
  - 2. Subjective Limits

III. Risk vs. Uncertainty

- A. Uncertainty Not Have a Probability
- B. Decisions Under Uncertainty
  - 1. The Mini-max strategy
  - 2. The Maxi-max strategy
  - 3. The Hurwicz strategy
  - 4. Minimizing Maximum regret

IV. Bounded Rationality In Economic Theory means people are capable of rational tradeoffs on a limited number of variables--4 to 6, after that it is intuitive.

V. An appraisal is an artificial feasibility study because it defines a profile of the investor and assumes market average criteria.

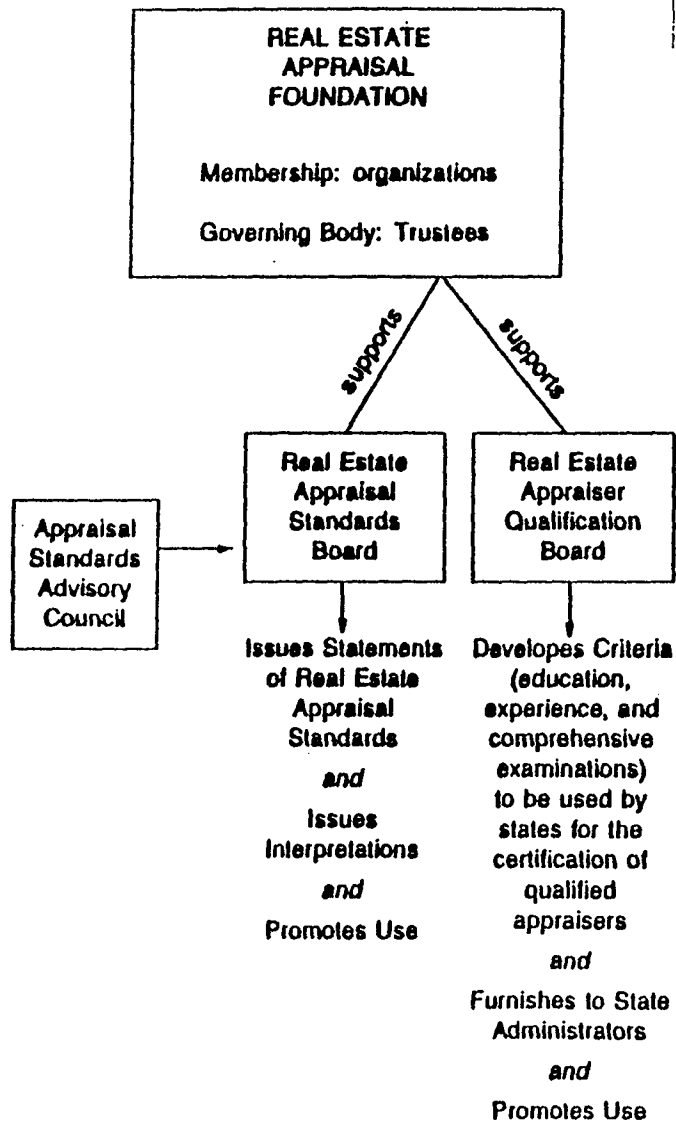
- I. Several trends are reestablishing public recognition that appraisal is a pivotal profession for social equity, safety of consumer capital, and efficient allocation capital. These forces include:
  - A. Terrible losses to the banking system as a result of accomadating appraisers who supported decisions of the lenders motivated by short term, non-real estate concerns.
  - B. Rising standards of fiduciary responsibility as a result of ERISA and a shift of pension funds toward real estate.
  - C. Recognition that too much venture capital was allocated to real estate, producing over supply, reducing tax collections, and undermining useful life of existing stock.
- II. As a result new methods of private and public control for the procurement of quality appraisal are being instituted or discussed.
  - A. At the transaction level institutions are using letters od engagement to specify appraisal methods, standards, responsibilities, and the purpose for which the appraisal is required.
  - B. Letters of engagement reflect specific policies written down by boards of directors, trustees, or policy groups who fear both liability and bad decisions as a result of purchasing poor appraisal work.
  - C. The Internal Revenue Service and the Securities Exchange Commission have each instituted sanctions and legal actions against appraisers determined not to be independent and exaggerate values.
  - D. The Federal Home Loan Bank Board has attempted to provide explicit guidelines to loan officers where institutions are insured by FSLDIC. The best known components are Administrative Rule 41-A, B, C, and D.
    1. D simply clarifies C, and C was revolutionary for developing a specific set of instructions for those who acquire and evaluate appraisals which support credit and investment decisions. The failure of the lender to obtain acceptable appraisals makes the board od directors and the loan officers personally accountable for violating a fiduciary duty.
    2. The appraisal must contain a certificate from the perosn at the instituion who has reviewed the appraisal, that person's title, and the date of approval.
  - E. Appraisal shall be based upon the following definition of market value:
    1. The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently, knowledgably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- E. 1. a. buyer and seller are typically motivated;
  - b. both parties are well informed or well advised, and each acts in what he considers his own best interest;
  - c. a reasonable time is allowed for exposure in the open market;
  - d. payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
  - e. the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.
- F. Because of appraisal fraud and incompetence as a major factor in the failure of 400-500 S&I's, Congressman Douglas Barnard, Democrat from Georgia, as Chairman of the House Oversight Committee on Consumer and Banking Affairs conducted a national investigation and is proposing federal legislation on appraisal standards to be followed by any federally insured deposit institution. He recommends
- 1. Bank regulatory agencies with express authority to discipline appraisers who willfully or negligently misrepresent value, including black listing and civil penalties.
  - 2. Establishing appraisal standards for all federally insured lenders (See page 13)
  - 3. Lender accountability
  - 4. Public/Private sector coordination of appraiser certification and review
  - 5. Standard appraisal policies and procedures for government insurers and secondary marketing institutions.
  - 6. Data collection and information sharing of appraisals and appraiser performance;
  - 7. Laws requiring public disclosure of sales transaction data and loan origination.
- III. The private response to the Barnard proposals is not surprising but it may be too little too late.
- A. Eight major appraisal associations organized into a select committee to produce a watered down statement of appraisal ethics and standards. The confederation is shaky since the SREA and MAI groups don't agree as to whether the federal government has any role in appraisal standards.
  - B. Both the federal proposals and the MAI private sector proposal are modeled on the Accounting Industry format
    - 1. Real Estate Appraisal Foundation of Trustees representing appraisal organizations and the general public, which would raise money and appoint two groups.
    - 2. A real estate Appraisers Standards Board to define standards, interpret issues and promote application through various sanctions

2. It would be advised by a new appraisal standards advisory council.
  3. Real Estate Appraisal Qualification Board to develop criteria in terms of education, experience, and examinations to be used by states for certification.
- C. The issue is should the federal government appoint the majority of trustees and provide the legal muscle to decertify appraisers-- that is finance the high cost of adequate enforcement.
1. The industry is moving quickly to establish a foundation and a standards board to argue that the federal government need not do it. Three years ago it panned the need for a standards board, and Barnard has forced it to reverse its position.
  2. Barnard was hoping to get consent and cooperation from the appraisers, who could avoid heavy funding of the apparatus so that the strong real estate lobbies would support, rather than oppose his legislation.
  3. Instead the lines of confrontation have been drawn, and Mr. Barnard will rely on additional scandals to line up Congress and use the Congressional necessity to fund 25 billion in FSLDIC losses to motivate Congress to prevent that disaster from happening again.



**CHART A**



**State Administrators**

Use Criteria Developed by the Real Estate Appraiser Qualification Board to:

1. Check education and experience and administer examination (before issuing certificates for state certified real estate appraisers)
2. Supervise continuing education program for renewal of certificates

and

Enforce the Standards developed by the Real Estate Appraisal Standards Board (with penalties for violation)

**State and Federal Regulators**

Adopt (when appropriate) the Standards Developed by the Real Estate Appraisal Standards Board

and

Restrict Certain Types of Appraisal Services to State Certified Real Estate Appraisers (certified by states that use the criteria developed by the Real Estate Appraiser Qualification Board)

## Business 856

### CASH FLOW MODEL SIMULATION FOR LAND DEVELOPMENT VALUATION (Tabs for Worksheet Using Quarterly or Six Month Periods)

1. Market absorption in units(Schedule A)
2. Capture rate of subject project (Appraiser assumption)
3. Number of units sold per period (Line 1 x 2)
4. Average price per unit (Appraiser assumption)
5. Gross sales revenue (Line 3 x 4)
  - Less: Discounts for bulk purchase (footnote)
  - Closing costs (footnote)
  - Special assessments paid (footnote)
  - Commissions paid (footnote)
  - Debt release payments on units sold (footnote)
  - Paper taken back by seller (footnote)
6. Net cash from sales
  - Plus: Interest income on past period paper (footnote)
  - Miscellaneous income (footnote)
  - Less: Administration (footnote)
  - Professional fees (footnote)
  - Interest on outstanding debt (footnote)
  - Real estate taxes on vacant land (footnote)
  - Real estate taxes on unsold units (footnote)
  - Income taxes (optional)
7. Cash available from operations for capital investment
  - Plus: Cash available retained from previous period
  - Cash principal from previous period credit sales
  - Cash from new debt
  - Cash from new equity contributions
8. Total cash available for capital improvements and distribution
  - Less: Land payments (Schedule B)
  - Construction in place (Schedule C)
  - Contingency (footnote)
9. Cash available for distribution
  - Less: Cash retained for internal financing (and taxes)(footnote)
10. Cash distributed to investors
11. Present value discount factor
12. Present value of periodic distributions
13. Present value of residual properties (end of projection series)

## COMMUNICATION THROUGH STATISTICS

Statistics uses a combination of both uppercase and lowercase Greek letters that have statistical meanings, English letters that have statistical meanings, and unknowns expressed in English letters. Unknowns are often expressed as  $a$ ,  $b$ ,  $x$ , or  $y$ .

English letters that have specific statistical meanings must be written in italics when the typewriter is equipped with them; otherwise, they should be underlined. Examples follow:

$N$  or  $N$  (total population or number of observations)

$n$  or  $n$  (a sample of that population)

$P$  or  $P$  (probability, as in  $P < .01$  or  $P$   $< .01$ )<sup>1</sup>

$r$  or  $r$  (correlation coefficient)

Tests of variance ( $t$  test or  $t$  test,  $F$  ratio or  $F$  ratio)

Never confuse Greek letters with English letters. If Greek letters are not available on the typewriter, they must be carefully drawn with black ink.<sup>2</sup> Particular attention must be given to those that resemble English letters:

$x$  and  $\chi$  ( $x$  and chi)<sup>3</sup>

$u$  and  $\mu$  ( $u$  and mu)

$p$  and  $\rho$  ( $p$  and rho)

$B$  and  $\beta$  (uppercase  $B$  and lowercase beta)

---

<sup>1</sup>Some statisticians prefer a lowercase  $p$ .

<sup>2</sup>The Greek letters and symbols used here were done with a commercial product called TYPITS. For a comparatively modest price, the equipment is available for any typewriter at Stemp Typewriter Company, 528 State St., Madison, Wi., and at other stores that have been granted this franchise in other cities.

<sup>3</sup>A common statistical expression is  $\chi^2$ . This is a lowercase chi; written out, it is "chi-square." At the beginning of a sentence the cee of chi is capitalized.

An equation is a mathematical sentence that has a subject, a verb, and thought-completion words; it therefore requires punctuation. Consider this sentence: "Cubic feet equals length times width times height where C equals cubic feet,  $l$  equals length,  $w$  equals width, and  $h$  equals height or C equals  $lwh$ , C equals twenty feet times ten feet times eight feet, and therefore C equals one thousand six hundred cubic feet." This thought can be more clearly expressed in a simple equation:

$$C = l \times w \times h$$

where

C = cubic feet,

$l$  = length,

$w$  = width, and

$h$  = height

or

C =  $lwh$ ,

C = 20' x 10' x 8', and therefore

C = 1,600 cubic feet.

Operational signs as they are used here need a space on either side. However, some expressions use no spaces as in  $x(n+2) - y(n+2)$ . The decision requires discretion.

The operational line of a fraction must be exactly opposite the = sign. Because the underline symbol is used to make the line, the carriage must be lifted one-half space:

$$x = \frac{2a}{2b} = 6$$

The words "where" and "or" are on separate lines.

Commas follow each part of the equation as they would in a sentence, and a period ends the mathematical sentence.

Times is  $\times$ , not an English x; a script  $l$  is used for length, not l as would appear on most typewriters.

If a long equation must carry over to a second line, divide it at a natural point, put the operational sign on the second line, and begin that line at some logical indentation point. If the part of the solution that follows an equal sign must be divided, begin the second line after the vertical row of equal signs.

Align your equal signs.

Adequate white space is essential to accurate communication.

October 27, 1983

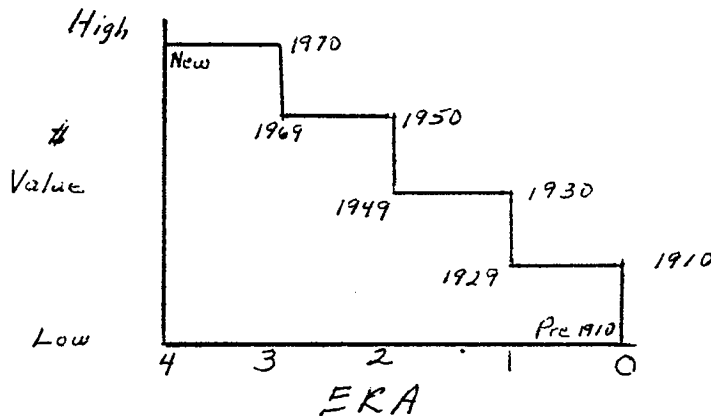
Addendum - Market Comp Lecture - Maple Bluff Valuation

Transformation of the Variable for Age

A. Discovery of Need to Transform Variable for Age of House

1. Had used variable #49 ERA (See Maple Bluff Single Family Residential Information Form) which grouped 20 years of age into a single variable.

Graph of the relationship of value and age variable:



2. Adjustments were based upon the difference in variable value for the subject and the comparable, multiplied by .02 of the comparable sale price.

3. Example:

|         | Year<br>Built | ERA | Age/Years | Selling<br>Price |
|---------|---------------|-----|-----------|------------------|
| Subject | 1910          | 1   | 73        | ?                |
| Comp. A | 1949          | 2   | 34        | \$100,000        |
| Comp. B | 1930          | 2   | 53        | \$ 95,000        |

Using ERA variable, the adjustments would be as follows:

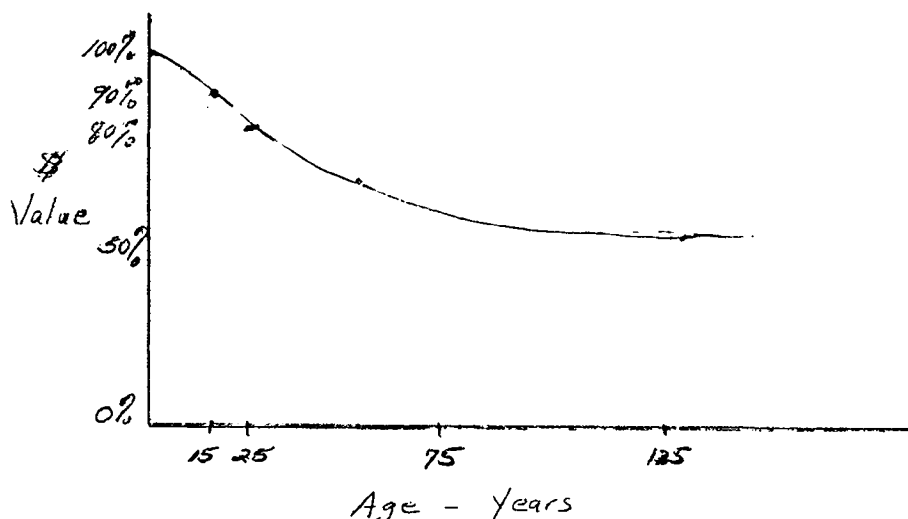
### ERA

| SUBJECT | 1 | Adjustment Calculation                            |
|---------|---|---------------------------------------------------|
|         |   | $A_i \times (X_{S_i} - X_{C_i})$                  |
| COMP. A | 2 | $[(.02 \times \$100,000) \times (1-2)] = \$2,000$ |
| COMP. B | 2 | $[(.02 \times \$95,000) \times (1-2)] = \$1,900$  |

Thus, the \$ adjustments differ by only \$100 even though the two comps vary in age by 19 years and both are much newer than the subject.

### B. Transformation of Age Variable to Better Reflect Relationship Between Value and Age of House

#### 1. Graph of Relationship Desired



2. Use regression to determine points on the curve which represent value of the age variable called effective age. The larger the variable, the newer the house. The resulting equation solves for the effective age of any house.
3. Because of the nature of this variable, a type 3 adjustment is used to translate the variable into a dollar adjustment. In MKTCOMP a type 1 adjustment uses a dollar amount, and a type 2 adjustment is a

percentage of the selling price. A type 3 adjustment allows for the use of a separate calculation to solve for the percent of sale price to be used. In this case the equation is:

$$[(V_s/V_c - 1) \times .50] \times \text{Selling Price} = \$ \text{ adjustment}$$

where  $V_s$  = effective age of subject

$V_c$  = effective age of comparable

4. Example:

|         | Year<br>Built | Age/Years | Effective<br>Age Variable | Selling<br>Price |
|---------|---------------|-----------|---------------------------|------------------|
| Subject | 1910          | 73        | 56.65                     | ?                |
| Comp A. | 1949          | 34        | 75.22                     | \$100,000        |
| Comp B. | 1930          | 53        | 64.77                     | \$ 95,000        |

Using the Effective Age variable, the \$ adjustments would be as follows:

|         | ERA | Effective<br>---Age--- |                                                                                                    |
|---------|-----|------------------------|----------------------------------------------------------------------------------------------------|
| SUBJECT | 1   | 56.65                  | Adjustment Calculation<br>$[(V_s/V_c - 1) \times .50] \times \text{Selling Price}$<br>= Adjustment |
| COMP. A | 2   | 75.22                  | $[(56.65/75.22 - 1) \times .50] \times \$100,000$<br>= \$12,300                                    |
| COMP. B | 2   | 64.77                  | $[(56.65/64.77 - 1) \times .50] \times \$95,000$<br>= \$6,000                                      |

Thus, the \$ adjustments are more realistic with the spread and magnitude of dollar adjustments more representative of the differences in ages among the houses.

4

## A Composite Variable - Kitchen Score

### MKTCOMP - Maple Bluff

To capture the several price-sensitive factors in a kitchen, a composite variable is created. (See Variables 72 to 76 on Maple Bluff Residential Form). Upon inspection, the several attributes described in Variables 73 to 76 are scored and the equation shown in the description of Variable 72 is used to calculate the Kitchen score.

#### Example:

The least desirable kitchen would be scored as follows:

| Attribute    | Description | Score |
|--------------|-------------|-------|
| Size         | Small       | 1.0   |
| Type         | Single wall | 1.0   |
| Work Area    | Obsolete    | .5    |
| Eating Space | None        | 0     |

$$\text{Kitchen Score} = (1 \times 1 \times .5) + 0 = .50$$

The most desirable kitchen would be scored as follows:

| Attribute    | Description          | Score |
|--------------|----------------------|-------|
| Size         | Large                | 3.0   |
| Type         | L-shaped with island | 5.0   |
| Work Area    | Modern               | 1.0   |
| Eating Space | Breakfast nook       | .6    |

$$\text{Kitchen Score} = (3 \times 5 \times 1.00) + .6 = 15.6$$

The difference in kitchen scores between the subject and its comparables are adjusted at \$850 per point score. The maximum adjustment is \$12,835, or  $15.1 \times \$850$ .



## MARKET COMP THEORY COMPARED TO REGRESSION

## I. Common Requirements to be Determined

- A. Variables to survey
- B. Sales comparables available for analysis
- C. Variables which relate to value
- D. Rates of adjustment for difference in variable factors
- E. Comparable sales which are best related to subject property

## II. Prediction of Price Through Regression Analysis

$$V_p = b + X_s (A) + \dots X_{n,s} (A_n)$$

$$V_s = b_0 + \sum_f A_f X_{f,s}$$

$$V_k = b_0 + \sum_f A_f X_{f,k}$$

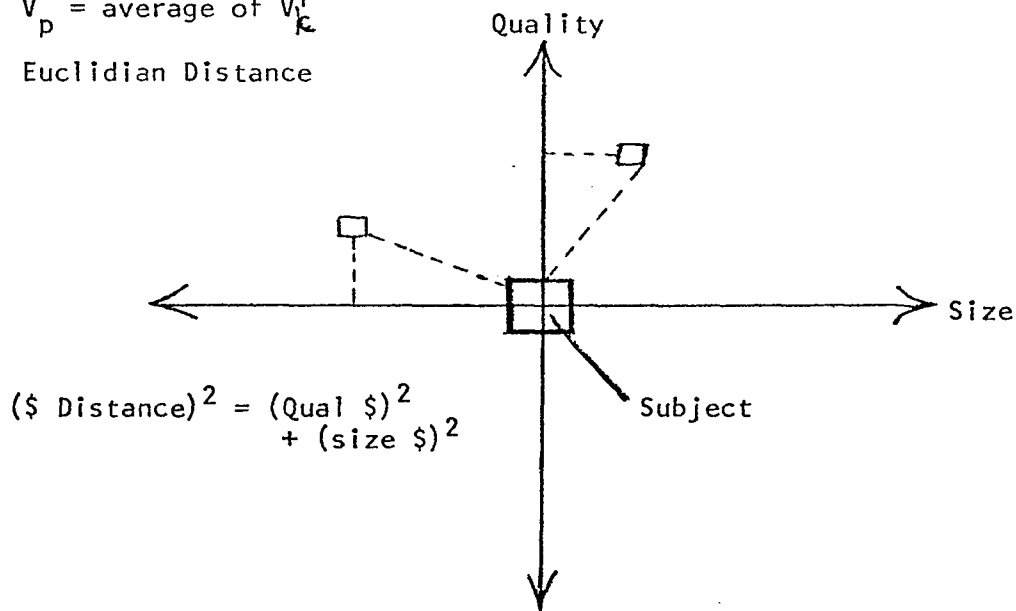
$$\begin{aligned} V'_k &= P_k + V_s - V_k \\ &= P_k + A_1 X_{1s} - A_1 X_{1k} + A_2 X_{2s} - A_2 X_{2k} \\ &= P_k + A_1 (X_{1s} - X_{1k}) + A_2 (X_{2s} - X_{2k}) \end{aligned}$$

## III. Market Comparison

$$V_k = A_1 \times (X_s - X_k) + A_2 \times (X_{s2} - X_{k2})$$

$$V_p = \text{average of } V'_k$$

## IV. Euclidian Distance



Scale requires conversion of factors to \$'s per unit  
 Market comp permits conversion with:

- \$/unit
- \$/as % of sale price/unit
- \$'s/ transformation unit

4. Note that Exhibit 7 provides an objective scale for most factors so that the reader can understand the score. The weights in this case were corroborated in the narrative of the report from a 1968 study by Real Estate Research Corporation.
- C. All calculations for establishing the "a" and "b" factors for linear regression appear in Exhibit #8 and are charted in Exhibit #9.
- D. An example using restaurant sites in Madison is provided in Exhibits 10, 11, and 12.
- E. An example of a single family appraisal is provided in Exhibits 13, 14, 15, and 16.
- F. A fourth example comparing old store buildings in downtown Madison will be provided in a demonstration appraisal.

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## Pyare Square Building

1. Boilers - Cleaver Brooks  
Mode 4 Watertube Boiler.  
2,800,000 BTU/HR  
Natural gas 3500 CFH  
Control Circuit 120 volts  
Blower Motor 460 volts  
Built in 1976  
Model M4W-3500, Series 700MG  
Heat Surface 170 sq. ft.
2. Chiller - Air Conditioning Unit  
Tiane Climate Changer  
250,000 BTU  
Motor 440,460,480 volts  
G Electric 414-506 volts
3. Hot Water - Ruud  
Ruudglass Commercial  
67 gallon  
120,000 BTU/HR  
Recovery 120.8 gallons 1 hr
4. Diesel Generator - Emergency Power Source  
Kohler - Electric Plant  
Model 30RS2 9104A

|               | Continuous | Standby          |
|---------------|------------|------------------|
| KW            | 25         | 30               |
| KVA           | 31.25      | 104.2            |
| AMP           | 868        | 37.5             |
| Cycles        | 60         |                  |
| RPM           | 1800       |                  |
| 120-208 volts |            | Battery volts 24 |
5. Fan Units - 5 fan coil units  
Heating 1 Cooling
6. Elevators - Westinghouse  
Capacity 2000 lbs.  
Maximum No Passengers 13  
3 elevators  
Floors <sup>can</sup><sub>are</sub> be key operated/locked
7. Softener - Calgon Burner Model #225BC1½"

|                             |               |
|-----------------------------|---------------|
| Size - flow rate continuous | 38 gal 1 min. |
| peak flow rate              | 50 gal 1 min. |

  
Valve Serial 12-6-90462      24" x 54" mineral tank  
Serial B4039-68              24" x 60" brine tank  
                                    100 lbs gravel  
13.5 gal 1 minute backwash flow softening capacity: 225,000 grains  
Flow rise 3.5 gal/minute                                      188,000 grains  
                                    75 lbs sold/regeneration                      normal  
                                    TOTAL SIZE: 54" long 36" wide  
                                                                                    72" tall
8. Electric Power Into Building  
(volts) 2500 lighting - 120/208 v - 3Ø - 4 w  
(volts) 1000 light/motors 480 v 3Ø 3 w

~~(#2)~~

## ~~AAAA~~ Regression Appraisal

- I. Dilmore has suggested that regression analysis of sales is the most objective method of inferring price as the appraiser makes fewer subjective adjustments.
  - A. In some cases, regression will reduce the average error, in some cases it will identify useful value predictors, but almost always it increases the range of error. In general, it is more useful in organizing information for the appraisal process than in directly forecasting price.
  - B. Some of the areas in which it will prove useful are:
    1. Automatic identification of non-market transactions.
    2. Estimating cost to assemble a group of parcels at a low cost.
    3. Converting demand factors to potential market in dollars or households or customers.
    4. Establishing the value influence of adverse uses;
    5. Identification of compounding influence of certain attributes on value.
  - C. Regression will not generally provide a measure of an individual attribute's contribution to value.
- II. Simple lineal regression expresses a relationship between two variables while a multiple regression equation deals with three or more variables.

Price equals  $a + bX + cY + \text{residual error}$

The object is to determine that set of coefficients and variables which will produce the lowest practicable residual error, which is often called the standard error of the estimate.

- A. The test of a regression equation is comparison of an estimated price to the actual observed price on a sample and then to predict a price on a similar property which was not included in the sample. Thus, there is a statistical test inherent in the sample and a pragmatic test for the utility of the application.
  1. If  $a$  is the only known coefficient it is the mean average value of the sample and the point where the mean line crosses the vertical axis.
  2.  $b$  introduces slope to the mean line which is parallel to the horizontal axis. These coefficients are determined with the least squares method and as a result extreme values in the scatter diagram will cause excess moment on the line because their squared values have so much influence. While prices do not have to be homogeneous, they must be more or less continuous along the line or the line is appropriate to fit only one segment of the data.

B. A sample output of our 1410 regression run is provided.

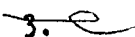
1. The constant term is the a factor and indicates the steepness of the slope.
2. To avoid a simultaneous set of equations the degrees of freedom must be greater than zero and preferably at least 30, although this will decrease the reliability below the example to a point where it may not be useful.
3. The standard ~~xxx~~ error of the estimate is in dollars--the same units as the dependent variable, so that it is affected by a change in the units. A large standard error means a disparity between actual and estimated values and indicates the standard deviation of the disparity. In this case the average price of a home is about \$36,000, but to be 95% accurate we could have a range of error of plus or minus \$6,000. When an observed sale is three or four standard errors from the estimate, you have identified a sale which was either not a market transaction or compatible with the sample.

$$S_{yx} = \sqrt{\frac{\sum (y - y')^2}{n - 2}}$$

4. Total variation equals explained variation plus unexplained variation, the latter associated with independent variables not provided by the statistics directly or by proxy. The coefficient of multiple correlations is the ratio of explained variation to total variation, and the square of that provides a coefficient of multiple determination. (unbiased has adjusted for the statistical error potential in the degrees of freedom)
5. A basic assumption of linear regression is that all the variables are independent of one another. If they are not, you have collinearity or multiple collinearity, which would make the results invalid. To reduce that in real estate where multiple collinearity is always present, we use stepwise regression. The first variable is related to price, but the second variable is correlated to the residual error by a least squares technique in which all the variables are tested.

C. Note that variable number 6 in the data bank comes in first with a value of \$9.26 and a standard error of \$.77. The T value of 11.9 means that the probability of this coefficient being zero is 11.9 standard deviations away, a remote probability. Note that it explains 60% of the difference in price.

1. Location, factor number 2, kicks in by adding \$102 to value for each integer in the code and has a T value of 8.3 and explains 46% of the previously unexplained variants.
2. The quality factor comes in third, and notice the scientific notation--3.6584 E-03, which means \$3,658, and it explains 55% of the unexplained variance.

3. 

3. Other variables keep coming in because the F level has been set extremely low. Typically, variables should not go to a point where the T value is less than 2.5, or at worst 2.0, which means less than a 5% chance of that coefficient not explaining any real variance at all.
- D. These coefficients do not make any sense unless one understands how the data were coded. Some variables are continuous variables, such as square feet of living area; others are discrete (binary Yes-No). Others are discrete but weighted by the coding system. Refer to Bayside tax form.
1. For any particular property, the coefficients could be applied to a continuous variable, to a one recognizing its presence, or a zero so that the product is zero, to a weighted code, or to a transformation.
  2. A transformation is a programmed modification of data to create a fictitious variable. One objective would be to reduce all garage types to attached or non-attached. Sometimes weighted codes are used to provide a preliminary sort to reduce the data bank to a particular subset such as one-storey houses. Most often transformations are used to convert a curvilinear or exponential relationship to a linear one. For example, the quality factor may be item 22 x item 26 x location (item 11) x floor area (item 17). The more people can afford a better house in a better location, the more conscious they are of quality and appearance. On the other hand, square feet of living space divided by number of rooms will indicate average feet per room or the spaciousness of the interior. Statisticians can analyze residuals and detect certain types of curvilinear problems, but a computer is necessary to do so efficiently.
- III. Reference to the second page of computer output will indicate a test of comparison between a computed estimate ~~mx~~ of price (CDV) as compared to ~~xxxxxx~~ the actual sales price. The first one was wrong by \$24.50-- a lucky guess. The eighth item was wrong by \$4,141 with a standard error falling 1.4 standard deviations off the pace. SED equals the actual difference between observed and estimated prices divided by the standard error of the estimate.
- A. In Bayside, the standard error of the estimate was used to edit the data bank of sales.
  - B. When the estimate was positive by more than two standard deviations, it was flagged for reappraisal.
  - C. When the estimate was three standard errors too low (negative), the property was studied to see what special factors explained the additional price, which might ~~has~~ not have been reflected in the independent variables. It appears now that the year improved should also be considered as a transformation to reflect an old house (pre-1955) at a poor location.
  - D. Note that certain variables such as railroad or highway abutting are negative but so are shade trees and recreation rooms. This indicates that location may be reflecting shade trees but that some

high price locations reflect other qualities, and that many shade trees are in the older, lower-priced neighborhoods. Recreation rooms may also tend to be present in older or smaller houses which don't have a family room and that represents an exception to the average.



11/10/86

*Improvement  
of Students'*  
General Comments for 856 Appraisals

Describe property with more impact, such as: a three story office and retail building converted from old department store on an inside lot in prime redevelopment block.

You are missing some legal constraints such as Concourse redevelopment district, Capitol View district, etc. What do you mean "grasping the political climate?" Terms of sale don't compute what sales support your pattern? Market inference based on a quality point system - price/quality regression model was true on 25 N. Pinckney and should not be used now. Report \$ amount of taxes, mill rate, and special assessments; note that most value is in the land so the tax advantages are reduced.

The value definition of fair market value with its 6 assumptions should be stated. The seller might accept sale of the equity subject to the existing mortgages but would not accept a rap of a third mortgage or land contract around the existing debt.

Be sure you distinguish between the Capitol Square North Development plan and the TIF district. The redevelopment plan can bring the DCA into play which would permit public purchase for resale to private developers at a writedown. In addition, this should be distinguished from the convention center plan.

Appraisal issue regards a property in transition with development potential and a pivotal position relative to hotel 30 On the Square, or Woolworth site. What next and when are critical issues for appraisal?

You need two definitions of value. Evidence of pattern for terms of sale. Date of TIF district? Linkages should develop potential relationship of site to Concourse Hotel elevator lobby, Woolworth site, and 30 On the Square in terms of redevelopment pressure and bargaining position in resale.

What is the financial equivalence that justifies a land contract price of \$750,000? Why would seller sell at less money than he owes? How can you be so vague on terms - 10-20%, 10-20 years? You're waffling. Why is fair market value lower than previous purchase price despite improvements added? Who is the most probable buyer? Would the Concourse pay more? Would you sell on terms identical to Brathaus II? Would you appeal assessment?

You should indicate that appraisal is not suited for State or Federal security purposes without review and additional charge and conditions. Real estate taxes are high while your rents are low. Your expense ratio at 55% seems a little high. Misprint on size of lot. Since hotels can pay at least \$5,000 per room for raw land - 160 rooms added to the Concourse might indicate a better land value.

Your discussion of Capitol Square North as a redevelopment district should precede your discussion on TIF district #14 and its balance started by the Concourse. What do they plan to do with \$10,648,000? Does it matter what DMPI has in mind - what does the City have to do with DMPI? Linkages should explore contiguous ownerships on the block before branching out onto the Square. Where will the sky bridges go?

What about a scenario involving sale to the Concourse for an interim or purchase by Gordon Rice who trades a part interest for Brathaus II to a parking ramp and conference center?

As we stated in class, linear regression was to be used only to choose a unit of comparison. Then you were to compute a weighted point score per unit price mean. Linear regression was used in 25 N. Pinckney and we criticized it because the standard error was too great and the sample too small to make the error statement significant. Redo your market comparison using QP. Remember that your sales are cash prices so your conclusion must be a cash price.

Since you made no adjustment for time, would it be relevant to consider the impact of TIF 14 and Capitol Square North as an externality leading to a premium for the subject property?

In D you indicated your estimate of probable price is based on gross leasable area and yet your Exhibit XXX says you used gross building area. So what did you do?

Your section of externalities needs to be thought out better and you must conclude with a \$ amount of value in the section, even if it is the same as your preliminary estimate so that the reader knows what conclusion you are going to test.

Your value conclusion needs to be reworked - forget the standard error but don't forget existing financing and costs of sale approaching \$50,000. Your certification should include the most probable price and transaction zone in one paragraph and fair market value in the second paragraph. Limiting conditions should protect you from R41(c) and state and federal security rules.

The property at 5-7 North Pineckney dated 1977 is too old to sale when 102 State Street and 122 State Street are available for 1985 and 1986. Adjustment for time with a deflator would be misleading as I think prices Downtown have declined relative to the value of the dollar.

The price range around the central tendency is not explained by changes in the financial terms. The high end of the range would represent a buyer who expected to benefit from plottage values as a result of assemblage for future redevelopment. As long as the property shows a positive cash flow, I doubt that the property would sell for less than the mortgage balance plus a commission. The real difference in fair market value and most probable price is the premium paid for plottage value by an adjacent land owner.

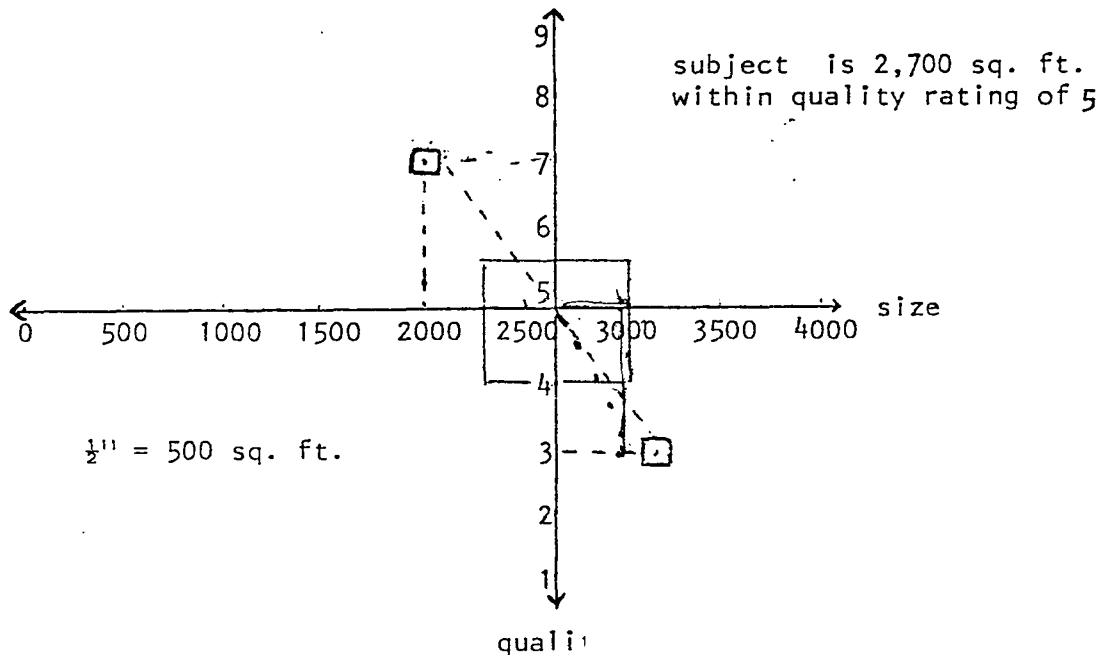
If the upper range is a function of terms, then it should be calculated financially as the present value of the non-market advantage provided by the seller rather than just a number that is more rather than less.

Any paper which puts 50% of its weight on composition and format requires an individual and unique paper from each student. There are many opportunities for a joint effort but photo reproductions of the same paper for a different student or deliberate changes in format and font to disguise duplicate papers earns an automatic C, you will have to read which ever paper was fully graded to learn all of the corrections since Gennie and I don't owe a duplicate grading effort if you haven't given us an equal effort with a unique paper. REMEMBER - ONE FINAL COPY OF YOUR REPORT WITH GENNIES MARKED UP COPY OF YOUR ORIGINAL PLUS MY TYPEWRITTEN NOTES MUST COME TOGETHER WHEN YOU DELIVER THE FINAL REPORT.

## EXHIBIT 11

Demonstration of Euclidian Distance  
For Selection of Best Comparable

Comparable 1 = 2,000 sq. ft. and quality 7 sold for \$80,000  
 Comparable 2 = 3,000 sq. ft. and quality 3 sold for \$110,000  
 Adjustment for difference in size is \$20 per sq. ft.  
 Adjustment for difference in quality is 2% of sales price



$$\begin{aligned}
 \text{Comp. 1 Euclidian distance dollars} &= [(2,700 - 2,000) \$20]^2 + [(5 - 7) .02 \times 80,000]^2 \\
 &= 14,000^2 + 3200^2 \text{ or } 196,000,000 + 10,240,000 \\
 &= \sqrt{206,240,000} \\
 &= 14,361 \\
 \text{Comp. 2 Euclidian distance in dollars} &= [(2,700 - 3,000) \$20]^2 + [(5 - 3) .02 \times 110,000]^2 \\
 &= 300 \times 20 \text{ or } 6000^2 + 4400^2 \\
 &= 36,000,000 + 19,360,000 = \sqrt{55,360,000} = 7440
 \end{aligned}$$

Therefore, Comparable 2 is most comparable to the subject property,  
 because hypotenuse  $\sqrt{55,360,000}$  is shorter than hypotenuse  $\sqrt{206,240,000}$

## APPRAISAL TESTS

### A. Probable Price Ratios

1. OAR
2. Price per unit
3. Unbundled rates of return

### B. Operating Trends

1. Net annual rate of change in net income, gross rents, and expenses
2. Cash breakeven shift
3. DCR
4. Lease expiration table
5. "As leased" vs. "available for lease"
6. Proportion of revenues from rents, services, passthroughs

### C. Resale Price Assumptions

1. Ratios for new buyer
2. Financing premises
3. Age

### D. Unbundled Returns - before or after tax

1. Contract revenue
2. Rollover revenue
3. Repayment of debt
4. PV of original purchase price
5. PV of increase or decrease in original purchase price

(English system or arbitrary allocation)

Feasibility Analysis

Will the project really work for a specific investor?

1. Objectives - decision standards provided by client decision process
  - a. Maximize spendable cash of total enterprise
  - b. Subjective gratification of specific individual
  - c. Adaptation to enterprise management specialties and weaknesses
2. Aggregate market potential opportunity identification
3. Merchandising analysis (Defining competitive edge) and specific user profile
4. Legal-political context
  - a. All legal constraints on site, seller, buyer, and user are considered
  - b. What is legal is qualified by what is political
5. Physical-technical constraints are examined in terms of what might be
6. Impact on environment and community specifically forecast
7. Financing from buyer viewpoint considering all profit centers
8. Income tax advantages or disadvantages affecting spendable cash
9. Actual cash revenues and expenses forecasted for each period of time horizon
10. Limiting assumptions of solution
  - a. Identification of potential variance and sensitivity of objectives to alternative futures
  - b. Responsibility allocated among sources of expertise
  - c. Budget & purpose of study edits information scope
  - d. Format of analysis determined by structuring of data to lead to desired conclusion or recommendation

Appraisal Analysis

What would the project sell for if it did work for a typical investor?

1. Objectives - decision standards provided by theoretical framework
  - a. Maximize economic surplus of individual parcel
  - b. Prudent behavior of economic man
  - c. Average management to isolate return to land & capital
2. Aggregate market potential business climate
3. Merchandising comparison (Defining standard competitive substitute)
4. Legal-political context
  - a. Legality assumed
  - b. Limited to site use rather than regulations on probable user as alternative buyers are assumed
5. Physical-technical constraints are studied as is or in terms of conventional uses
6. Impact on environment and community assumed acceptable within existing permitted uses
7. Financing from lender viewpoint considering only net income line and below
8. Income tax not considered except implicitly recognized in market comparison
9. Revenues and expenses generally normalized and projected on linear trend for standard period
10. Limiting assumptions of solution
  - a. Average outcome without qualification as to alternative futures
  - b. Responsibility denied for other areas of expertise
  - c. Date of appraisal edits information scope
  - d. Format of analysis defined by model of fair market value appraisal report

## MARKET COMP THEORY COMPARED TO REGRESSION

### I. Common Requirements to be Determined

- A. Variables to survey
- B. Sales comparables available for analysis
- C. Variables which relate to value
- D. Rates of adjustment for difference in variable factors
- E. Comparable sales which are best related to subject property

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$$V_p = b + X_s (A) + \dots X_{n,s} (A_n)$$

$$V_s = b_o + \sum_f A_f X_{f,s}$$

$$V_k = b_o + \sum_f A_f X_{f,k}$$

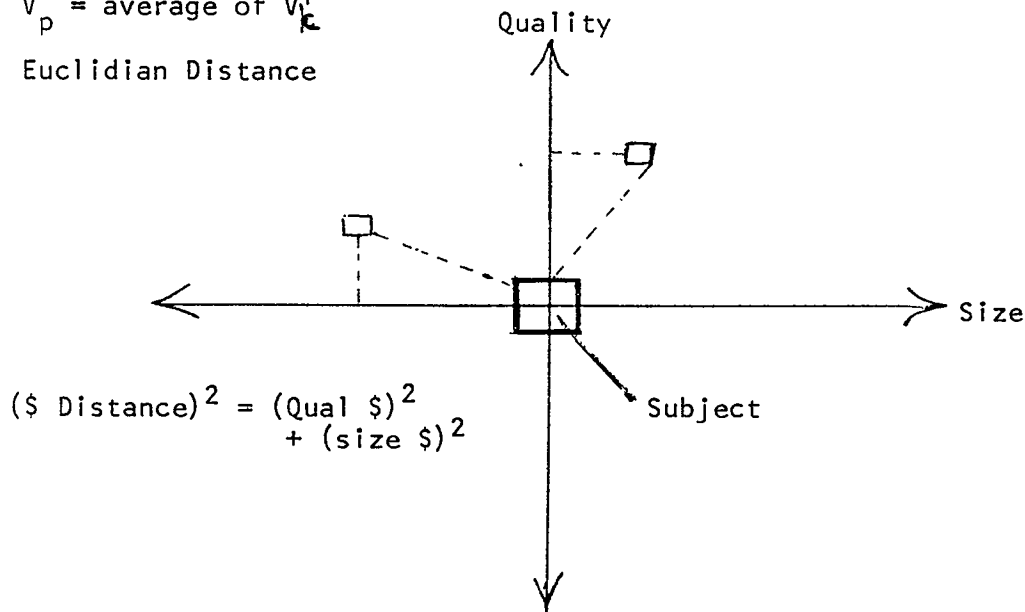
$$\begin{aligned} V'_k &= P_k + V_s - V_k \\ &= P_k + A_1 X_{1s} - A_1 X_{1k} + A_2 X_{2s} - A_2 X_{2k} \\ &= P_k + A_1 (X_{1s} - X_{1k}) + A_2 (X_{2s} - X_{2k}) \end{aligned}$$

### III. Market Comparison

$$V_k = A_1 \times (X_s - X_k) + A_2 \times (X_{s2} - X_{k2})$$

$$V_p = \text{average of } V'_k$$

### IV. Euclidian Distance



Scale requires conversion of factors to \$'s per unit

Market comp permits conversion with:

\$/unit

\$/as % of sale price/unit

\$'s/ transformation unit

# Using Regression in Appraisal

$$\begin{aligned}\Sigma Y &= na + b\Sigma X \\ \Sigma XY &= a\Sigma X + b\Sigma X^2\end{aligned}$$

1. Compute the product  $XY$ , and calculate or look up the squares  $X^2$  and  $Y^2$  in Appendix C, for each original pair of observations.
2. Sum these columns. (Steps 1 and 2 can be combined in a single operation on a calculating machine.)
3. Subtract from each sum the mean times the sum of the respective variables to get the adjusted sums of the  $x$ 's and  $y$ 's expressed as deviations from their means. That is,

$$\begin{array}{lcl} \text{Sum} & \Sigma XY & \Sigma X^2 \quad \Sigma Y^2 \\ \text{Less mean times sum} & \frac{\Sigma Y}{n} \Sigma X & \frac{\Sigma X}{n} \Sigma X \quad \frac{\Sigma Y}{n} \Sigma Y \\ \text{Equals adjusted sum} & = \Sigma xy & = \Sigma x^2 \quad = \Sigma y^2 \end{array}$$

The sum of the deviations around the means,  $\Sigma x$  and  $\Sigma y$ , must equal zero, so they drop out of the two normal equations above, which reduce to

$$b = \frac{\Sigma xy}{\Sigma x^2}$$

$$a = \bar{Y} - b\bar{X}$$

| <u>House No.</u>    | <u>Points</u> | <u>Price</u> | <u>XY</u>   | <u>X<sup>2</sup></u> | <u>Y<sup>2</sup></u> |
|---------------------|---------------|--------------|-------------|----------------------|----------------------|
| Sum                 | 1,101         | 1,122        |             |                      |                      |
| Mean                | 55.05         | 56.10        |             |                      |                      |
| Less mean times sum |               |              |             |                      |                      |
| Equals adjusted sum |               |              |             |                      |                      |
| This is             |               |              | $\Sigma xy$ | $\Sigma x^2$         | $\Sigma y^2$         |

$$b = \frac{\Sigma xy}{\Sigma x^2} = \frac{6,974}{7,395} = 0.943$$

$$a = \bar{Y} - b\bar{X} = 56.10 - 0.943(55.05) = 4.2$$

Hence, the regression line is  $Y_c = 4.2 + 0.943X$



SUBJECT

|                         |        | Rating / Weighted Ratings |          |          |          |          |          |          |      |
|-------------------------|--------|---------------------------|----------|----------|----------|----------|----------|----------|------|
| Features                | Weight |                           |          |          |          |          |          |          |      |
| Location & Neighborhood | 25     | 2/50                      | 6/150    | 4/100    | 2/50     | 2/50     | 4/100    | 4/100    | 2/50 |
| Lot                     | 5      | 2/10                      | 4/20     | 4/20     | 6/30     | 4/20     | 4/20     | 4/20     | 4/20 |
| Financial Burden        | 15     | 4/60                      | 2/30     | 4/60     | 6/90     | 4/60     | 4/60     | 4/60     | 6/90 |
| Exterior Architecture   | 15     | 4/60                      | 4/60     | 4/60     | 6/90     | 6/90     | 6/90     | 6/90     | 4/60 |
| Mechanical              | 10     | 2/20                      | 2/20     | 4/40     | 6/60     | 6/60     | 4/40     | 4/40     | 6/60 |
| Physical Condition      | 10     | 2/20                      | 4/40     | 4/40     | 4/40     | 4/40     | 4/40     | 4/40     | 4/40 |
| Interior Attractiveness | 20     | 2/40                      | 2/40     | 4/80     | 4/80     | 6/120    | 6/120    | 6/120    | 4/80 |
| TOTAL                   | 100    | 260                       | 360      | 400      | 440      | 440      | 470      | 470      | 400  |
| PRICE                   |        | \$26,300                  | \$24,500 | \$23,800 | \$22,900 | \$22,900 | \$21,900 | \$21,900 | ???  |

Ratcliff Linear Regression

EXHIBIT B

$$Y = a + bx$$

$$b = \frac{n(\sum xy) - (\sum x)(\sum y)}{n(\sum x^2) - \sum (x)^2}$$

$$a = \frac{Y - b(\sum x)}{n}$$

$$n = 7$$

The number of comparables.

$$\sum Y = 164,200$$

The sum of the seven actual prices paid for the comparables.

$$(\$26,300) + (\$24,500) + (\$23,800) + \dots$$

$$(\sum Y) = 164,200$$

$$(\sum x) = 2840$$

The sum of the total weighs for the comparables.

$$(260) + (360) + (400) + (440) + \dots$$

$$(\sum xy) = 65,916,000$$

$$(260)(26,300) + (360)(24,500) + \dots$$

$$(\sum x)(\sum y) = 465,328,000$$

$$(2840)(164,200)$$

$$\sum (x)^2 = 8,065,600$$

$$(2840)^2$$

$$(\sum x^2) = 1,186,200$$

$$(260)^2 + (360)^2 + (400)^2 + (440)^2 + \dots$$

$$b = \frac{7(65,916,000) - (465,328,000)}{7(1,186,200) - (8,065,600)} = -16.467619 \approx -16.5$$

$$a = \frac{164,200 - (-16.5)(2840)}{7} = 30,151.428 \approx \$30,151.$$

$$Y = a + bx$$

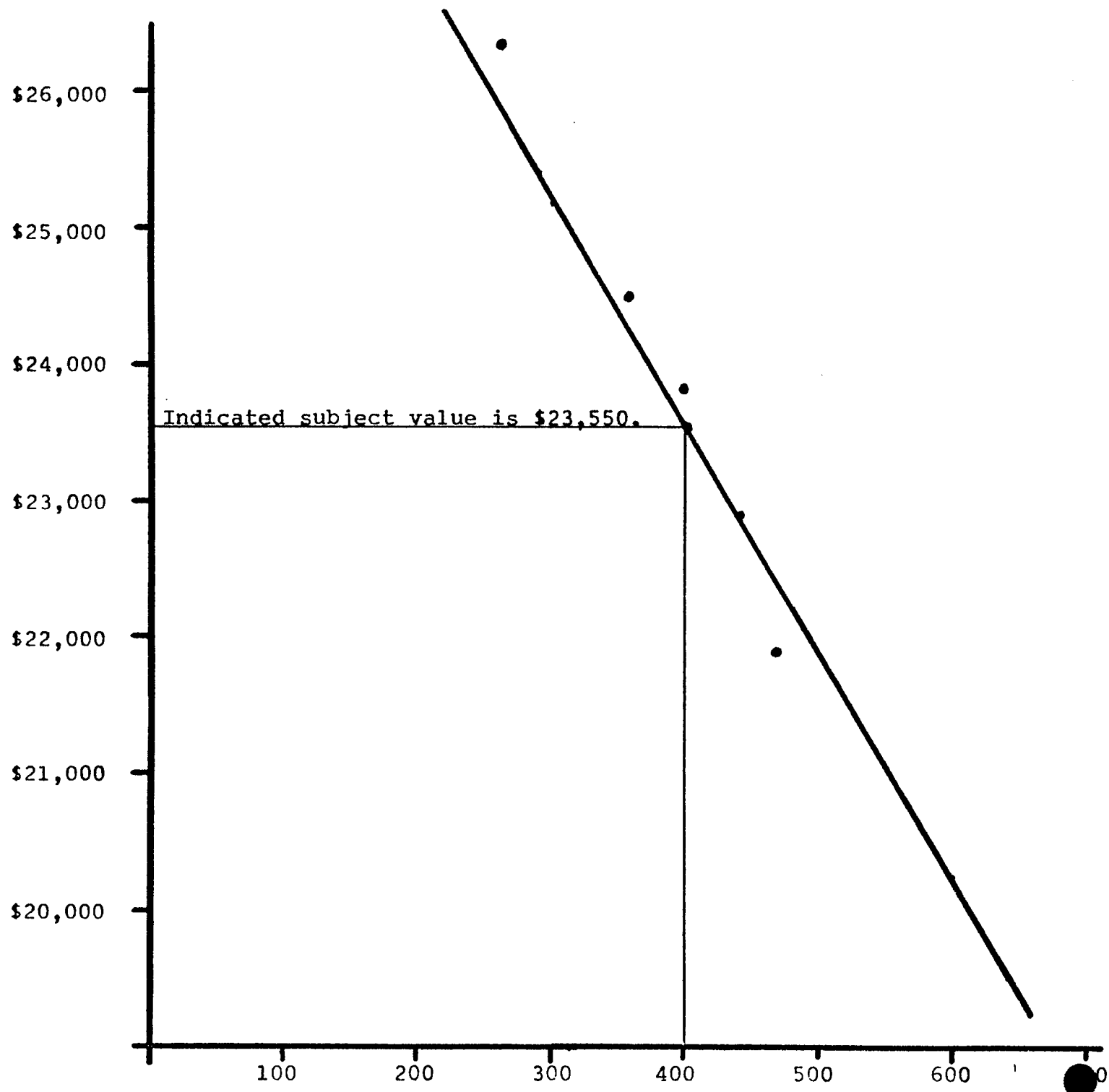
$$Y = 30,151 + (-16.5)(x)$$

'x' for the subject property was 400

$$Y = 30,151 + (-16.5)(400)$$

$$Y = \$23,550$$

EXHIBIT 1



COMPARISON OF RATGRAM/DILMORE

MARKET COMPARISON MODEL

EXCERPTS FROM GRAASKAMP SEMINARS  
(1984-1985)

## RATGRAM STYLE

WOOLWORTH BUILDING  
SCALE FOR SCORING COMPARABLES ON  
IMPORTANT INVESTOR CONSIDERATIONS FOR  
OFFICE - RETAIL SPACE IN MADISON  
C-4 ZONING

LOCATION  
10%

- 5 = High visibility
- 3 = Corner visibility limited
- 1 = Inside lot

EXPANSION POTENTIAL  
30%

- 5 = Potential for significant increases of floor space
- 3 = Flexible layouts due to bay spacing and elevator position
- 1 = Inflexibility of layout due to old bearing walls and elevator shafts

CONDITION AT  
TIME OF PURCHASE  
25%

- 5 = Fully renovated and leased
- 3 = Long-term retail leases in place. Serviceable as retail in tired space.
- 1 = Vacant and in need of total rehabilitation. Short-term lease or large vacancy in need of total rehabilitation.

ELEVATORS AT  
TIME OF PURCHASE  
20%

- 5 = Two passenger and freight
- 3 = Two passenger
- 1 = One passenger

FENESTRATION ON UPPER LEVEL  
15%

- 5 = Large windows facing the Square
- 3 = Limited window area
- 1 = No windows

WOOLWORTH BUILDING  
WEIGHTED MATRIX FOR COMPARABLE PROPERTIES  
SCORE/WEIGHTED SCORE

| ATTRIBUTE                                   | WEIGHT | COMPARABLE NO. 1<br>30 N. CARROLL<br>WOLFF KUBLY | COMPARABLE NO. 2<br>14 W. MIFFLIN | COMPARABLE NO. 3<br>5 & 7 E. MIFFLIN<br>CENTRE SEVEN | COMPARABLE NO. 4<br>50 E. MIFFLIN<br>EMPORIUM | COMPARABLE NO. 5<br>2 W. MIFFLIN<br>WOOLWORTH | SUBJECT   |
|---------------------------------------------|--------|--------------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------|
| LOCATION                                    | 10%    | 3/0.30                                           | 1/0.10                            | 1/0.10                                               | 3/0.30                                        | 5/0.50                                        | 5/0.50    |
| EXPANSION<br>POTENTIAL AT<br>TIME OF SALE   | 30%    | 3/0.90                                           | 1/0.30                            | 1/0.30                                               | 5/1.50                                        | 3/0.90                                        | 3/0.90    |
| CONDITION AT<br>TIME OF SALE                | 25%    | 1/0.25                                           | 5/1.25                            | 1/0.25                                               | 3/0.75                                        | 3/0.75                                        | 1/0.25    |
| ELEVATORS<br>IN PLACE                       | 20%    | 5/1.00                                           | 3/0.60                            | 1/0.20                                               | 3/0.60                                        | 1/0.20                                        | 1/0.20    |
| FENESTRATION<br>ON UPPER<br>FLOORS          | 15%    | 1/0.15                                           | 5/0.75                            | 5/0.75                                               | 1/0.15                                        | 3/0.45                                        | 3/0.45    |
| TOTAL<br>WEIGHTED<br>SCORE                  | 100%   | 2.60                                             | 3.00                              | 1.60                                                 | 3.30                                          | 2.80                                          | 2.30      |
| ADJUSTED<br>SELLING PRICE [1]               |        | \$625,000                                        | \$750,000                         | \$240,000                                            | \$850,000                                     | \$662,500                                     |           |
| DATE OF SALE                                |        | 7/17/80                                          | 2/27/84                           | 12/31/77                                             | 4/30/78                                       | 7/31/78                                       |           |
| GROSS BUILDING<br>AREA (GBA)                |        | 41,000 SF                                        | 40,000 SF                         | 26,000 SF                                            | 42,500 SF                                     | 39,000 SF                                     | 39,000 SF |
| ADJUSTED PRICE/GBA                          |        | \$15.24                                          | \$18.75                           | \$ 9.23                                              | \$20.00                                       | \$16.99                                       |           |
| ADJUSTED PRICE/GBA/<br>WEIGHTED POINT SCORE |        | \$5.86                                           | \$6.25                            | \$5.77                                               | \$6.06                                        | \$6.08                                        |           |

[1] See Appendix \_ for assumptions and calculations to determine adjusted selling price.

EXHIBIT 13  
RATGRAM STYLE

EXHIBIT 14  
WOOLWORTH - RATGRAM STYLE  
1ST RUN

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\*\*\*\* WOOLWORTH DEMONSTRATION \*\*\*\*

# Attributes = 5

Attribute Names, Prelim. Weights

LOCATION 20  
EXPANSION POTENTIAL 20  
CONDITION AT TIME OF SALE 20  
ELEVATORS IN PLACE 20  
FENESTRATION ON UPPER FLOORS 20

# of Observations = 5

Observ. # 1 WOLFF-KUBLY-30 N. CARROLL Price 15.24

LOCATION 3  
EXPANSION POTENTIAL 3  
CONDITION AT TIME OF SALE 1  
ELEVATORS IN PLACE 5  
FENESTRATION ON UPPER FLOORS 1

Observ. # 2 14 W. MIFFLIN Price 18.75

LOCATION 1  
EXPANSION POTENTIAL 1  
CONDITION AT TIME OF SALE 5  
ELEVATORS IN PLACE 3  
FENESTRATION ON UPPER FLOORS 5

Observ. # 3 CENTRE SEVEN-5 & 7 N. PINCKNEY Price 9.23

LOCATION 1  
EXPANSION POTENTIAL 1  
CONDITION AT TIME OF SALE 1  
ELEVATORS IN PLACE 1  
FENESTRATION ON UPPER FLOORS 5

Observ. # 4 EMPORIUM-50 E. MIFFLIN Price 20

LOCATION 3  
EXPANSION POTENTIAL 5  
CONDITION AT TIME OF SALE 3  
ELEVATORS IN PLACE 3  
FENESTRATION ON UPPER FLOORS 1

Observ. # 5 WOOLWORTH-2 W. MIFFLIN Price 16.99

LOCATION 5  
EXPANSION POTENTIAL 3  
CONDITION AT TIME OF SALE 3  
ELEVATORS IN PLACE 1  
FENESTRATION ON UPPER FLOORS 3

The Matrix:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 20 | 20 | 20 | 20 |
| 10 | 10 | 10 | 10 | 10 |
| 15 | 15 | 15 | 15 | 15 |
| 25 | 25 | 25 | 25 | 25 |
| 30 | 30 | 30 | 30 | 30 |

Median = 5.861538  
Mean = 5.913863  
Standard Deviation = .5837666

Weights:

LOCATION = 20  
EXPANSION POTENTIAL = 20  
CONDITION AT TIME OF SAL = 20  
ELEVATORS IN PLACE = 20  
FENESTRATION ON UPPER FL = 20

Final Results:

Number of Combinations = 3125  
Number of Combinations Adding to 100% = 381

Median = 6.060606  
Mean = 6.00175  
Standard Deviation = .1893479

Weights:

LOCATION = 10  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 25  
ELEVATORS IN PLACE = 20  
FENESTRATION ON UPPER FL = 15

EXHIBIT 14 (Continued)  
WOOLWORTH - RATGRAM STYLE  
2ND RUN

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\*\*\*\* WOOLWORTH DEMONSTRATION \*\*\*\*

# Attributes = 5

Attribute Names, Prelim. Weights  
LOCATION 20  
EXPANSION POTENTIAL 20  
CONDITION AT TIME OF SALE 20  
ELEVATORS IN PLACE 20  
FENESTRATION ON UPPER FLOORS 20

# of Observations = 5

Observ. # 1 WOLFF-KUBLY-30 N. CARROLL Price 15.24  
LOCATION 3  
EXPANSION POTENTIAL 3  
CONDITION AT TIME OF SALE 1  
ELEVATORS IN PLACE 5  
FENESTRATION ON UPPER FLOORS 1  
Observ. # 2 14 W. MIFFLIN Price 18.75  
LOCATION 1  
EXPANSION POTENTIAL 1  
CONDITION AT TIME OF SALE 5  
ELEVATORS IN PLACE 3  
FENESTRATION ON UPPER FLOORS 5  
Observ. # 3 CENTRE SEVEN-5 & 7 N. PINCKNEY Price 9.23  
LOCATION 1  
EXPANSION POTENTIAL 1  
CONDITION AT TIME OF SALE 1  
ELEVATORS IN PLACE 1  
FENESTRATION ON UPPER FLOORS 5  
Observ. # 4 EMPORIUM-50 E. MIFFLIN Price 20  
LOCATION 3  
EXPANSION POTENTIAL 5  
CONDITION AT TIME OF SALE 3  
ELEVATORS IN PLACE 3  
FENESTRATION ON UPPER FLOORS 1  
Observ. # 5 WOOLWORTH-2 W. MIFFLIN Price 16.99  
LOCATION 5  
EXPANSION POTENTIAL 3  
CONDITION AT TIME OF SALE 3  
ELEVATORS IN PLACE 1  
FENESTRATION ON UPPER FLOORS 3

The Matrix:

|    |    |    |    |    |
|----|----|----|----|----|
| 10 | 30 | 25 | 20 | 15 |
| 0  | 20 | 15 | 10 | 5  |
| 5  | 25 | 20 | 15 | 10 |
| 15 | 35 | 30 | 25 | 20 |
| 20 | 40 | 35 | 30 | 25 |

Median = 6.060606  
Mean = 6.00175  
Standard Deviation = .1893479

Weights:

LOCATION = 10  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 25  
ELEVATORS IN PLACE = 20  
FENESTRATION ON UPPER FL = 15

Final Results:

Number of Combinations = 3125  
Number of Combinations Adding to 100% = 381

Median = 6.060606  
Mean = 6.00175  
Standard Deviation = .1893479

Weights:

LOCATION = 10  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 25  
ELEVATORS IN PLACE = 20  
FENESTRATION ON UPPER FL = 15



## EXHIBIT 15

## WOOLWORTH - RATGRAM STYLE

CALCULATION OF MOST PROBABLE PRICE USING  
MEAN PRICE PER POINT EQUATION METHOD

| COMPARABLE<br>PROPERTY | SELLING PRICE<br>PER SF OF GBA | POINT<br>SCORE | PRICE PER SF OF GBA/<br>TOTAL WEIGHTED<br>SCORE (x) |
|------------------------|--------------------------------|----------------|-----------------------------------------------------|
| 1                      | \$15.24                        | 2.60           | \$5.86                                              |
| 2                      | 18.75                          | 3.00           | 6.25                                                |
| 3                      | 9.23                           | 1.60           | 5.77                                                |
| 4                      | 20.00                          | 3.30           | 6.06                                                |
| 5                      | 16.99                          | 2.80           | <u>6.08</u>                                         |
| TOTAL                  |                                |                | \$30.02<br>=====                                    |

Total of Price Per SF of GBA = \$30.02  
Total Weighted Score

Mean Value ( $\bar{x}$ ) =  $30.02/5 = \$6.00$

Standard Deviation =  $\sqrt{\frac{\sum (x - \bar{x})^2}{n-1}}$  = \$0.19 where:

| x      | $\bar{x}$ | $(x - \bar{x})$ | $(x - \bar{x})^2$ | n | n-1 |
|--------|-----------|-----------------|-------------------|---|-----|
| \$5.86 | \$6.00    | = -\$0.14       | 0.0196            | 5 | 4   |
| 6.25   | 6.00      | = 0.25          | 0.0625            |   |     |
| 5.77   | 6.00      | = - 0.23        | 0.0529            |   |     |
| 6.06   | 6.00      | = 0.06          | 0.0036            |   |     |
| 6.08   | 6.00      | = 0.08          | <u>0.0064</u>     |   |     |
|        |           |                 | 0.1450            |   |     |

$$\sqrt{\frac{0.1450}{4}} = \sqrt{0.03625} = 0.190394 \text{ or } \$0.19$$

## EXHIBIT 15 (Continued)

Value Range of Price/Point Score: \$6.00 ± \$0.19

Since GBA of subject is 39,000 square feet and total weighted point score of subject is 2.3, then:

High

Estimate:  $\$6.19 \times 2.3 \times 39,000 \text{ SF} = \$555,243 \text{ or } \$560,000$   
(\$14.23/SF)

Central

Tendency:  $\$6.00 \times 2.3 \times 39,000 \text{ SF} = \$538,200 \text{ or } \$540,000$   
(\$13.80/SF)

Low

Estimate:  $\$5.81 \times 2.3 \times 39,000 \text{ SF} = \$521,159 \text{ or } \$520,000$   
(\$13.36/SF)

JUSTIFICATION OF COMPARABLE PRICE FORMULA FOR  
WOOLWORTH BUILDING  
BY MEANS OF ANALYSIS OF VARIANCE OF ACTUAL SALE PRICE VS. PREDICTED PRICE  
OF COMPARABLES USING MEAN PRICE PER POINT EQUATION METHOD

| NO.          | COMPARABLE PROPERTY                      | WEIGHTED<br>POINT<br>SCORE | MEAN PRICE<br>PER<br>POINT SCORE | PREDICTED<br>PRICE/<br>SF GBA | ACTUAL<br>PRICE/<br>SF GBA | VARIANCE      | % OF VARIANCE<br>TO ACTUAL PRICE |
|--------------|------------------------------------------|----------------------------|----------------------------------|-------------------------------|----------------------------|---------------|----------------------------------|
| 1            | WOLFF KUBLY<br>30 N. Carroll Street      | 2.60                       | \$6.00                           | \$15.60                       | \$15.24                    | \$ 0.36       | 2.4%                             |
| 2            | 14 W. Mifflin Street                     | 3.00                       | 6.00                             | 18.00                         | 18.75                      | - 0.75        | 4.0                              |
| 3            | CENTRE SEVEN<br>5 & 7 N. Pinckney Street | 1.60                       | 6.00                             | 9.60                          | 9.23                       | 0.37          | 4.0                              |
| 4            | EMPORIUM<br>50 E. Mifflin Street         | 3.30                       | 6.00                             | 19.80                         | 20.00                      | - 0.20        | 1.0                              |
| 5            | WOOLWORTH<br>2 W. Mifflin Street         | 2.80                       | 6.00                             | 16.80                         | 16.99                      | <u>- 0.19</u> | 1.1                              |
| NET VARIANCE |                                          |                            |                                  |                               |                            | \$ - 0.41     |                                  |

RATGRAM STYLE

EXHIBIT 16

WOOLWORTH BUILDING  
SCALE FOR SCORING COMPARABLES ON  
IMPORTANT INVESTOR CONSIDERATIONS FOR  
OFFICE - RETAIL SPACE IN MADISON  
C-4 ZONING  
DILMORE STYLE

LOCATION  
15%

- 26 = High visibility
- 15 = Corner visibility limited
- 10 = Inside lot

EXPANSION POTENTIAL  
30%

- 26 = Potential for significant increases of floor space
- 15 = Flexible layouts due to bay spacing and elevator position
- 10 = Inflexibility of layout due to old bearing walls and elevator shafts

CONDITION AT  
TIME OF PURCHASE  
40%

- 26 = Fully renovated and leased
- 15 = Long-term retail leases in place. Serviceable as retail in tired space.
- 10 = Vacant and in need of total rehabilitation. Short-term lease or large vacancy in need of total rehabilitation.

ELEVATORS AT  
TIME OF PURCHASE  
15%

- 26 = Two passenger and freight
- 15 = Two passenger
- 10 = One passenger

WOOLWORTH BUILDING  
WEIGHTED MATRIX FOR COMPARABLE PROPERTIES  
SCORE/WEIGHTED SCORE

| ATTRIBUTE                                    | WEIGHT | COMPARABLE NO. 1<br>30 N. CARROLL<br>WOLFF KUBLY | COMPARABLE NO. 2<br>14 W. MIFFLIN | COMPARABLE NO. 3<br>5 & 7 E. MIFFLIN<br>CENTRE SEVEN | COMPARABLE NO. 4<br>50 E. MIFFLIN<br>EMPORIUM | COMPARABLE NO. 5<br>2 W. MIFFLIN<br>WOOLWORTH | SUBJECT   |
|----------------------------------------------|--------|--------------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------|
| LOCATION                                     | 15%    | 15/2.25                                          | 10/1.50                           | 10/1.50                                              | 15/2.25                                       | 26/3.90                                       | 26/3.90   |
| EXPANSION<br>POTENTIAL AT<br>TIME OF SALE    | 30%    | 15/4.50                                          | 10/3.00                           | 10/3.00                                              | 26/7.80                                       | 15/4.50                                       | 15/4.50   |
| CONDITION AT<br>TIME OF SALE                 | 40%    | 10/4.00                                          | 26/10.40                          | 10/4.00                                              | 15/6.00                                       | 15/6.00                                       | 10/4.00   |
| ELEVATORS<br>IN PLACE                        | 15%    | 26/3.90                                          | 15/2.25                           | 10/1.50                                              | 15/2.25                                       | 10/1.50                                       | 10/1.50   |
| TOTAL<br>WEIGHTED<br>SCORE                   | 100%   | 14.65                                            | 17.15                             | 10.00                                                | 18.30                                         | 15.90                                         | 13.90     |
| ADJUSTED<br>SELLING PRICE [1]                |        | \$625,000                                        | \$750,000                         | \$240,000                                            | \$850,000                                     | \$662,500                                     |           |
| DATE OF SALE                                 |        | 7/17/80                                          | 2/27/84                           | 12/31/77                                             | 4/30/78                                       | 7/31/78                                       |           |
| GROSS BUILDING<br>AREA (GBA)                 |        | 41,000 SF                                        | 40,000 SF                         | 26,000 SF                                            | 42,500 SF                                     | 39,000 SF                                     | 39,000 SF |
| ADJUSTED PRICE/GBA                           |        | \$15.24                                          | \$18.75                           | \$ 9.23                                              | \$20.00                                       | \$16.99                                       |           |
| ADJUSTED PRICE/GBA +<br>WEIGHTED POINT SCORE |        | \$1.04                                           | \$1.09                            | \$0.92                                               | \$1.09                                        | \$1.07                                        |           |

[1] See Appendix \_ for assumptions and calculations to determine adjusted selling price.

EXHIBIT 18  
DILMORE STYLE

EXHIBIT 19  
WOOLWORTH - DILMORE STYLE  
1ST RUN

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\*\*\*\* WOOLWORTH-DILMORE STYLE \*\*\*\*

# Attributes = 5

Attribute Names, Prelim. Weights

LOCATION 20  
EXPANSION POTENTIAL 20  
CONDITION AT TIME OF SALE 20  
ELEVATORS IN PLACE 20  
FENESTRATION ON UPPER FLOORS 20

# of Observations = 5

Observ. # 1 WOLFF-KUBLY Price 15.24  
LOCATION 15  
EXPANSION POTENTIAL 15  
CONDITION AT TIME OF SALE 10  
ELEVATORS IN PLACE 26  
FENESTRATION ON UPPER FLOORS 10  
Observ. # 2 14 W. MIFFLIN Price 18.75  
LOCATION 10  
EXPANSION POTENTIAL 10  
CONDITION AT TIME OF SALE 26  
ELEVATORS IN PLACE 15  
FENESTRATION ON UPPER FLOORS 26  
Observ. # 3 CENTRE SEVEN Price 9.23  
LOCATION 10  
EXPANSION POTENTIAL 10  
CONDITION AT TIME OF SALE 10  
ELEVATORS IN PLACE 10  
FENESTRATION ON UPPER FLOORS 26  
Observ. # 4 EMPORIUM Price 20  
LOCATION 15  
EXPANSION POTENTIAL 26  
CONDITION AT TIME OF SALE 15  
ELEVATORS IN PLACE 15  
FENESTRATION ON UPPER FLOORS 10  
Observ. # 5 WOOLWORTH Price 16.99  
LOCATION 26  
EXPANSION POTENTIAL 15  
CONDITION AT TIME OF SALE 15  
ELEVATORS IN PLACE 10  
FENESTRATION ON UPPER FLOORS 15

The Matrix:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 20 | 20 | 20 | 20 |
| 10 | 10 | 10 | 10 | 10 |
| 15 | 15 | 15 | 15 | 15 |
| 25 | 25 | 25 | 25 | 25 |
| 30 | 30 | 30 | 30 | 30 |

Median = 1.048765  
Mean = 1.012559  
Standard Deviation = .1956356

Weights:

LOCATION = 20  
EXPANSION POTENTIAL = 20  
CONDITION AT TIME OF SAL = 20  
ELEVATORS IN PLACE = 20  
FENESTRATION ON UPPER FL = 20

Final Results:

Number of Combinations = 3125  
Number of Combinations Adding to 100% = 381

Median = 1.068553  
Mean = 1.024281  
Standard Deviation = .1314307

Weights:

LOCATION = 15  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 30  
ELEVATORS IN PLACE = 15  
FENESTRATION ON UPPER FL = 10

EXHIBIT 19 (Continued)  
WOOLWORTH - DILMORE STYLE  
2ND RUN

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\*\*\*\* WOOLWORTH-DILMORE STYLE \*\*\*\*

# Attributes = 5

Attribute Names, Prelim. Weights

LOCATION 20  
EXPANSION POTENTIAL 20  
CONDITION AT TIME OF SALE 20  
ELEVATORS IN PLACE 20  
FENESTRATION ON UPPER FLOORS 20

# of Observations = 5

Observ. # 1 WOLFF-KUBLY Price 15.24  
LOCATION 15  
EXPANSION POTENTIAL 15  
CONDITION AT TIME OF SALE 10  
ELEVATORS IN PLACE 26  
FENESTRATION ON UPPER FLOORS 10  
Observ. # 2 14 W. MIFFLIN Price 18.75  
LOCATION 10  
EXPANSION POTENTIAL 10  
CONDITION AT TIME OF SALE 26  
ELEVATORS IN PLACE 15  
FENESTRATION ON UPPER FLOORS 26  
Observ. # 3 CENTRE SEVEN Price 9.23  
LOCATION 10  
EXPANSION POTENTIAL 10  
CONDITION AT TIME OF SALE 10  
ELEVATORS IN PLACE 10  
FENESTRATION ON UPPER FLOORS 26  
Observ. # 4 EMPORIUM Price 20  
LOCATION 15  
EXPANSION POTENTIAL 26  
CONDITION AT TIME OF SALE 15  
ELEVATORS IN PLACE 15  
FENESTRATION ON UPPER FLOORS 10  
Observ. # 5 WOOLWORTH Price 16.99  
LOCATION 26  
EXPANSION POTENTIAL 15  
CONDITION AT TIME OF SALE 15  
ELEVATORS IN PLACE 10  
FENESTRATION ON UPPER FLOORS 15

The Matrix:

|    |    |    |    |    |
|----|----|----|----|----|
| 15 | 30 | 30 | 15 | 10 |
| 5  | 20 | 20 | 5  | 0  |
| 10 | 25 | 25 | 10 | 5  |
| 20 | 35 | 35 | 20 | 15 |
| 25 | 40 | 40 | 25 | 20 |

Median = 1.068553  
Mean = 1.024281  
Standard Deviation = .1314307

Weights:

LOCATION = 15  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 30  
ELEVATORS IN PLACE = 15  
FENESTRATION ON UPPER FL = 10

Final Results:

Number of Combinations = 3125  
Number of Combinations Adding to 100% = 381

Median = 1.068553  
Mean = 1.043603  
Standard Deviation = 7.084803E-02

Weights:

LOCATION = 15  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 40  
ELEVATORS IN PLACE = 15  
FENESTRATION ON UPPER FL = 0

EXHIBIT 19 (Continued)  
WOOLWORTH - DILMORE STYLE  
3RD RUN

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\*\*\*\* WOOLWORTH-DILMORE STYLE \*\*\*\*

# Attributes = 5

Attribute Names, Prelim. Weights

LOCATION 20  
EXPANSION POTENTIAL 20  
CONDITION AT TIME OF SALE 20  
ELEVATORS IN PLACE 20  
FENESTRATION ON UPPER FLOORS 20

# of Observations = 5

Observ. # 1 WOLFF-KUBLY Price 15.24

LOCATION 15  
EXPANSION POTENTIAL 15  
CONDITION AT TIME OF SALE 10  
ELEVATORS IN PLACE 26  
FENESTRATION ON UPPER FLOORS 10

Observ. # 2 14 W. MIFFLIN Price 18.75

LOCATION 10  
EXPANSION POTENTIAL 10  
CONDITION AT TIME OF SALE 26  
ELEVATORS IN PLACE 15  
FENESTRATION ON UPPER FLOORS 26

Observ. # 3 CENTRE SEVEN Price 9.23

LOCATION 10  
EXPANSION POTENTIAL 10  
CONDITION AT TIME OF SALE 10  
ELEVATORS IN PLACE 10  
FENESTRATION ON UPPER FLOORS 26

Observ. # 4 EMPORIUM Price 20

LOCATION 15  
EXPANSION POTENTIAL 26  
CONDITION AT TIME OF SALE 15  
ELEVATORS IN PLACE 15  
FENESTRATION ON UPPER FLOORS 10

Observ. # 5 WOOLWORTH Price 16.99

LOCATION 26  
EXPANSION POTENTIAL 15  
CONDITION AT TIME OF SALE 15  
ELEVATORS IN PLACE 10  
FENESTRATION ON UPPER FLOORS 15

The Matrix:

|    |    |    |    |     |
|----|----|----|----|-----|
| 15 | 30 | 40 | 15 | 0   |
| 5  | 20 | 30 | 5  | -10 |
| 10 | 25 | 35 | 10 | -5  |
| 20 | 35 | 45 | 20 | 5   |
| 25 | 40 | 50 | 25 | 10  |

Median = 1.068553  
Mean = 1.043603  
Standard Deviation = 7.084803E-02

Weights:

LOCATION = 15  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 40  
ELEVATORS IN PLACE = 15  
FENESTRATION ON UPPER FL = 0

Final Results:

Number of Combinations = 3125  
Number of Combinations Adding to 100% = 233

Median = 1.068553  
Mean = 1.043603  
Standard Deviation = 7.084803E-02

Weights:

LOCATION = 15  
EXPANSION POTENTIAL = 30  
CONDITION AT TIME OF SAL = 40  
ELEVATORS IN PLACE = 15  
FENESTRATION ON UPPER FL = 0



## EXHIBIT 20

WOOLWORTH BUILDING  
CALCULATION OF MOST PROBABLE PRICE USING  
MEAN PRICE PER POINT EQUATION METHOD  
DILMORE STYLE

| COMPARABLE<br>PROPERTY | SELLING PRICE<br>PER SF OF GBA | POINT<br>SCORE | PRICE PER SF OF GBA/<br>TOTAL WEIGHTED<br>SCORE (x) |
|------------------------|--------------------------------|----------------|-----------------------------------------------------|
| 1                      | \$15.24                        | 14.65          | \$1.04                                              |
| 2                      | 18.75                          | 17.15          | 1.09                                                |
| 3                      | 9.23                           | 10.00          | 0.92                                                |
| 4                      | 20.00                          | 18.30          | 1.09                                                |
| 5                      | 16.99                          | 15.90          | <u>1.07</u>                                         |
| TOTAL                  |                                |                | \$5.21                                              |

Total of  $\frac{\text{Price Per SF of GBA}}{\text{Total Weighted Score}} = \$5.21$

Mean Value ( $\bar{x}$ ) =  $\$5.21 \div 5 = \$1.04$

Standard Deviation of the Mean =  $\sqrt{\frac{\sum (x - \bar{x})^2}{n-1}} = \$0.07$  where:

| x      | $\bar{x}$ | $(x - \bar{x})$ | $(x - \bar{x})^2$ | n | n-1 |
|--------|-----------|-----------------|-------------------|---|-----|
| \$1.04 | \$1.04    | =               | \$0.00            | 5 | 4   |
| 1.09   | 1.04      | =               | 0.05              |   |     |
| 0.92   | 1.04      | =               | 0.12              |   |     |
| 1.09   | 1.04      | =               | 0.05              |   |     |
| 1.07   | 1.04      | =               | 0.03              |   |     |
|        |           |                 | <u>0.0009</u>     |   |     |
|        |           |                 | 0.0203            |   |     |

$$\sqrt{\frac{0.0203}{4}} = \sqrt{0.005075} = 0.071239 \text{ or } \$0.07$$

## EXHIBIT 20 (Continued)

Value Range of Price/Point Score: \$1.04 ± \$0.07

Since GBA of subject is 39,000 square feet and total weighted point score of subject is 13.90, then:

High

Estimate: \$1.11 x 13.90 x 39,000 SF = \$601,731 or \$600,000  
(\$15.43/SF)

Central

Tendency: \$1.04 x 13.90 x 39,000 SF = \$563,784 or \$560,000  
(\$14.46/SF)

Low

Estimate: \$0.97 x 13.90 x 39,000 SF = \$525,837 or \$530,000  
(\$13.48/SF)

COMPARISON OF WOOLWORTH DEMONSTRATION -  
RATGRAM STYLE  
AND WOOLWORTH - DILMORE STYLE

| =====            |               |               | % VARIANCE            |
|------------------|---------------|---------------|-----------------------|
|                  | RATGRAM STYLE | DILMORE STYLE | RATGRAM<br>TO DILMORE |
| -----            |               |               |                       |
| Estimated Value  |               |               |                       |
| Central Tendency | \$540,000     | \$560,000     | 3.7%                  |

JUSTIFICATION OF COMPARABLE PRICE FORMULA FOR  
WOOLWORTH BUILDING  
BY MEANS OF ANALYSIS OF VARIANCE OF ACTUAL SALE PRICE VS. PREDICTED PRICE  
OF COMPARABLES USING MEAN PRICE PER POINT EQUATION METHOD

| NO.          | COMPARABLE PROPERTY                      | WEIGHTED<br>POINT<br>SCORE | MEAN PRICE<br>PER<br>POINT SCORE | PREDICTED<br>PRICE/<br>SF GBA | ACTUAL<br>PRICE/<br>SF GBA | VARIANCE  | % OF VARIANCE<br>TO ACTUAL PRICE |
|--------------|------------------------------------------|----------------------------|----------------------------------|-------------------------------|----------------------------|-----------|----------------------------------|
| 1            | WOLFF KUBLY<br>30 N. Carroll Street      | 14.65                      | \$1.04                           | \$15.24                       | \$15.24                    | \$ 0.00   | 0.0%                             |
| 2            | 14 W. Mifflin Street                     | 17.15                      | 1.04                             | 17.84                         | 18.75                      | - 0.91    | 4.9                              |
| 3            | CENTRE SEVEN<br>5 & 7 N. Pinckney Street | 10.00                      | 1.04                             | 10.40                         | 9.23                       | 1.17      | 12.7                             |
| 4            | EMPORIUM<br>50 E. Mifflin Street         | 18.30                      | 1.04                             | 19.03                         | 20.00                      | - 0.97    | 4.9                              |
| 5            | WOOLWORTH<br>2 W. Mifflin Street         | 15.90                      | 1.04                             | 16.54                         | 16.99                      | - 0.45    | 2.6                              |
| NET VARIANCE |                                          |                            |                                  |                               |                            | \$ - 1.16 |                                  |

EXHIBIT 21  
DILMORE STYLE

SAMPLE OF EXPERIMENTAL  
AUTOMATED MARKET COMPARISON PROCESS

DILMORE  
AND  
GRAASKAMP

## EXHIBIT IV-9

SCALE FOR SCORING COMPARABLE SALES  
BASED UPON PRICE SENSITIVE ATTRIBUTES

| =====                                                                 |        |                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ATTRIBUTE                                                             | WEIGHT | SCORE                                                                                                                                                                                                                                                                                                                                                             |
| <hr/>                                                                 |        |                                                                                                                                                                                                                                                                                                                                                                   |
| GROSS BUILDING<br>AREA                                                | 30%    | 5 = Building less than 15,000<br>SF of GBA<br>3 = Building between 15,000 SF<br>to 40,000 SF of GBA<br>1 = Building greater than<br>40,000 SF of GBA                                                                                                                                                                                                              |
| LOCATION                                                              | 30%    | 5 = Located in South Madison<br>Industrial Park area with<br>or without rail siding or<br>along major highway with<br>rail siding<br>3 = Located along or visible<br>from a major road such as<br>Highways 51, 151, 113, or<br>30 in a mixed use area<br>without rail siding.<br>1 = Located in more isolated<br>commercial mixed use area<br>without rail siding |
| RATIO OF LAND<br>TO GBA                                               | 10%    | 5 = Greater than 4:1<br>3 = Between 4:1 and 2.5:1<br>1 = Less than 2.5:1                                                                                                                                                                                                                                                                                          |
| EFFICIENCY OF BUILDING<br>DESIGN FOR STORAGE AND<br>DISTRIBUTION USES | 10%    | 5 = Efficient layout for<br>accessibility of stored<br>goods with adequate number<br>of overhead doors and<br>truck height loading docks<br>3 = Adequate layout with<br>limited number of overhead<br>doors and truck height<br>docks<br>1 = Deep space with inadequate<br>number of overhead doors<br>and truck height doors                                     |
| QUALITY OF<br>HVAC SYSTEM                                             | 20%    | 5 = Fully insulated with heat<br>in warehouse and office<br>area<br>3 = Partially heated warehouse<br>space and adequate heated<br>office space<br>1 = Minimal heat, if any, in<br>warehouse area and small<br>heated office space                                                                                                                                |
| <hr/>                                                                 |        |                                                                                                                                                                                                                                                                                                                                                                   |

WEIGHTED MATRIX FOR COMPARABLE PROPERTIES  
SCORE/WEIGHTED SCORE

| ATTRIBUTE                               | WEIGHT | COMPARABLE NO. 1 | COMPARABLE NO. 2 | COMPARABLE NO. 3 | COMPARABLE NO. 4       | COMPARABLE NO. 5        | COMPARABLE NO. 6 | SUBJECT           |
|-----------------------------------------|--------|------------------|------------------|------------------|------------------------|-------------------------|------------------|-------------------|
|                                         |        | 1115 O'Neill St. | 2810 Bryant St.  | 910 Watson Ave.  | 4401 Cottage Grove Rd. | 4610 - 4622 Fenwick Rd. | 3103 Watford Way | 2422 Pennsylvania |
| GROSS BUILDING AREA (GBA)               | 30%    | 5/1.50           | 3/0.90           | 1/0.30           | 3/0.90                 | 5/1.50                  | 5/1.50           | 3/0.90            |
| LOCATION                                | 30%    | 1/0.30           | 3/0.90           | 5/1.50           | 5/1.50                 | 3/0.90                  | 5/1.50           | 3/0.90            |
| RATIO OF LAND TO GBA                    | 10%    | 3/0.30           | 1/0.10           | 1/0.10           | 5/0.50                 | 3/0.30                  | 1/0.10           | 1/0.10            |
| EFFICIENCY OF BUILDING DESIGN           | 10%    | 3/0.30           | 1/0.10           | 1/0.10           | 5/0.50                 | 5/0.50                  | 3/0.30           | 1/0.10            |
| QUALITY OF HVAC SYSTEM                  | 20%    | 5/1.00           | 3/0.60           | 3/0.60           | 1/0.20                 | 5/1.00                  | 1/0.20           | 5/1.00            |
| TOTAL WEIGHTED SCORE                    | 100%   | 3.40             | 2.60             | 2.60             | 3.60                   | 4.20                    | 3.60             | 3.00              |
| CASH SELLING PRICE                      |        | \$200,000        | \$212,000        | \$625,000        | \$525,000              | \$301,000               | \$209,000        |                   |
| DATE OF SALE                            |        | 6/27/84          | 6/12/83          | 6/30/83          | 1/4/82                 | 2/29/84                 | 6/30/82          |                   |
| GROSS BUILDING AREA (GBA)               |        | 13,832 SF        | 19,760 SF        | 57,800 SF        | 34,517 SF              | 17,300 SF               | 14,000 SF        | 30,195 SF         |
| CASH PRICE/ SF OF GBA                   |        | \$14.46          | \$10.73          | \$10.81          | \$15.21                | \$17.40                 | \$14.94          |                   |
| CASH PRICE PER SF/ WEIGHTED POINT SCORE |        | \$4.2529         | \$4.1269         | \$4.1577         | \$4.2250               | \$4.1429                | \$4.1500         |                   |

EXHIBIT IV-10

JUSTIFICATION OF COMPARABLE PRICE FORMULA  
FOR THE GOODWILL BUILDING  
BY MEANS OF ANALYSIS OF VARIANCE OF ACTUAL SALE PRICE  
VS. PREDICTED PRICE OF COMPARABLES  
USING MEAN PRICE PER POINT EQUATION METHOD

| NO.          | COMPARABLE SALE         | WEIGHTED<br>POINT SCORE | MEAN PRICE<br>PER POINT SCORE | PREDICTED<br>PRICE PER SF<br>OF GBA | ACTUAL<br>PRICE PER SF<br>OF GBA | VARIANCE | % OF VARIANCE<br>TO ACTUAL PRICES |
|--------------|-------------------------|-------------------------|-------------------------------|-------------------------------------|----------------------------------|----------|-----------------------------------|
| 1            | 1115 O'Neill Street     | 3.40                    | \$4.18                        | 14.21                               | 14.46                            | - 0.25   | 1.7%                              |
| 2            | 2810 Bryant Street      | 2.60                    | 4.18                          | 10.87                               | 10.73                            | 0.14     | 1.3%                              |
| 3            | 901 Watson Avenue       | 2.60                    | 4.18                          | 10.87                               | 10.81                            | 0.06     | 0.6%                              |
| 4            | 4401 Cottage Grove Road | 3.60                    | 4.18                          | 15.05                               | 15.21                            | - 0.16   | 1.1%                              |
| 5            | 4610-22 Femrite Road    | 4.20                    | 4.18                          | 17.56                               | 17.40                            | 0.16     | 0.9%                              |
| 6            | 3103 Watford Way        | 3.60                    | 4.18                          | 15.05                               | 14.94                            | 0.11     | 0.7%                              |
| NET VARIANCE |                         |                         |                               |                                     |                                  | \$ 0.06  |                                   |

EXHIBIT IV-11

## EXHIBIT IV-12

## GOODWILL BUILDING

CALCULATION OF MOST PROBABLE PRICE USING  
MEAN PRICE PER POINT EQUATION METHOD

| COMPARABLE<br>PROPERTY | CASH SELLING<br>PRICE PER<br>SF OF GBA | WEIGHTED<br>POINT SCORE | PRICE PER SF OF<br>GBA/TOTAL<br>WEIGHTED SCORE (x) |
|------------------------|----------------------------------------|-------------------------|----------------------------------------------------|
| 1                      | \$14.46                                | 3.40                    | \$4.25                                             |
| 2                      | 10.73                                  | 2.60                    | 4.13                                               |
| 3                      | 10.81                                  | 2.60                    | 4.16                                               |
| 4                      | 15.21                                  | 3.60                    | 4.23                                               |
| 5                      | 17.40                                  | 4.20                    | 4.14                                               |
| 6                      | 14.94                                  | 3.60                    | <u>4.15</u>                                        |
| TOTAL                  |                                        |                         | \$25.06                                            |

Total of Price per SF of GBA = \$25.06  
Total Weighted Score

Mean Value (x) = \$25.06/6 = \$4.18

Standard Deviation =  $\sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$  = \$0.05 where:

| <u>x</u> | <u><math>\bar{x}</math></u> | <u><math>(x - \bar{x})</math></u> | <u><math>(x - \bar{x})^2</math></u> | <u>n</u> | <u>n - 1</u> |
|----------|-----------------------------|-----------------------------------|-------------------------------------|----------|--------------|
| 4.25     | 4.18                        | 0.07                              | 0.0049                              | 6        | 5            |
| 4.13     | 4.18                        | = - 0.05                          | 0.0025                              |          |              |
| 4.16     | 4.18                        | = - 0.02                          | 0.0004                              |          |              |
| 4.23     | 4.18                        | = 0.05                            | 0.0025                              |          |              |
| 4.14     | 4.18                        | = - 0.04                          | 0.0016                              |          |              |
| 4.15     | 4.18                        | = - 0.03                          | <u>0.0009</u>                       |          |              |
|          |                             |                                   | 0.0128                              |          |              |

$$\sqrt{\frac{0.0128}{5}} = 0.050596$$



ESTIMATED RANGE OF MOST PROBABLE SELLING PRICE  
OF THE GOODWILL BUILDING

|                     | SCORE<br>FOR SUBJECT | MEAN VALUE +/-<br>\$0.05/POINT SCORE | PRICE/SF<br>OF GBA | GBA OF<br>SUBJECT | ESTIMATED<br>VALUE     |
|---------------------|----------------------|--------------------------------------|--------------------|-------------------|------------------------|
| LOW<br>ESTIMATE     | 3.00                 | \$4.13                               | \$12.39            | 30,195 SF         | \$374,116 or \$374,000 |
| CENTRAL<br>TENDENCY | 3.00                 | \$4.18                               | \$12.54            | 30,195 SF         | \$378,645 or \$379,000 |
| HIGH<br>ESTIMATE    | 3.00                 | \$4.23                               | \$12.69            | 30,195 SF         | \$383,175 or \$383,000 |

EXHIBIT IV-12 (Continued)

APPENDIX E

COMPUTER OUTPUT OF DILMORE QUANTITATIVE  
POINT WEIGHTING PROGRAM

\*\*\*\* GOODWILL 3 \*\*\*\*

# Attributes = 5

Attribute Names, Prelim. Weights ← Preliminary weights selected  
GROSS BUILDING AREA (GBA) 20 by the appraisers  
LOCATION 20  
RATIO OF LAND TO GBA 20  
EFFICIENCY OF BUILDING DESIGN FOR STORAGE AND DISTRIBUTION 20  
QUALITY OF HVAC SYSTEM 20

# of Observations = 6 ← Comparable sales with score for  
each comparable

Observ. # 1 1115 O'NEILL ST Price 14.46  
GROSS BUILDING AREA (GBA) 5  
LOCATION 1  
RATIO OF LAND TO GBA 3  
EFFICIENCY OF BUILDING DESIGN FOR STORAGE AND DISTRIBUTION 3  
QUALITY OF HVAC SYSTEM 5  
Observ. # 2 2810 BRYANT ST Price 10.73  
GROSS BUILDING AREA (GBA) 3  
LOCATION 3  
RATIO OF LAND TO GBA 1  
EFFICIENCY OF BUILDING DESIGN FOR STORAGE AND DISTRIBUTION 1  
QUALITY OF HVAC SYSTEM 3  
Observ. # 3 901 WATSON AVE Price 10.81  
GROSS BUILDING AREA (GBA) 1  
LOCATION 5  
RATIO OF LAND TO GBA 1  
EFFICIENCY OF BUILDING DESIGN FOR STORAGE AND DISTRIBUTION 1  
QUALITY OF HVAC SYSTEM 3  
Observ. # 4 4401 COTTAGE GROVE RD Price 15.21  
GROSS BUILDING AREA (GBA) 3  
LOCATION 5  
RATIO OF LAND TO GBA 5  
EFFICIENCY OF BUILDING DESIGN FOR STORAGE AND DISTRIBUTION 5  
QUALITY OF HVAC SYSTEM 1  
Observ. # 5 4610-22 FERMITE RD Price 17.4  
GROSS BUILDING AREA (GBA) 5  
LOCATION 3  
RATIO OF LAND TO GBA 3  
EFFICIENCY OF BUILDING DESIGN FOR STORAGE AND DISTRIBUTION 5  
QUALITY OF HVAC SYSTEM 5  
Observ. # 6 3103 WATFORD WAY Price 14.94  
GROSS BUILDING AREA (GBA) 5  
LOCATION 5  
RATIO OF LAND TO GBA 1  
EFFICIENCY OF BUILDING DESIGN FOR STORAGE AND DISTRIBUTION 3  
QUALITY OF HVAC SYSTEM 1

The Matrix: ← Test matrix to select optimal  
combination of weights  
20 20 20 20 20  
10 10 10 10 10  
15 15 15 15 15  
25 25 25 25 25  
30 30 30 30 30

Median = 4.565106 ← Initial results using  
Mean = 4.528223 appraiser's weights  
Standard Deviation = .441591

Weights: ← Appraiser's initial weights  
GROSS BUILDING AREA (GBA = 20  
LOCATION = 20  
RATIO OF LAND TO GBA = 20  
EFFICIENCY OF BUILDING D = 20  
QUALITY OF HVAC SYSTEM = 20

Final Results: ← Iterations to  
Number of Combinations = 3125 select optimal  
Number of Combinations Adding to 100% = 381 weight

Median = 4.153846 ← Final results using  
Mean = 4.175902 optimal weights  
Standard Deviation = 5.067353E-02

Weights: ← Optimal weights  
GROSS BUILDING AREA (GBA = 30  
LOCATION = 30  
RATIO OF LAND TO GBA = 10  
EFFICIENCY OF BUILDING D = 10  
QUALITY OF HVAC SYSTEM = 20

COMPUTERIZATION OF ALL MARKET COMPARISON CALCULATIONS

14112 G.B.

Program Choices Are:

1. Enter/edit/display/file input data
2. Analyze quality point ratings
3. Display output to screen
4. Print output to printer
5. Select options
6. Quit

Enter your choice: ? 1

Load/edit file options      Current disk file: None

1. Create new data file
2. Load existing disk file for editing
3. Display current data
4. Edit current data
5. Save current data to disk file
6. Clear (erase) all current data
7. Quit load/edit options, return to main program

Enter selection number:

Enter selection number: 1

Enter new data

Enter heading for output: INDUSTRIAL WAREHOUSE

Enter number of attributes: ? 5

Enter name for attribute: 1 ? GROSS BUILDING AREA (GBA)

Preliminary weight: 1 ? 20

Enter name for attribute: 2 ? LOCATION

Preliminary weight: 2 ? 20

Enter name for attribute: 3 ? RATIO OF LAND TO GBA

Preliminary weight: 3 ? 20

Enter name for attribute: 4 ? EFFICIENCY OF BUILDING DESIGN

Preliminary weight: 4 ? 20

Enter name for attribute: 5 ? QUALITY OF HVAC SYSTEM

Weight for QUALITY OF HVAC SYSTEM is 20, so that total of weights is 100.

```
Enter number of observations: ? 6
Do you want to <1> Enter a unit price or
                <2> Enter a total price & size
Enter your choice: ? 1
```

Observation number 1 :

Enter name 1? 1115 O'NEILL ST.

Enter price 1 ? 14.46

-Score for GROSS BUILDING AREA (GBA)? 5

Score for LOCATION? 1

Score for RATIO OF LAND TO GBA? 3

Score for EFFICIENCY OF BUILDING DESIGN? 3

Score for QUALITY OF HVAC SYSTEM? 5

Observation number 2 :

Enter name 2 ? 2810 BRYANT ST.

Enter price 2 ? 10.73

Score for GROSS BUILDING AREA (GBA)? 3

Score for LOCATION? 3

Score for RATIO OF LAND TO GBA? 1

Score for EFFICIENCY OF BUILDING DESIGN? 1

Score for QUALITY OF HVAC SYSTEM? 3

Observation number 3 :

Enter name 3 ?

Score for QUALITY OF HVAC SYSTEM? 3

Observation number 3 :

Enter name 3 ? 910 WATSON AVE.

Enter price 3 ? 10.81

Score for GROSS BUILDING AREA (GBA)? 1

Score for LOCATION? 5

Score for RATIO OF LAND TO GBA? 1

Score for EFFICIENCY OF BUILDING DESIGN? 1

Score for QUALITY OF HVAC SYSTEM? 3

Observation number 4 :

Enter name 4 ? 4401 COTTAGE GROVE RD.

Enter price 4 ? 15.21

Score for GROSS BUILDING AREA (GBA)? 3

Score for LOCATION? 5

Score for RATIO OF LAND TO GBA? 5

Score for EFFICIENCY OF BUILDING DESIGN? 5

Score for QUALITY OF HVAC SYSTEM? 1

Observation number 5 :  
Enter name 5 ?

Score for QUALITY OF HVAC SYSTEM? 1

Observation number 5 :  
Enter name 5 ? 4610-22 FEMRITE RD.  
Enter price 5 ? 17.40

Score for GROSS BUILDING AREA (GBA)? 5  
Score for LOCATION? 3  
Score for RATIO OF LAND TO GBA? 3  
Score for EFFICIENCY OF BUILDING DESIGN? 5  
Score for QUALITY OF HVAC SYSTEM? 5

Observation number 6 :  
Enter name 6 ? 3103 WATFORD WAY  
Enter price 6 ? 14.94

Score for GROSS BUILDING AREA (GBA)? 5  
Score for LOCATION? 5  
Score for RATIO OF LAND TO GBA? 1  
Score for EFFICIENCY OF BUILDING DESIGN? 3  
Score for QUALITY OF HVAC SYSTEM? 1

Enter subject property name:? INDUSTRIAL WAREHOUSE

Enter the name of the designated unit of comparison  
(acre, square foot, etc.) ? SQUARE FOOT

Enter number of units of comparison for subject  
(acres, square feet, etc.) ? 30195

Enter attribute scores for subject property  
GROSS BUILDING AREA (GBA) ? 3  
LOCATION ? 3  
RATIO OF LAND TO GBA ? 1  
EFFICIENCY OF BUILDING DESIGN? 1  
QUALITY OF HVAC SYSTEM ? 5

Load/edit file options      Current disk file: None

1. Create new data file
2. Load existing disk file for editing
3. Display current data
4. Edit current data
5. Save current data to disk file
6. Clear (erase) all current data
7. Quit load/edit options, return to main program

Enter selection number: 5

Enter name for data file: ? SAMPLE

Load/edit file options      Current disk file: SAMPLE

1. Create new data file
2. Load existing disk file for editing
3. Display current data
4. Edit current data
5. Save current data to disk file
6. Clear (erase) all current data
7. Quit load/edit options, return to main program

Enter selection number: 3

Project title: INDUSTRIAL WAREHOUSE

Unit prices      Search interval = 5

|             | GROSS | LOCAT | RATIO | EFFIC | QUALI | Price   |
|-------------|-------|-------|-------|-------|-------|---------|
| Prel. wts.  | 20    | 20    | 20    | 20    | 20    | -       |
| 1115 O'NEIL | 5     | 1     | 3     | 3     | 5     | \$14.46 |
| 2810 BRYANT | 3     | 3     | 1     | 1     | 3     | \$10.73 |
| 910 WATSON  | 1     | 5     | 1     | 1     | 3     | \$10.81 |
| 4401 COTTAG | 3     | 5     | 5     | 5     | 1     | \$15.21 |
| 4610-22 FEM | 5     | 3     | 3     | 5     | 5     | \$17.40 |
| 3103 WATFOR | 5     | 5     | 1     | 3     | 1     | \$14.94 |
| INDUSTRIAL  | 3     | 3     | 1     | 1     | 5     | -       |

Press any key to continue



QP

Version 2.1

Program Choices Are:

1. Enter/edit/display/file input data
2. Analyze quality point ratings
3. Display output to screen
4. Print output to printer
5. Select options
6. Quit

Enter your choice: ? 2

Pass # 1      Combination # 6

Standard deviation = .4693161      Mean = 4.497911

| Status       | GROSS | LOCAT | RATIO | EFFIC | QUALI | S.D.    | Mean     |
|--------------|-------|-------|-------|-------|-------|---------|----------|
| Prelim. Wts. | 20    | 20    | 20    | 20    | 0     | .441591 | 4.528223 |

QP

Version 2.1

Program Choices Are:

1. Enter/edit/display/file input data
2. Analyze quality point ratings
3. Display output to screen
4. Print output to printer
5. Select options
6. Quit

Enter your choice: ? 3

Display Output to Screen

Select output to be displayed:

1. Weighted matrix for properties
2. Value range determination: mean price per point method
3. Value range per unit of dispersion
4. Transaction zone: mean price per point method
5. Transaction zone: linear regression method
6. Mean price per point method: predicted vs. actual price for comparables
7. Linear regression method: predicted vs. actual price for comparables
8. Input data
9. Computation matrix

<Return> to quit

Enter your choice: 1

| Feature/<br>Attribute | Weighted Matrix |         |          |         |         |                  | Wtd.<br>score |
|-----------------------|-----------------|---------|----------|---------|---------|------------------|---------------|
|                       | GROSS           | BU      | LOCATION | RATIO   | OF      | EFFICIEN QUALITY |               |
| Initial weights       | 20              | 20      | 20       | 20      | 0       |                  | 100           |
| Final weights         | 30              | 30      | 10       | 10      | 20      |                  | 100           |
| 1115 O'NEILL S        | 5/ 1.50         | 1/ 0.30 | 3/ 0.30  | 3/ 0.30 | 5/ 1.00 |                  | 3.40          |
| 2810 BRYANT ST        | 3/ 0.90         | 3/ 0.90 | 1/ 0.10  | 1/ 0.10 | 3/ 0.60 |                  | 2.60          |
| 910 WATSON AVE        | 1/ 0.30         | 5/ 1.50 | 1/ 0.10  | 1/ 0.10 | 3/ 0.60 |                  | 2.60          |
| 4401 COTTAGE G        | 3/ 0.90         | 5/ 1.50 | 5/ 0.50  | 5/ 0.50 | 1/ 0.20 |                  | 3.60          |
| 4610-22 FEMRIT        | 5/ 1.50         | 3/ 0.90 | 3/ 0.30  | 5/ 0.50 | 5/ 1.00 |                  | 4.20          |
| 3103 WATFORD W        | 5/ 1.50         | 5/ 1.50 | 1/ 0.10  | 3/ 0.30 | 1/ 0.20 |                  | 3.60          |
| INDUSTRIAL WAR        | 3/ 0.90         | 3/ 0.90 | 1/ 0.10  | 1/ 0.10 | 5/ 1.00 |                  | 3.00          |

Press any key to continue

Display Output to Screen

Select output to be displayed:

1. Weighted matrix for properties
2. Value range determination: mean price per point method
3. Value range per unit of dispersion
4. Transaction zone: mean price per point method
5. Transaction zone: linear regression method
6. Mean price per point method: predicted vs. actual price for comparables
7. Linear regression method: predicted vs. actual price for comparables
8. Input data
9. Computation matrix

<Return> to quit

Enter your choice: 2

(and 3)

Value Range Determination: Mean Price Per Point Method

Mean price per point: \$4.18  
Dispersion About the Mean: \$0.05  
Coefficient of Dispersion: 0.0121

Value Range Per Unit of Dispersion

|                  | Subject<br>Point<br>Score |   | Mean<br>(+/- One<br>Standard<br>Deviation) |   | Price<br>Per<br>Unit |
|------------------|---------------------------|---|--------------------------------------------|---|----------------------|
| Low Estimate     | 3.00                      | X | \$4.13                                     | = | \$12.38              |
| Central Tendency | 3.00                      | X | \$4.18                                     | = | \$12.53              |
| High Estimate    | 3.00                      | X | \$4.23                                     | = | \$12.68              |

Press any key to continue

Display Output to Screen

Select output to be displayed:

1. Weighted matrix for properties
2. Value range determination: mean price per point method
3. Value range per unit of dispersion
4. Transaction zone: mean price per point method
5. Transaction zone: linear regression method
6. Mean price per point method: predicted vs. actual price for comparables
7. Linear regression method: predicted vs. actual price for comparables
8. Input data
9. Computation matrix

<Return> to quit

Enter your choice: 4

(and 5)

Transaction Zone: Mean Price Per Point Method

Number of units in subject property: 30195

|                  |           |    |           |
|------------------|-----------|----|-----------|
| Low Estimate     | \$373,679 | or | \$374,000 |
| Central Tendency | \$378,274 | or | \$378,000 |
| High Estimate    | \$382,869 | or | \$383,000 |

Transaction Zone: Linear Regression Method

a = -7.505322E-02      Standard Error of the Forecast = .2056632  
b = 4.200016

Prediction equation: price =

30195 units X [-7.505322E-02 + ( 4.200016 +/- .2056632 ) X 3 ]

|                  |           |    |           |
|------------------|-----------|----|-----------|
| Low Estimate     | \$359,562 | or | \$360,000 |
| Central Tendency | \$378,192 | or | \$378,000 |
| High Estimate    | \$396,822 | or | \$397,000 |

Press any key to continue

Display Output to Screen

Select output to be displayed:

1. Weighted matrix for properties
2. Value range determination: mean price per point method
3. Value range per unit of dispersion
4. Transaction zone: mean price per point method
5. Transaction zone: linear regression method
6. Mean price per point method: predicted vs. actual price for comparables
7. Linear regression method: predicted vs. actual price for comparables
8. Input data
9. Computation matrix

<Return> to quit

Enter your choice: 6

Mean Price Per Point Method: Predicted vs. Actual Price for Comparables

|                    | Predicted Price | Actual price | Error   |
|--------------------|-----------------|--------------|---------|
| 1115 O'NEILL ST.   | \$14.20         | \$14.46      | -\$0.26 |
| 2810 BRYANT ST.    | \$10.86         | \$10.73      | \$0.13  |
| 910 WATSON AVE.    | \$10.86         | \$10.81      | \$0.05  |
| 4401 COTTAGE GROVE | \$15.03         | \$15.21      | -\$0.18 |
| 4610-22 FEMRITE RD | \$17.54         | \$17.40      | \$0.14  |
| 3103 WATFORD WAY   | \$15.03         | \$14.94      | \$0.09  |

Press any key to continue

Display Output to Screen

Select output to be displayed:

1. Weighted matrix for properties
2. Value range determination: mean price per point method
3. Value range per unit of dispersion
4. Transaction zone: mean price per point method
5. Transaction zone: linear regression method
6. Mean price per point method: predicted vs. actual price for comparables
7. Linear regression method: predicted vs. actual price for comparables
8. Input data
9. Computation matrix

<Return> to quit

Enter your choice: 7

Linear Regression Method: Predicted vs. Actual Price for Comparables

|                    | Predicted Price | Actual price | Error   |
|--------------------|-----------------|--------------|---------|
| 1115 O'NEILL ST.   | \$14.20         | \$14.46      | -\$0.26 |
| 2810 BRYANT ST.    | \$10.84         | \$10.73      | \$0.11  |
| 910 WATSON AVE.    | \$10.84         | \$10.81      | \$0.03  |
| 4401 COTTAGE GROVE | \$15.05         | \$15.21      | -\$0.16 |
| 4610-22 FEMRITE RD | \$17.57         | \$17.40      | \$0.17  |
| 3103 WATFORD WAY   | \$15.05         | \$14.94      | \$0.11  |

Press any key to continue

CONTEMPORARY APPRAISAL SEMINAR

Supplementary Tables

Prepared by James A. Graaskamp

Salem, Oregon

Saturday, May 3, 1980



## EXHIBIT #1

## Basic Information of residential Multi-Family Land Sales Comparables

| Factors         | 420 W. Wilson<br>No. 1  | 219 N. Frances<br>No. 2 | 102 N. Franklin<br>No. 3 | 434 W. Mifflin<br>No. 4       | 427 W. Main<br>No. 5 |
|-----------------|-------------------------|-------------------------|--------------------------|-------------------------------|----------------------|
| Sales Price     | \$ 84,950               | \$48,000                | \$86,900                 | \$160,000                     | \$53,000             |
| Sales Date      | '73                     | '72                     | '72                      | '72                           | '72                  |
| Type of Deed    | WD                      | WD                      | WD                       | WD                            | WD                   |
| Volume and Page | 403/510                 | 346/561                 | 334/ 23                  | 337/215                       | 342/113              |
| Grantor         | R.A. Paape<br>Co. Inc.  | Work of God,<br>Inc.    | Brown, Emily             | Voss, Rob't                   | Miller + wife        |
| Grantee         | Hillmark, Dev.<br>Corp. | Hillmark Corp.          | Courtyard<br>Assoc.      | American United<br>Investment | Hillmark Corp.       |
| Land Area       | 13,068                  | 7,920                   | 15,246                   | 26,400                        | 8,712                |
| Zoning          | R-6                     | R-6                     | R-6                      | R-6                           | R-6                  |

All have city services, sidewalk and street improvements

No adjustment for time required as residential economics would not permit inflation of land prices.

*Landmark Research, Inc.*

## EXHIBIT #2

Vacant Land Market Comparison  
Residential Use Land Price: Mean

## Comparable Sales

| Factors            | 420 W. Wilson<br>No. 1 | 219 N. Frances<br>No. 2 | 102 N. Franklin<br>N. 3 | 434 W. Mifflin<br>N. 4 | 427-31 W. Main<br>No. 5 | Mean (X)<br>1-5 |
|--------------------|------------------------|-------------------------|-------------------------|------------------------|-------------------------|-----------------|
| Sales Price        | \$84950                | \$48000                 | \$86900                 | \$160000               | \$53000                 | \$432850        |
| Date of Sale       | '73                    | '72                     | '72                     | '72                    | '72                     |                 |
| Land Area (sq.ft.) | 13068                  | 7920                    | 15246                   | 26400                  | 8712                    | 71346           |
| No. of Dwelling    | 43                     | 24                      | 43                      | 73                     | 24                      | 207             |
| Units Built        |                        |                         |                         |                        |                         |                 |
| Total Gross Bldg.  | 20070                  | 12670                   | 24364                   | 43040                  | 10900                   | 111044          |
| Total # Rms Bld.   | 65.5                   | 38                      | 65.5                    | 130.5                  | 40                      | 339.5           |

## Mean Land Price - \$/per:

|                                    |        |        |        |        |        |        |
|------------------------------------|--------|--------|--------|--------|--------|--------|
| 1. Square Ft. of Land              | \$6.50 | \$6.06 | \$5.60 | \$6.06 | \$6.08 | \$6.06 |
| 2. Dwelling Unit Bld.              | \$1976 | \$2000 | \$2020 | \$2192 | \$2208 | \$2079 |
| 3. Total Gross Bldg.<br>Floor Area | \$4.23 | \$3.79 | \$3.79 | \$3.72 | \$4.86 | \$4.08 |
| 4. Total # Rms Bld.                | 1297   | 1263   | 1327   | 1226   | 1325   | 1288   |

Landmark Research, Inc.

# EXHIBIT #5

## Industrial Land Sales Selected as Comparables to MG & E Subject Parcel

|                       | Date of Sale | Price     | Public Record                            | Square Feet | (Acres) | \$/Sq. Ft. |
|-----------------------|--------------|-----------|------------------------------------------|-------------|---------|------------|
| 1. MATC               | 6/8/67       | \$108,750 | Confirmed by<br>MATC Finance<br>Director | 152,460     | (3.5)   | .71        |
| 2. MATC               | 1/23/67      | 75,000    | Vol. 828, p. 280                         | 81,828      | (1.88)  | .92        |
| 3. Gorman             | 12/20/65     | 17,500    | Vol. 436, p. 463                         | 21,060      | (.48)   | .83        |
| 4. Holfman            | 6/5/64       | 15,000    | Vol. 779, p. 558                         | 17,050      | (.39)   | .88        |
| 5. Garrett            | 5/31/63      | 12,000    | Vol. 758, p. 226                         | 13,932      | (.32)   | .86        |
| 6. Madison<br>Transit | 1/4/68       | 55,000    | Vol. 4, p. 358                           | 211,701     | (4.86)  | .26        |
| 7. Madison<br>Trust   | 12/28/66     | 45,000    | Vol. 828, p. 204                         | 67,900      | (1.56)  | .66        |
| 8. NW Mutual          | 9/9/66       | 117,500   | Vol. 824, p. 144                         | 138,521     | (3.18)  | .85        |

# EXHIBIT #7

## Quality Scores & Weight Per Category

|                                                                                                         |               |
|---------------------------------------------------------------------------------------------------------|---------------|
| 1. Size (Marketability Factor)                                                                          | <u>Weight</u> |
| 0 - 1 acre = 5                                                                                          | 20            |
| over 1 - 3 = 4                                                                                          |               |
| over 3.5 - 10 = 3                                                                                       |               |
| over 10 - 20 acre = 2                                                                                   |               |
| over 20 acre = 1                                                                                        |               |
| 2. Accessibility to all areas<br>(in terms of distance and time)<br>1-5 where 5 = premium + 3 = average | 20            |
| 3. Visibility from major artery<br>1-5                                                                  | 15            |
| 4. Availability of sewer/water at site<br>1-5                                                           | 15            |
| 5. Availability of rail<br>1-5                                                                          | 10            |
| 6. Soils and topography                                                                                 | <u>20</u>     |
|                                                                                                         | 100%          |

### Exhibit 16

Table of Scores for Comparable Properties

|             | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>Subject</u> |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------------|
| Size        | 3        | 4        | 5        | 5        | 5        | 3        | 4        | 4        | 1              |
| Access      | 4        | 4        | 4        | 4        | 4        | 2        | 3        | 3        | 4              |
| Visibility  | 5        | 5        | 5        | 5        | 4        | 1        | 1        | 2        | 5              |
| Sewer/water | 5        | 5        | 5        | 5        | 5        | 2        | 5        | 5        | 5              |
| Rail        | 1        | 1        | 1        | 1        | 3        | 1        | 2        | 2        | 4              |
| Soils       | 2        | 3        | 2        | 2        | 2        | 4        | 5        | 5        | 1              |

| <u>Feature</u> | <u>Weight</u> | <u>Weighted Ratings</u> |          |          |          |          |          |          |          |             |
|----------------|---------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|-------------|
|                |               | <u>1</u>                | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>Subj</u> |
| Size           | 20            | 60                      | 80       | 100      | 100      | 100      | 60       | 80       | 80       | 20          |
| Access         | 20            | 80                      | 80       | 80       | 80       | 80       | 40       | 60       | 60       | 80          |
| Visibility     | 15            | 75                      | 75       | 75       | 75       | 60       | 15       | 15       | 30       | 75          |
| Sewer/water    | 15            | 75                      | 75       | 75       | 75       | 75       | 30       | 75       | 75       | 75          |
| Rail           | 10            | 10                      | 10       | 10       | 10       | 30       | 10       | 20       | 100      | 40          |
| Soils          | 20            | 40                      | 60       | 40       | 40       | 40       | 80       | 100      | 100      | 20          |
| Total          |               | 340                     | 380      | 380      | 380      | 385      | 235      | 350      | 365      | 310         |
| Price/Sq. Ft.  |               | .71                     | .92      | .83      | .88      | .86      | .26      | .66      | .85      |             |

# EXHIBIT #10

## Basic Information on Restaurant-Commercial Land Sale Comparables

|                                | Barnaby's<br>East     | Barnaby's<br>West                        | Bud's<br>West     | Pigs Ear<br>East                        | Marc's<br>Big Boy<br>South | Marc's<br>Big Boy<br>East |
|--------------------------------|-----------------------|------------------------------------------|-------------------|-----------------------------------------|----------------------------|---------------------------|
| Sales Price                    | \$92,000 <sup>±</sup> | \$89,000                                 | \$75,700          | \$91,000                                | \$87,500                   | \$85,000                  |
| Sales Date                     | 10-6-70               | 6-30-70                                  | 6-29-71           | 5-20-72                                 | 9-3-69                     | 3-15-68                   |
| Type of Deed                   | Lease with<br>Option  | WD                                       | WD                | WD                                      | WD                         | WD                        |
| Volume & Page                  | 209-455               | 184-75                                   | 264-173           | 344-385                                 | 130-463                    | 15-108                    |
| Grantee                        | Barnaby's Inc.        | Barnaby's Inc.                           | Clyde Chamberlain | Poole, Inc.                             | B & G Realty               | B & G Realty              |
| Area                           | 38,211                | 32,900                                   | 45,236            | 141,570                                 | 38,327                     | 30,237                    |
| Zoning                         | C-2                   | C-3-L                                    | C-3-L             | M-1                                     | C-2                        | C-2                       |
| Principal Business<br>Frontage | E. Washington Ave.    | Mineral Point<br>& Grand Canyon<br>Roads | Odana Rd.         | Cottage Grove<br>Road & Atlas<br>Avenue | S. Park<br>Street          | E. Washington Ave.        |
| Position on Block              | Inside lot            | Corner lot                               | Inside lot        | Corner lot                              | Corner lot                 | Inside lot                |

All have city services, Pigs Ear did not have curb and gutter

No adjustment of time required as restaurant economics would not permit inflation of land prices.

# EXHIBIT #11

## Attribute Point and Weight Comparison Of Restaurant-Commercial Land Sales and Subject Property

| (See Exhibit #8)                      | Barnaby's<br>East | Barnaby's<br>West | Bud's<br>West | Pigs Ear<br>East | Marc's<br>Big Boy<br>South | Marc's<br>Big Boy<br>East | Subject     |
|---------------------------------------|-------------------|-------------------|---------------|------------------|----------------------------|---------------------------|-------------|
| 30 *Site                              | Points Wgt'd Pts  |                   |               |                  |                            |                           |             |
| Shape                                 | 5                 | 1                 | 5             | 3                | 5                          | 3                         | 5           |
| % Usable                              | 3                 | 3                 | 5             | 5                | 5                          | 5                         | 1           |
| Site Preparation                      | 3                 | 1                 | 5             | 5                | 5                          | 5                         | 5           |
| Visibility                            | 3                 | 5                 | 5             | 3                | 5                          | 3                         | 3           |
| Access                                |                   |                   |               |                  |                            |                           |             |
| Left & Right Turn                     | 5                 | 5                 | 5             | 3                | 3                          | 3                         | 1           |
| Frontage Road                         | 3                 | 5                 | 5             | 1                | 5                          | 5                         | 5           |
| Total                                 | <u>18</u>         | <u>20</u>         | <u>25</u>     | <u>20</u>        | <u>28</u>                  | <u>24</u>                 | <u>20</u>   |
| Weight                                | 540               | 600               | 750           | 600              | 840                        | 720                       | 600         |
| 50                                    |                   |                   |               |                  |                            |                           |             |
| Linkages                              |                   |                   |               |                  |                            |                           |             |
| Traffic Volume                        | 5                 | 5                 | 3             | 3                | 5                          | 5                         | 3           |
| Supportive Retail/Serv.               | 5                 | 5                 | 3             | 1                | 1                          | 3                         | 1           |
| Proximity to Multi-Family Residential | 1                 | 5                 | 5             | 1                | 3                          | 3                         | 3           |
| Proximity to Employm.                 | 3                 | 3                 | 3             | 1                | 1                          | 5                         | 3           |
| **Interstate-Beltline                 | <u>2</u>          | <u>1</u>          | <u>1</u>      | <u>3</u>         | <u>2</u>                   | <u>2</u>                  | <u>1</u>    |
| Total                                 | <u>15</u>         | <u>18</u>         | <u>15</u>     | <u>9</u>         | <u>12</u>                  | <u>18</u>                 | <u>11</u>   |
| Weight                                |                   |                   |               |                  |                            |                           |             |
| 20 Image                              |                   |                   |               |                  |                            |                           |             |
| Development Activity                  | 5                 | 5                 | 3             | 1                | 1                          | 3                         | 1           |
| Prestige of Street Address            | <u>5</u>          | <u>5</u>          | <u>3</u>      | <u>1</u>         | <u>3</u>                   | <u>5</u>                  | <u>1</u>    |
| 100 Total                             | 10                | 10                | 6             | 2                | 4                          | 8                         | 2           |
|                                       | <u>200</u>        | <u>200</u>        | <u>120</u>    | <u>40</u>        | <u>80</u>                  | <u>160</u>                | <u>40</u>   |
| *Scale 1,3,5 Except **                | <u>1490</u>       | <u>1700</u>       | <u>1620</u>   | <u>1090</u>      | <u>1520</u>                | <u>1780</u>               | <u>1190</u> |

## EXHIBIT #12

Determination of Linear Regression  
Weighted Mean Value of Land/sf  
Commercial-Restaurant

| Comparable | 1<br>Land \$/sf | 2<br>Total Wgtd.<br>Pts. | 3<br>(Land \$/sf) <sup>2</sup> | 4<br>(Wgtd.Pts) <sup>2</sup> | 5<br>(3 x 4)                  |
|------------|-----------------|--------------------------|--------------------------------|------------------------------|-------------------------------|
|            | Y <sub>i</sub>  | X <sub>i</sub>           | Y <sub>i</sub> <sup>2</sup>    | X <sub>i</sub> <sup>2</sup>  | X <sub>i</sub> Y <sub>i</sub> |
| 1          | \$2.40          | 1490                     | 5.76                           | 2220100                      | 3575                          |
| 2          | 2.73            | 1700                     | 7.45                           | 2890000                      | 4641                          |
| 3          | 1.67            | 1620                     | 2.79                           | 2624000                      | 2705                          |
| 4          | .64             | 1090                     | .41                            | 1881000                      | 698                           |
| 5          | 2.28            | 1520                     | 5.20                           | 2310400                      | 3466                          |
| 6          | 2.81            | 1780                     | 7.90                           | 3168400                      | 5002                          |
| TOTAL      | \$12.53         | 9200                     | 29.51                          | 15093000                     | 20087                         |
| Mean       | (Y)=\$2.09      | (X)=1533                 |                                |                              |                               |

---

Calculations of Mean, Standard Deviation

$$\begin{aligned}\text{Sum } y^2 &= Y^2 - n(Y)^2 \\ &= (29.51)^2 - 6(2.09)^2 \\ &= 845\end{aligned}$$

$$\begin{aligned}\text{Sum } x^2 &= X^2 - n(X)^2 \\ &= 1509300 - 6(1533)^2 \\ &= 993366\end{aligned}$$

$$\begin{aligned}\text{Sum } xy &= XY - n(x)(Y) \\ &= 20087 - 6(1533)(2.09) \\ &= 863\end{aligned}$$

---


$$Y' = a + bX_{\text{subject}}$$

$$b = \frac{\text{Sum } xy}{\text{Sum } x^2} = \frac{863}{993366} = .00087$$

$$a = (Y) - b(X) = \$2.09 - .00087(1533)$$

---

SALES PRICE/SUBJECT SITE

$$Y' = a + bX_{\text{subject}}$$

$$= -\$ .76 + .00087(1190) = \underline{\underline{\$ 1.80}}$$

STANDARD DEVIATION

$$\begin{aligned}S_{xy} &= \frac{\text{Sum } y^2 - b(\text{Sum } xy)}{n-2} \\ &= \$ \underline{\underline{.15}}\end{aligned}$$

# APPENDIX II

## Vacant Land Market Comparison Office Use Subject - Fauerbach Property

| Weight<br>Total | Sub<br>Total | Factor                                     | CMI |      | VIP |      | Doty<br>School |      | WPS-1 |      | IBM |      | WPS-2 |      | Subject |      |
|-----------------|--------------|--------------------------------------------|-----|------|-----|------|----------------|------|-------|------|-----|------|-------|------|---------|------|
|                 |              |                                            | Wgt | Wgt* | Wgt | Wgt* | Wgt            | Wgt* | Wgt   | Wgt* | Wgt | Wgt* | Wgt   | Wgt* | Wgt     | Wgt* |
| 30              |              | Site                                       |     |      |     |      |                |      |       |      |     |      |       |      |         |      |
|                 | 10**         | Intensity of Land Use                      | 8   | 80   | 10  | 100  | 6              | 60   | 4     | 40   | 2   | 20   | 2     | 20   | 6       | 60   |
|                 | 10**         | Topography                                 | 10  | 100  | 8   | 80   | 6              | 60   | 4     | 40   | 1   | 10   | 4     | 40   | 6       | 60   |
|                 | 10**         | Views                                      | 8   | 80   | 6   | 60   | 4              | 40   | 8     | 80   | 4   | 40   | 4     | 40   | 6       | 60   |
| 25              |              | Image                                      |     |      |     |      |                |      |       |      |     |      |       |      |         |      |
|                 | 10**         | Lineal Ft Lake/Park                        | 10  | 100  | 4   | 40   | 4              | 40   | 8     | 80   | 6   | 60   | 1     | 10   | 8       | 80   |
|                 | 5            | Lake Exposure                              | 5   | 25   | 3   | 15   | 3              | 15   | 3     | 15   | 1   | 5    | 1     | 5    | 3       | 15   |
|                 | 10**         | Community Recognition                      | 10  | 100  | 8   | 80   | 8              | 80   | 6     | 60   | 4   | 40   | 2     | 20   | 2       | 20   |
| 35              |              | Linkages                                   |     |      |     |      |                |      |       |      |     |      |       |      |         |      |
|                 | 15**         | Downtown                                   | 8   | 120  | 10  | 150  | 8              | 120  | 4     | 60   | 1   | 15   | 1     | 15   | 4       | 60   |
|                 | 5            | Auto Approach Zone                         | 5   | 25   | 3   | 15   | 3              | 25   | 2     | 10   | 2   | 10   | 1     | 5    | 3       | 15   |
|                 | 5            | Ancillary Uses                             | 3   | 15   | 5   | 25   | 3              | 15   | 3     | 15   | 1   | 5    | 2     | 10   | 1       | 5    |
|                 | 5            | Employee--Housing &<br>Transportation      | 3   | 15   | 3   | 15   | 3              | 15   | 1     | 5    | 3   | 15   | 3     | 15   | 3       | 15   |
|                 | 5            | Protection from adverse<br>Contiguous Uses | 5   | 25   | 4   | 20   | 3              | 15   | 3     | 15   | 4   | 20   | 2     | 10   | 1       | 5    |
| 10              |              | Construction Suitability                   |     |      |     |      |                |      |       |      |     |      |       |      |         |      |
|                 | 5            | Depth to Ground water/<br>Soils            | 5   | 25   | 5   | 25   | 3              | 15   | 1     | 5    | 1   | 5    | 2     | 10   | 3       | 15   |
|                 | 5            | Drainage                                   | 5   | 25   | 5   | 25   | 3              | 15   | 3     | 15   | 1   | 5    | 3     | 10   | 3       | 15   |
| 100             | 100          | Totals                                     |     | 735  |     | 650  |                | 515  |       | 440  |     | 225  |       | 210  |         | 425  |

\* Weight x Scale  
\*\* 10 Point Scale

$$b = \frac{\sum xy}{\sum x^2} = .0249$$

$$a = Y - bX = -\$5.75$$

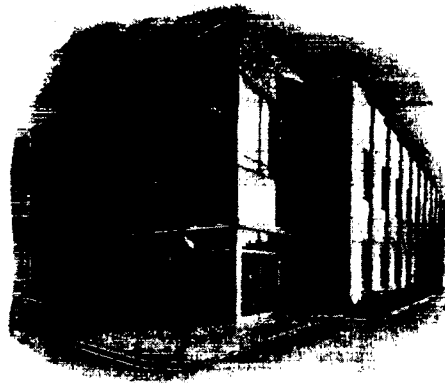
$$Y' = a + bX_{\text{subject}}$$

$$= -\$5.75 + .0249(425)$$

$$= \$4.83 \text{ per sq. ft. } \pm \$ .08 \text{ (standard deviation)}$$



SACKMAN-GILLILAND  
CORPORATION



260 - 68TH STREET  
BROOKLYN, N. Y. 11220  
TELEPHONE: 833-2700

November 28th, 1967

Dr. James Graaskamp  
202A Breese Terrace  
Madison, Wisconsin

Dear Jim:

I am looking forward to the opportunity to work with you in the Seminar in Milwaukee December 8th through December 10th. At our meetings in Washington I advised Bill Crouch that I would contact you. We should have some general ideas concerning an appropriate teaching schedule. I had the opportunity to conduct a two day seminar on mortgage equity capitalization for the Institute's grading sub-committees of the admissions committee. This experience provided me with certain conclusions about the manner of handling a short period of instruction.

In brief, I would suggest the following arrangements:

1. There should be an opening statement outlining the rationale and objectives of the mortgage equity method. This presentation should be quite full and should set forth all the steps involved. I would suggest that I handle this part of the program, and I find that it generally requires an hour and a half.
2. We should have a discussion of the tools utilized in working with the mortgage equity method. The development, nature, and use of the compound interest tables should be covered. In this connection I really believe the emphasis should be on the nature of the functions and their applications. Only a slight amount of attention should be devoted to derivation; just enough to demonstrate that the key to all is  $(1 + i)^n$ . I would hope that you would be agreeable to handling this part of the instruction.
3. Effects of depreciation and appreciation in the overall rate, calculation of recapture through amortization, and development of the mortgage coefficient. I would suggest that I handle this part of the course.

(continued)

Dr. James Graaskamp

11/28/67

4. Investment analysis and in particular, graphic analysis of overall rates. Perhaps you would handle this section.

5. Yield calculations. I will take this section.

6. Frequently the balance of the time can be devoted to drill problems and special situations.

I would be grateful for your suggestions and comments about the arrangement of our schedule. Any items you would like to include, please advise and we can make necessary provisions. To the fullest extent possible I would like to have this be a seminar in which substantial discussion takes place. Interchange between the students and instructors is a most effective method of teaching, and I hope we can bring about such a situation.

I will arrive in Milwaukee on the evening of the 7th of December and will be available any time thereafter. Please let me have your views.

Cordially,



James E. Gibbons,  
Executive Vice President

JEG/sab

UNIVERSITY OF WISCONSIN EXTENSION

Department of Commerce

Ellwood Tables

Drill Problem No. 1

The legal limit for life insurance company mortgage loans on income or business properties has been increased from 66  $\frac{1}{3}$ % to 75% of acceptable appraisal. This means a thinner equity position. Which in turn means greater risk for each dollar of equity investment. And, since risk is one of the most important factors in determining the rate of interest that will attract investment capital, it follows that prospective equity yield should increase as the risk increases.

In theory, the increased legal limit will make more mortgage money available to help finance purchase of individual properties. On the other hand, it would be foolish to use increased mortgage ratios as an excuse for increasing appraisals. It is obvious that the mortgage investor assumes greater risk by increasing the loan without increasing the appraisal. It is also clear that the equity buyer increases his risk by taking a thinner equity position. Both risks will be increased to an even greater extent if we use the higher mortgage ratio to increase appraisals.

When you must use capitalization as a direct or independent approach because the absence of comparable sales makes it impossible to select a proper overall capitalization rate from the market, we suggest the following general rules.

- (1) Base the overall capitalization rate on the maximum mortgage to value ratio and the maximum amortization term available to a typical buyer.
- (2) If the 75% ratio is available, increase the prospective equity yield rate from 1% to 2% over what would normally be attractive with a mortgage ratio of 66  $\frac{2}{3}$ %.

The following problem will indicate about what you can expect from the application of these rules in most cases.

- (a) Average, net cash flow income projected 10 years at \$48,743 per year. Mortgage money available up to 66  $\frac{2}{3}$ % of acceptable appraisal to be fully amortized in 20 years by level monthly installments including interest at 5  $\frac{1}{4}$ % per annum.

Allow for a 15% value decline in 10 years and appraise the property to yield 10% on equity.

- (b) Increase the mortgage ratio to 75% of acceptable appraisal and appraise it to yield 11% on equity using Table C.
- (c) Also appraise it to yield 20% on equity with a 90% mortgage ratio, and 15% value decline in 10 years.

UNIVERSITY OF WISCONSIN EXTENSION

Department of Commerce

Ellwood Tables

Drill Problem No. 2

Graph prospects for yield on equity investment between an annual rate of 6% minimum and 16% potential maximum assuming purchase of an existing apartment building, 10 years old, presently grossing \$72,000, indicating a 50% expense ratio and an offering price of \$300,000. Assume financing is available with a 75% ratio mortgage, 25 year monthly level payment plan, at 7% interest, and using a 5- and 10-year projection. Is 16% on equity a reasonable hope?

UNIVERSITY OF WISCONSIN EXTENSION

Department of Commerce

Ellwood Tables  
Solution  
Drill Problem No. 1

(a) Factor from Table, Page 347

Basic rate .07180

Plus depreciation  $.5 \times .0628$  .00942

Overall cap. rate .08122

Valuation;  $\$48,732 / .08122 = \$600,000$

(b) Factors from Table, Page 305 or Table C, Page. 247

Y .110000

Less M C;  $.75 \times .0513$  .038475

Basic rate: .071525

Plus depreciation:  $.15 \times .0598$  .008970

Overall cap. rate .080495

SAY: .0805

Valuation;  $\$48,732 / .0805 = \$603,366$

Y .20000

Less M C;  $.9 \times .1334$  .12006

Basic rate .07994

Plus depreciation  $.15 \times .0385$  .005775

Overall cap. rate .125835

SAY: .1258

Valuation:  $\$48,732 / .1258 = \$387,376$

# ELLWOOD EXAMPLES

Appraisal 8560  
Ellwood Example  
5-15

- A. Price this property to yield 7% on a 1/3rd equity allowing for a decline of 25% in value at the end of 10 years.
- B. Price it to yield 12% on a 1/3rd equity assuming a 10% increase in value in 10 years.
- C. Select one of these prices, assume the property is bought at that price and compute the range within which its market must be in 10 years to produce any equity yield from 7% to 12%.

Solution:

(a) Basic Capitalization Rate,..... .0611  
Plus allowance for depreciation,  $\$25 \times .0724$ ,... .0181

Complete Capitalization Rate,..... .0792  
Valuation,  $\$18,200 / .0792 = \$229,798$  round to \$230,000

(b) Basic Capitalization Rate,..... .0837  
Less adjustment for appreciation,  $.10 \times .0570$ ,... .0057

Complete Capitalization Rate,;..... .0780  
Valuation,  $\$18,200 / .0780 = \$233,333$  round to \$233,000

- D. Retaining the 25% depreciation allowance as a safe guard, it is possible to analyze the .0792 cap rate to find out change in property value necessary to produce a 12% yield.

Subtract .0792 from the base rate at 12%, .0837. Divide the difference by the appreciation factor at 12%, .0570

$.0045 / .0570 = .078947$ , Say 8% appreciation.

At a price of \$230,000 equity yield will range between 7-12% if the reversion remains from 75 to 108% of that price in 10 years.

## BUSINESS 528--REAL ESTATE APPRAISAL

## ELLWOOD PROBLEM

FALL 1968

Graph prospects for yield on equity investment between an annual rate of 6% minimum and 16% potential maximum assuming purchase of an existing apartment building, 10 years old, presently grossing \$56,000, indicating a 50% expense ratio and an offering price of \$300,000. Assume financing is available with a 75% ratio mortgage, 25 year monthly level payment plan, at 6% interest, and using a 5- and a 10-year projection. Is 15% on equity a reasonable hope over 10 years?

$$\frac{2800}{300,000} = .00934$$

$$1-5 \quad R = .0934$$

$$= .06 - (.75 \times .0005) = .0596$$

$$= .0 \quad R = .0934$$

$$= .06 - (.75 \times .0006) = .0597$$

$$\frac{R-r}{.1774} = \frac{.0934 - .0596}{.1774} = .1905 = 19\%$$

$$\frac{.0934 - .0597}{.0259} = .4440 = 44\%$$

at 6%

at 15%

$$17 = 5$$

$$= .15 - (.75 \times .0876) = .0843$$

$$\frac{.0934 - .0843}{.1483} = .0613 = 6\% \text{ depreciation}$$

$$1-mc = r$$

$$.15 - (.75)(.0843) = .0887$$

$$\frac{.0934 - .0887}{.0493} = .0953 = 9\frac{1}{2}\%$$

PROBLEM SHEET #2

Real Estate Investment

J. A. Graaskamp

1. A large industrial firm occupies a regional plant under a twenty-five year net lease with two ten year renewal options. Rent during the initial term is \$480,000 net per annum, payable \$40,000 monthly in advance. Ten years of the initial term have expired. Ownership of the fee is subject to a current mortgage balance of \$2,400,000 and is subject to a repayment penalty of 2%. The owner wished to sell, and a trust fund offers to purchase it outright to yield 5%, with full recovery and balance of the initial term. What was the purchase price? How much cash will the owner realize if he has \$1.5 million basis and a capital gains rate of 25%?
2. What is the annual rent requirement on a monthly and quarterly advance basis where cost is budgeted at \$3,000,000 for industrial park when all units are financed under a 30 year initial lease providing a 5% return to the fee holder together with recovery of capital in the initial lease term.
3. How much less would it cost over a 30 year span to set the initial term at 15 years with a 4½% interest yield to the fee holder if renewal options were priced at a cost of \$30,000 for a 15 year renewal?
4. A corporation is formed to finance the acquisition of a store and office building, with the following financial structure. Estimated net annual income is \$415,000. Sources of capital were as follows:
  - 55% by first lease hold mortgage at 5½% to be fully amortized in 20 years
  - 15% from a second mortgage at 8% interest to be amortized in 10 years
  - 12% by sale and leaseback of site on long term basis with ground rent at 5% of the sales price.
  - 18% by sale of corporate stock. Investors were told to expect an effective return of 12% on their money despite 15% depreciation of the initial price.

What price was paid for the property assume mortgage money was available for 2/3 of the price for 20 years at 5%.
5. An independent super market is purchased subject to a net lease which will fully amortize the investment in 20 years at 5½%. The seller wants an option to repurchase at the end of 15 years and the buyer is willing to provide such an option at a price which would give him an effective yield of 8%. What price should be quoted for repurchase option?
6. A property is purchased subject to a 30 year net lease which will fully amortize the investment at 6%. The lessee wants an option for an additional 20 years at reduced rent which would provide a 7% investment yield at the end of 50 years even if there were no residual value. Extension rent should be what % of the initial investment?



PROBLEMS IN REAL ESTATE INVESTMENT

- I. What does Ellwood mean by a properly correlated appraisal supported by the cost approach and market comparison methods?
- II. Graph prospects for yield on equity investment assuming purchase at appraised value when financed by a 66 2/3% mortgage, 25 year level payment loan, at 6 1/4% interest using a 10 year projection.
- III. Suppose you have an equitable 25 year net lease to an AAA tenant. Suppose further you have purchased this situation with one third equity having an assured yield of 8%, with the balance supplied by a 25 year level payment mortgage at 6%. What proportion of the original purchase price must you recover upon sale of the reversion to achieve a 15% effective yield?
- IV. Suppose you purchase a commercial property to yield 8% on one third equity when the balance was financed by a 25 year mortgage at 5 1/4%. At the end of 5 years you have an opportunity to refinance at a better ratio with a new 25 year mortgage at 5 1/4%. Assume further the building has depreciated 10% of its original appraised value just as you anticipated when you purchased the structure. What mortgage ratio is necessary to achieve a yield of 10% by refinancing?
- V. Assume a property can be purchased with \$50,000 mortgage to be amortized in 15 years with interest of 5 3/4%. Average annual income for the next 10 years has been estimated at \$5,800. Price this property to yield 9% on the equity investment allowing for 15% depreciation in 10 years.
- VI. Assume you are able to purchase a property for which \$8,000 per annum is projected as income for the next 10 years. Assume further that you may finance with a 70% ratio loan to be amortized in 15 years at a rate of 6 1/4%. The cap rate indicated by the standard appraisal is 8%. If an alternative investment in U.S. Government Bonds would provide a guaranteed 5% return, what decline in value would be necessary to reduce the effective yield in 10 years below the bond rate? Assuming the investment has some speculative attributes beyond the control of the equity investor, would you buy?
- VII. An office building is for sale but subject to a prime lease with 7 years to run providing a net rental of \$7,800. The buyer must further assume a 20 year level payment mortgage at 5 1/4% with 10 years to run and with a balance of \$62,780 to be paid. For how much was the original mortgage? Price the property to yield 9% on the equity on the basis of the 7 year income projection and 10% appreciation in the value of the remainder due to an improving neighborhood situation.
- VIII. Assume the same set of facts in Number VII, expect that the mortgage was a 7% annual constant loan at 5 1/4%. Price the property to yield 9% with no assumption of any appreciation or depreciation in 7 years.
- IX. Assume a 100% location downtown property is burdened by a long term lease with 10 years to run paying \$5,000 a year for property which should be leased at a minimum of \$10,000 per year. Moreover, it would be possible to use the property for 20 years following expiration of the lease, and secure at the minimum the full \$10,000 each year. Suppose further that mortgage money is available at two thirds of present value for 25 year term at 5 1/4%. Assume the property will depreciate at a rate of 1% per year. Further assume an 8% return on equity is desired. What is the maximum amount the equity holder might pay the lease holder to break this unfavorable lease to make it available to an alternative tenant for 20 years at market rent level?

C. cont. Cap rate at 7% with 25% decline in 10 years

Basic Capitalization Rate,..... .0611  
 Plus allowance for depreciation, 125 x .0724,..... .0181

Complete Capitalization Rate,..... .0792

Valuation, \$18,200/.0792 = \$229,798 round to \$230,000

Cap rate at 12% with 10% increase in 10 years

Basic Capitalization Rate,..... .0837  
 Less adjustment for appreciation, .10 x .0570,..... .0057

Complete Capitalization Rate,..... .0780

Valuation, \$18,200/.0780 = \$233,333 round to \$233,000

D. Retaining the 25% depreciation allowance as a safe guard, it is possible to analysis the .0792 cap rate to find out change in property value necessary to produce a 12% yield.

Subtract .0792 from the base rate at 12%, .0837. Divide the difference by the appreciation factor at 12%, .0570

.0045/.0570 = .078947, Say 8% appreciation.

At a price of \$23,000 equity yield will range between 7-12% if the reversion remains from 75 to 108% of that price in 10 years.

E. Ellwood then uses a graph to illustrate the prospects for acceptable yields assuming sale at various prices during the 10 year span.

This graph is determined by calculating the outer limit which depreciation and still maintain a 5% yield although original evaluation contemplated a 7% yield.

This kind of graph making is simplified by Table 1 A.

F. Test class members on problem: \$20,000 net income before debt service. Mortgage rate 5 3/4% for 20 years. Minimum acceptable yield 8%; desired yield 14%. Estimated depreciation in 20 years is 20%.

Sold at the end of 20 years--

Basic cap rate at 8% .0684 - Depreciation factor .0219

Basic cap rate at 14% .0956 - Depreciation factor .0110

|              |      |              |              |         |
|--------------|------|--------------|--------------|---------|
| <u>.0219</u> | plus | .0684/20,000 | .0044        | 274,725 |
| 5            |      |              | <u>.0684</u> |         |
|              |      |              | .0728        |         |
| <u>.0110</u> | plus | .0956/20,000 | .0022        | 204,500 |
| 5            |      |              | <u>.0956</u> |         |
|              |      |              | .0978        |         |

.0956  
 -.0728  
 .0228/.0110 207%

Sold at the end of 10 years--

Basic cap rate at 8% .0663 - Depreciation factor .0690

Basic cap rate at 14% .0905 - Depreciation factor .0517

Assumption 10% decline

|              |         |              |         |
|--------------|---------|--------------|---------|
| .0069        |         | .0052        |         |
| <u>.0663</u> | 273,000 | <u>.0905</u> | 209,000 |
| .0732        |         | .0957        |         |

.0905  
 $-\frac{.0732}{.0233/.0517}$  45%

Sold at the end of 5 years-- 5% Decline

Basic cap rate at 8% .0653 - Depreciation factor .1705

Basic cap rate at 14% .0873 - Depreciation factor .1513

|              |         |              |         |
|--------------|---------|--------------|---------|
| .0653        |         | .0873        |         |
| <u>.0085</u> | 271,000 | <u>.0075</u> | 211,000 |
| .0738        |         | .0948        |         |

.0873  
 $-\frac{.0738}{.0135/.1513}$  9%

V. This kind of work is done for you in Table 1A for selected capitalization rates. Refer to problem 2 on page 45

- A. First note the estimate of rate indicated by dividing cost by net net income.
- B. Next note conversion of gross multiplier by dividing by the net income ratio to an indication of acceptable market capitalization rate. Note that a market cap rate is selected which will provide a value in line with duplication cost. Cap rate selected is .0825 .
- C. Reference to Table 1A under mortgage rate 5½% to determine how far values may decline in a 20 year span and still assure a given yield of 5, 10, and 15%.

How do you explain an increase in yield despite a decline in value?

Again note the emphasis on page 51 "With very rare exception high yields are realized only when the term of ownership is of comparibly short duration.

Also note, that the rate of capital recovery through amortization between 5 and 10% yields affects things very little the longer the term of the mortgage. While a reduction in mortgage service payments means a higher income value, it also means a greater mortgage charge to lessen the value of the reversion.

Even the columns which are blank suggest useful information. It means 100% depreciation has been reached at a yield higher than the indicated rate of 5, 10, or 15%. This is particularly true for long-term projections in the case of long-term leases on a net basis to the better tennant.

# Problem Sheet No. 1 Key

- I. Ellwood establishes a indicated cap rate by dividing net income by the cost summation value.

Cap rates are also determined from comparative sales by dividing the net income ratio by the gross multiplier, using the net income ratio of the given property and a range of multipliers from comparable properties. He then selects a cap rate which is within the range indicated by market ratio data but high enough to produce a value no higher than a careful estimate of the cost approach.

In this way Ellwood sees the cost and market approach as coorelated.

His capitalization approach then assumes a mortgage of 2/3 of the purchase price with an appropriate amorization period and interest rate, referring to table IA for a convenient source of cap rates at the prescribed mortgage terms. Below this rate he finds a projection of yield given basic depreciation of appreciation assumptions.

- II. Assumption of a nine, twelve, or fifteen per cent equity yield suggests a basic cap rate of .0727, .0841, or .0952. In this event a 10 year projection curve would intersect right axis at the following points:

|     |       |             |
|-----|-------|-------------|
| 5%  | -19%  | at low      |
| 10% | + 6%  | cap rate    |
| 15% | + 46% | of \$7.25   |
|     |       | .0725       |
| 5%  | -35%  | at mid      |
| 10% | -14%  | point .0850 |
| 15% | +21%  |             |
| 5%  | -54%  | at cap rate |
| 10% | -37%  | of 10%      |
| 15% | -10%  |             |

Analysis of prospects depends on the judgement as to the proable decline in value, or the prospects for dollar appreciation due to inflation, increasing land value, etc. Note that the higher the cap rate assumed the more leaway or greater safety factor is available to the investor.

- III. ~~Basic cap rate .0691 (25 year mortgage at 6%, 8% equity yield page 33)~~  
~~Depreciation factor .0137~~  
~~Cap rate .0828~~      720%

Necessary appreciation in reversion to achieve 15% yield is 119% of purchase price.

- IV. Cap rate of present project is::

+340 - p. 64

|                                      |       |
|--------------------------------------|-------|
| Equity yield                         | .08   |
| .0269 mortgage coefficient x 2/3     | .0179 |
| Basis cap rate                       | .0621 |
| Credit for dep <sup>re</sup> ciation | .0170 |
| Complete cap rate                    | .0791 |

- V. Desired cap rate :

|                                     |       |                          |
|-------------------------------------|-------|--------------------------|
| Equity Yield                        | .10   |                          |
| Adjustment for depreciation factor  | .0164 | .0373                    |
| Rate before mortgage                | .1164 | .0439                    |
| Less Cap rate from previous project | .0791 |                          |
| Mortgage contribution               | .0373 | 85%                      |
|                                     |       | new mortgage coefficient |

$$\begin{array}{rcl} \text{V. } \$50,000 \times .0277 & \$1,385 & \\ & \underline{5,800} & \\ \text{Amt. to be cap.} & \$7,015 & \end{array}$$

$$\begin{array}{rcl} \text{Yield} & .09 & \\ \text{Depreciation} & .00987 \text{ } (.0658 \times .15) & \\ \text{Cap. rate} & \underline{.09987} & \end{array}$$

$$7,015 / .099 = \$70,240$$

$$\begin{array}{rcl} \text{VI. Basic cap. rate} & .08 & \\ \text{Mortgage coefficient at 5\% equity yield} & .0083 & \\ \text{Depreciation factor of 5\% equity yield} & .0795 & \end{array}$$

$$.05 \text{ plus } .7 \times .0083 = .0558$$

$$.08 \text{ minus } .0558 = .0242 \quad .0242 / .0795 = 30.4\%$$

30.4% depreciation of initial purchase price is required before the yield would fall below 5%, an average decline per year of about 3%, a decline which could be attributed to wear and tear and which would leave no margin for declines of a more speculative nature.

$$\begin{array}{rcl} \text{VII. S -1 at 7 years} & - .4430 & - .6434 \\ \text{S -1 at 10 years} & - .6885 & \end{array}$$

$$\text{F (annual requirement)} \quad .12876$$

$$\text{IIIB sinking fund factor} \quad .0907$$

$$.6434 \times .0907 = .05835$$

$$\begin{array}{rcl} & .09 & \\ & \underline{.14835} & \\ & .12876 & \\ \text{Mortgage Coef. } .01959 \times 62,780 & - \frac{7,800}{1,228} & \\ & \underline{8,028} & \\ & 8,028 / .09 = .0091 \text{ or } .0809 = \$102,340 & \end{array}$$

$$\text{VIII. } 14430 / 107 / .07 = .0525 \text{ } (-1)$$

$$\text{P} = .1477 \times .0907 = .01339$$

$$\begin{array}{rcl} & .09 & \\ & \underline{.1034} & \\ & .0700 & \end{array}$$

$$.0334 \times 62,780 = 2.096 \text{ plus } 7,800 \div 9.896 = 109,950$$

IX. Only difference in values between building under present lease or full market lease is difference in income of \$5,000 for 10 years. Capitalizing this difference requires a basic rate of .0644 plus 10% of the depreciation rate of .0690 or a total rate of .0713.

$$\$5,000 / .0713 = \$70,126$$

856 2/21/76  
20  
Ellwood Analysis

A program to perform Ellwood computations using formula specified by Dr. L. W. Ellwood in Ellwood Tables for Real Estate Appraising and Financing, Third Edition. The program is not constrained to the projection periods and rates tabulated but may be used for fractional periods and rates.

Program Name: ELLWOOD

Inputs Required:

NOTE: Entry of a question mark in response to any request by the program for data will cause a more elaborate explanation of the required entry to be printed.

EQ YLD? (Required) Equity Yield rate stated either as a percentage or a decimal fraction. All values which are rates may be specified in this manner. If a value larger than one is entered the program assumes that the entry is stated as a percentage and will be divided by 100 to obtain the decimal rate.

PROJ PD? (Required) Projection period stated in years.

For each mortgage the following data is required:

MTG INTR? (Optional) The mortgage interest rate stated as a percentage or decimal fraction. If data for all mortgages have already been entered then the proper response is no entry followed by a carriage return. The program will request no further mortgage data, and proceed with the analysis.

MTG PD? (Optional) Remaining mortgage period in years. If the mortgage is unknown the annual constant will subsequently be required and requested. Press return without entering data if period is unknown.

MTG CON? (Optional) The mortgage constant; the total annual payments for principal and interest as a fraction of the current mortgage balance should be entered here. If no entry is made the program will repeat the request for mortgage period above.

PMT PDS/YR? (Required) The number of payment periods per year for a monthly payment mortgage enter 12. For a quarterly payment mortgage enter 4.

M? (Optional) The fraction of value which is mortgaged by the current mortgage. If no entry is made program will request the dollar amount of the mortgage below.

M\$? (Optional) The dollar value of the current principal outstanding on the mortgage. If no entry is made the program will again request the mortgage as a fraction of the value of the property above.

The following data is requested after all mortgage data above has been entered.

%DEPR (-APPR) (Required) The percent of depreciation over the projection period on the basis of the current value. If property value is expected to increase, that is appreciate, enter the amount of appreciation as a negative percentage. If property value is to remain constant enter zero.

INC? (Required) The annual income derived from the investment.

%INCR INCOME (Required) The amount by which the annual income is to increase during the projection period on the basis of the currently stated income above. If income is to remain constant enter zero.

EF.R.E.TX.R? The annual real estate tax payment expressed as a percent of market value.

MODE?

Enter one of the following:

r

R Restart; return to the beginning of the program requesting equity yield.

C Provide a mechanism for making changes. Program will continue with the change option described below.

Q Quit; the program will terminate.

P Proof; the program will printout a complete description of the analysis showing the computations normally used in an Ellwood analysis to arrive at the value stated.

T Table; the program will request additional data so as to prepare a table of appreciation or depreciation associated with various choices of projection periods and equity rates. This table may be used to prepare the "Ellwood graphical analysis". In this table negative entries denote depreciation (and, optionally, income decline). This notation agrees with the (inconsistent) notation in the Ellwood text.

#,NEW VAL

(Optional) Enter the number of the item which is to be corrected and its new value. The numbers associated with data items previously entered will have been printed ahead of the abbreviated request for input. These numbers may be used at this point. The number must be followed by a comma and the new value to be used. Upon making one entry the program will again request another number and new value. To terminate this mode make no entry and press return.



## Introductory Ellwood Case #1

The Old Dog Appraisal Company has been asked to provide an income appraisal, complete with an Ellwood graph of possible yields and a proof, to value an investment in a well-built industrial building yielding a net income of \$36,000 per year. The investor feels a 5-year projection is sufficient. The client-investor wants the analysis in 30 minutes so that he can make an offer that afternoon. Investors expect a 20% yield to equity before taxes on this type of investment and the appraiser anticipates a 2% decline in resale value of the property each year. Financing includes both a first and a second mortgage as follows:

|                       | 1st Mortgage | 2nd Mortgage |
|-----------------------|--------------|--------------|
| Interest Rate         | .085         | .09          |
| Term                  | 20           |              |
| Debt Service Constant |              | .123         |
| M (Mortgage Ratio)    | .60          |              |
| M\$ (Mortgage Amount) |              | 20,000       |
| Payment Periods/Year  | 4            | 12           |
| %Depreciation         | .10          |              |

Fortunately Old Dog has a smart son home from college who runs the problem for him on the terminal and provides the output which follows this explanation. Later in the dead of night, Old Dog decides to see if he can repeat the results by doing the very same routine himself.

### Instructions:

- Step 1 - Find a terminal and if its not connected to a telephone adopt a smart son-of-an-assistant.
- Step 2 - Have assistant guide you in "logging in" (details and drill on this step will be provided Monday morning).
- Step 3 - As the terminal asks questions, make all the entries indicated on the example in hand.
- Step 4 - When you have completed the entire run, read back through the program to see if you can crack the code or cryptic notations:
  - a. For example: What is the purpose of entering a question mark (?)?
  - b. What is "mode"?
  - c. Did you enter any percentages as 9 instead of .09? Did it work? Why?
  - d. Does typing 0 (zero) mean the same thing as entering nothing?

- e. How do you indicate the number of mortgages to the program?
- f. How do you specify a mortgage as a % of valuation vs. a particular dollar amount?

Step 5 - Rest on your laurels. Tomorrow is another day!

OLD ELLWOOD

(Terminal inputs are underlined)

READY  
RUN-10

ELLWOOD 17:10CST 02/20/76

REVISED 6/17/75

You may enter a "?" to get a more complete description of any of these questions.

Examples →

```

1 EQ YLD? ?
EQUITY YIELD RATE DESIRED
1 EQ YLD? .20
2 PROJ PD? 5
MORTGAGE 1 DATA
4 MTG INTR? .085
5 MTG PD? 20
7 PMT PDS/YR? 4
10 M? ?
MORTGAGE AMT AS A % OF VALUE, IF UNKNOWN PRESS RETURN
10 M? .60
MORTGAGE 2 DATA
14 MTG INTR? .09
15 MTG PD? —
16 MTG CON? .123
17 PMT PDS/YR? 12
20 M? —
21 M$? 20000
MORTGAGE 3 DATA
24 MTG INTR? —
52 %DEPR(-APPR)? .10
55 INC? 36000
53 % INCR INCOME? 0
58 EF.R.E.TX.R.? .195
.1116310 = MTG 1 C
.1048726 = MTG 2 C
.1249581 = BASIC RATE
.3333960 = OVERALL RATE
107979 = VALUATION
  
```

indicates that only "return" was entered

MODE? P

|           |     |                |              |
|-----------|-----|----------------|--------------|
| MORTGAGE1 | 60% | 64788 AT .1044 | 6765         |
| MORTGAGE2 | 19% | 20000 AT .1230 | 2460         |
| EQUITY    | 21% | 23191 AT .2466 | 5718         |
|           |     | R.E.TAXES      | 21056        |
| TOTAL     |     | 107979         | 36000 INCOME |

107979 ORIGINAL PRICE  
10797 LESS 10.% DEPRECIATION

-----  
97181 PROPERTY REVERSION, DEFERRED 5 YEARS  
64788 MORTGAGE 1  
57050 7738 LESS 5 YEAR AMORTIZATION; (0.119433)  
20000 MORTGAGE 2  
15852 4148 LESS 5 YEAR AMORTIZATION; (0.207416)

-----  
24279 EQUITY REVERSION, DEFERRED 5 YEARS  
  
PRESENT VALUE OF EQUITY INCOME AND REVERSION AT 20.%

17103 INCOME, 5718.91 X 2.99061  
9757 REVERSION, 24279.7 X 0.401878  
-----  
26860 TOTAL

MODE? I

IS INCOME CONSTANT? YES  
ENTER OVERALL RATE FOR ANAL.? .138396  
ENTER 1 TO 4 PROJ. PDS? 2,5,8,10  
ENTER 1 TO 6 EQ. YLDS? 5,10,15,20,25

YIELD ANALYSIS WITH  
CONSTANT INCOME, .1383960 = R

| YRS   | 2      | 5      | 8      | 10     |
|-------|--------|--------|--------|--------|
| YIELD |        |        |        |        |
| .0500 | -.1341 | -.3699 | -.6499 | -.8653 |
| .1000 | -.1020 | -.2939 | -.5471 | -.7594 |
| .1500 | -.0700 | -.2044 | -.3967 | -.5696 |
| .2000 | -.0381 | -.1000 | -.1839 | -.2565 |
| .2500 | -.0063 | .0211  | .1094  | .2336  |

MODE? I  
 IS INCOME CONSTANT? NO  
 ENTER OVERALL RATE FOR ANAL.? .138396  
 ENTER 1 TO 4 PROJ. PDS? 2,5,8,10,15  
 ENTER 1 TO 6 EQ. YLDS? 5,10,15,20,25

YIELD ANALYSIS WITH  
 VARIABLE INCOME, .1383960 = R  
 YRS            2            5            8            10            15  
 YIELD  
 .0500   -.1109   -.2589   -.3919   -.4763   -.6847  
 .1000   -.0842   -.2039   -.3234   -.4064   -.6391  
 .1500   -.0577   -.1406   -.2303   -.2974   -.5089  
 .2000   -.0314   -.0683   -.1051   -.1309   -.2078  
 .2500   -.0052   .0143   .0615   .1170   .4132

MODE? C  
 \$,NEWVAL? 53,.025  
 \$,NEWVAL?         
 .1116310 = MTG 1 C  
 .1048726 = MTG 2 C  
 .1249581 = BASIC RATE  
 .3306836 = OVERALL RATE  
 108865 = VALUATION

MODE? Q

USED        8.61 UNITS

# RUN COST

COST            17:21CST        02/20/76

## ACCRUED CHARGES SINCE SIGNIN

\$ 1.05 COMPUTER  
 1.94 CONNECT  
 0.47 CHARACTERS  
 \$ 3.46 TOTAL  
 EFFICIENCY = 24.4

USED        .39 UNITS

BYE

00010.18 CRU        0000.19 TCH        0004.66 KC

OFF AT 17:21CST 02/20/76

# SHOPPING CENTER CAPITAL STRUCTURE ILLUSTRATION

Net income before recapture: \$100,000.

Sale and Leaseback of land for 10% of purchase price--rent 7% per year.

First mortgage on leasehold--70% of purchase price, 8% interest, 20-year term.

Preferred stock for 10% of price with 12% dividend.

10% common stock with 30% dividend.

10-year projection.

50-year lease on land--no option to repurchase.

$$OAR = Y - MC \pm \text{depreciation}$$

$$MC = MC_L + MC_P + MC_M$$

$$C = Y - I \text{ or } C = \text{Ellwood coefficient}$$

$$Y = .30$$

$$-MC_L = (.30 - .07)(.10) = .023$$

$$-MC_P = (.30 - .12)(.10) = .018$$

$$-MC_M = (.2068)(.7) = \underline{.14476} \quad (\text{p. 249})$$

$$.18576$$

$$\underline{-.18576}$$

$$Y - MC = .11424$$

$$\text{Depr} = (.0235)(.20) =$$

$$\underline{.00470}$$

$$.11894$$

$$100,000 / .11894 = 840,000$$

## MORTGAGE SCREEN TEST NEW APARTMENT BUILDING MORTGAGE APPLICATION

Total cost estimate: \$300,000.

Net income before recapture (forecast): \$25,000.

Loan requested: \$250,000 at 7 1/2% for 25 years, 10-year closed.

$$Y - M \quad C \quad \pm \quad \text{Depr} \quad = \quad OAR$$

$$.15 - \left( \frac{250,000}{300,000} \right) (.0713) + (.0493)(.10) = .0955371 \quad (\text{p. 255})$$

$$\frac{I}{OAR} = \text{sound value}$$

$$\frac{\$250,000}{.0955371} = \$261,600$$

PRO FORMA INCOME PROPERTY FORMAT

(Cash Accounting Basis)

- I. Expected Receipt
  - Base rent (Monthly)
  - Index to base rent (Annual adjustment to monthly base)
  - Percentage rent (Quarterly estimate with fifth quarter adjustment)
  - Amortized tenant improvements (Monthly, fixed)
  - CAM (Monthly average with 14th month adjustment)
  - Reimburseables (Annual pass through)
  - Escalators with stop (Annual review)
  - Interest on reserves (Quarterly sweep)
  - Government transfer payments (Negotiated and deferred)
  - Total receipts
- II. Loss of Potential Receipts
  - Vacancy losses
  - Rent collection losses
  - Reimbursement collection losses
  - Receivables
  - Concessions
  - Total reduction in expected receipts
- III. Actual Revenues for Operations
- IV Gross Outlays for Operations
  - CAM items
  - Reimburseables
  - Escalator items
  - Owner costs
  - Refurbishment
  - Renewal tenant improvements
  - Renewal lease commissions
  - Total operating outlays
- V. Total Cash from Operations
- VI. Capital Charges
  - Interest payments
  - Principal payments
  - Capital improvements
- VII. Net Cash from Operations before Taxes
  - + Transfers from cash reserves from previous period
  - + Net increases in loan balances outstanding
- VIII. Cash Available for Distribution and/or Taxes
  - Less distribution and taxes
  - = Net addition to cash reserves in following period

## ASSUMPTIONS AND LIMITING CONDITIONS OF APPRAISAL THEORY MODEL

- I. ONE APPROACH TO SOLVING PROBLEMS OR REACHING DECISIONS IS BY MAKING A MODEL TO STRUCTURE FACTS AND RELATIONSHIPS IN A MANNER WITHIN THE CONTEXT OF THE DECISION MAKING CIRCUMSTANCES.
  - A. THREE TYPES OF SCIENTIFIC MODEL BUILDING ARE COMMON IN REAL ESTATE ANALYSIS.
    1. PHYSICAL MODELS - SAND TABLES TO UNDERSTAND BUILDING MASS, AND SHAPE.
    2. ABSTRACT MODELS SUCH AS FLOW CHARTS OF INDUSTRIAL PROCESS OR TRAFFIC PATTERNS.
    3. SYMBOLIC MODELS RELATE ITEMS WITH MATHEMATICAL <sup>or logic</sup> CONCEPTS.  $I/C = V$  IS A SYMBOLIC MODEL OF THE RELATIONSHIP BETWEEN INCOME PRODUCTIVITY. ~~RECENTLY I SAW A MATHEMATICAL MODEL FOR TESTING THE FINANCIAL FEASIBILITY OF A 236 PROJECT WHICH REDUCED THE ISSUE THROUGH FACTORING TO ONLY A FEW COEFFICIENTS AND SENSITIVE COST AND REVENUE COMPONENTS.~~
  - B. <sup>6</sup>ADVANTAGES OF MODEL BUILDING FOR THE REAL ESTATE ANALYST
    1. MODEL PROVIDES A PRELIMINARY REFERENCE FOR ANALYSIS.
    2. A MODEL BRINGS INTO FOCUS THE PROBLEMS OF ABSTRACTION, TO CHOOSE FACTORS RELEVANT TO PROBLEMS UNDER CONSIDERATION.
    3. FAILURE OF A MODEL TO PREDICT REVEALS FLAWS IN DATA OR LOGIC.
    4. MODELING IN SYMBOLIC LANGUAGE PERMITS USE OF MATHEMATICAL TOOLS.
    5. MODELS OFTEN PROVIDE THE CHEAPEST WAY TO MAKE A PREDICTION AS WELL AS THE QUICKEST. THE GROSS-RENT MULTIPLIER TECHNIQUE IS AN APPRAISAL MODEL.
  - C. DISADVANTAGES AND DANGERS OF MODEL BUILDING FOR THE REAL ESTATE ANALYST.
    1. THE DANGER OF ABSTRACTION IS GROSS X OVERSIMPLIFICATION AND LOSS OF CRITICAL DATA.
    2. THE PROBLEM OF RELATING THE MODEL TO THE COMPLEXITY OF THE REAL WORLD.
    3. INFATUATION WITH THE MODEL IS A PRODUCT OF THE INTELLECT RATHER THAN AS A PRACTICAL TOOL.
  - D. THE VARIETY OF RELATIONSHIPS IN THE REAL WORLD EXCEED THE CAPACITY OF THE MATHEMATICIANS TO DESCRIBE IT OR DATE ACCUMULATION METHODS TO MAINTAIN THE RIGHT MODE OF DATA. MODELS MUST FIT THE DATA THAT IS AVAILABLE.
    1. IN MEDICAL RESEARCH MILLIONS ARE SPENT ON COLLECTING DATA TO TEST THE HYPOTHESIS DREAMED UP ON A SUNNY AFTERNOON. SO IT IS AN APPRAISAL - MOST OF THE TIME IS SPENT ON COLLECTING INFORMATION TO FIT YOUR MODEL OF WHAT YOUR APPRAISAL SHOULD BE AND TO SIMPLIFY THE DATA COLLECTION PROCESS THE APPRAISAL MODEL HAS BEEN SIMPLIFIED.
    2. THUS, THERE IS A CONSTANT INTERPLAY BETWEEN THE MODELS WE USE AND THE KIND OF DATA WHICH WE HAVE AVAILABLE WHICH WE CAN TEST WITH SOME PRACTICAL CONVENIENCE.

Communication  
or  
Abstract

E. THE CAREFUL DILINEATION OF THE VALUE DECISION TO BE SOLVED AND THE DATA WHICH IS APPROPRIATE CAN BE FOUND IN THE THEORETICAL RELATIONSHIPS AND ECONOMIC THEORY ON WHICH IT IS BUILT.

1. A PRICE THEORY OF A FIRM
2. A PERFECT MARKET
3. MARSHALLIAN ECONOMICS OF THE SHORT, INTERMEDIATE, AND LONG TERM VIEW, I.E. MARKET, CAPITALIZED INCOME AND COST

F. PROFESSIONS ALSO HAVE THE PROBLEM OF INTERFACING WITH OTHER PROFESSIONS AND AVOIDING PROFESSIONAL LIABILITY ON THOSE MATTERS ON WHICH THEY ARE NOT PROFESSIONALLY CONFIDENT. THUS THERE IS A SIGNIFICANT NUMBER OF LIMITING CONDITIONS RELATIVE TO THE DATA AND CIRCUMSTANCES OF THE MARKET TRANSACTION. THESE WOULD INCLUDE:

1. TITLE
2. ENGINEERING FACTORS
3. FINANCE AND TAXATION MATTERS
4. RELIABILITY OF DATA
5. SURVEYS, DIMENSIONS, ETC.
6. LEGAL CHARACTER OF LEASES, CONTRACTS, ETC.

Real Estate is valued in terms of its highest and best use. The highest and best use of the *land* (or site) if vacant and available for use may be different from the highest and best use of the *improved property*. This will be true when the improvement is not an appropriate use and yet makes a contribution to total property value in excess of the value of the site.

1. Definition: Highest and Best Use (Highest and Most Profitable Use; Optimum Use) is that reasonable and probable use which will support the highest present value as of the date of the appraisal. Alternatively, it is the most profitable *likely* use to which a property can be put. It may be *measured* in terms of the present worth of the highest net return that the property can be expected to produce over a stipulated long run period of time.
2. The Principle: The principle of highest and best use, as indicated in Session 4, is that urban space (land or improved properties) tends to be put to its highest and best use in a competitive



## The definitions

Proposed FHLBB definition. Market value shall mean the price in terms of cash, or in terms reasonably equivalent to cash, which a property will bring, if exposed for sale on an open market by an informed seller with a reasonable time to find a purchaser buying with full knowledge of all the uses and purposes to which it is adapted and for which it is capable of being used, with neither the buyer nor the seller being under compulsion to buy or sell.

SREA reference. Market value: The price which the property will bring in a competitive market under all conditions requisite to fair sale, which would result from negotiations between a buyer and a seller, each acting prudently, with knowledge, and without undue stimulus.

Regardless of the exact wording of the definition, market value contemplates the consummation of a sale and the passing of full title from seller to buyer by deed, under conditions whereby: (1) buyer and seller are free of undue stimulus and are motivated by no more than the reactions of typical owners; (2) both parties are well-informed or well-advised and act prudently, each for what he considers his own best interest; (3) a reasonable time is allowed to test the market; and (4) payment is made in cash or in accordance with financing terms available in the community for the property type in its locale.

### 1. Definition of Market Value.

- a. Society of Real Estate Appraisers: "The price which a property will bring in a competitive market under all conditions requisite to a fair sale, which would result from negotiations between a buyer and a seller, each acting prudently, with knowledge, and without undue stimulus." (SREA, Real Estate Appraisal Principles and Terminology [Chicago, The Author, 1960], p. 85).
- b. American Institute of Real Estate Appraisers: "The highest price estimated in terms of money which a property will bring if exposed for sale in the open market allowing a reasonable time to find a purchaser who buys with knowledge of all the uses to which it is adapted and for which it is capable of being used." (AIREA, Appraisal Terminology and Handbook, 5th Edition [Chicago, The Author, 1967], p. 131).

### 2. The wording can vary in the definition of Market Value, but the following conditions are always assumed to prevail:

- a. Competitive market conditions.

"The most probable price is that selling price which is most likely to emerge from a transaction involving the subject property if it were to be exposed for sale in the current market for a reasonable time at terms of sale which are currently predominant for properties of the subject type." R. U. Ratcliff.

# *Data Given To Bus. 856 for Class Appraisal Assignment*

## Business 856

### Notes on East Washington Property

1. Legal Description: Lots 5 through 10 and 15 through 22, Block 1, Clyde A. Gallagher Subdivision, in the City of Madison, subject to dedication of southeast 16.5 feet to the City of Madison for street purposes. \*Some documents also mention Township of Burke.
2. Purchased on a land contract June 15, 1983 by MADISON CELEBRATION STATION, INC. from Theodore A. Vail and Mary Jane E. Vail, his wife, of Sun Prairie, Wisconsin.
3. Purchase price was \$500,000, \$90,000 down and \$410,000 on a land contract. Interest rate is 11% per annum. Monthly installments of \$4,000 per month beginning July 15, 1983, with payments first applied to interest and then to principal. Performance guaranteed by Gustavs M. Martinsons and Dwight Zeck, stockholders of purchaser, by separate document. Land contract balance is due on the 15th day of June 1988. Prepayment permitted without penalty.
4. At the time of sale title was encumbered by "Mortgage from Vendor to Security Marine Bank of Madison in the original amount of \$258,000.00, dated January 10, 1978, recorded January 11, 1978, in Volume 903 of Records, page 452, as document number 1555374 ; and  
Mortgage from Vendor to Security Marine Bank for \$75,000.00 dated January 21, 1980, recorded January 21, 1980, in Volume 1582 of Records, page 59, as document number 1655426.
5. \$75,000 mortgage to Security Marine Bank was satisfied on January 19, 1984 by Theodore and Mary Jane Vail by document #1817753, Volume 5298, page 94, in Dane County.

PARKWOOD PLAZA APPRAISAL - 1987

GENERAL COMMENTS

- (1). The client is Alfred E. Anding, Jr.; partner, Anding Enterprises.
- (2). Define specific property interest to be appraised. Don't confuse property with specific interest in property.
- (3). Round to nearest \$10,000 or 1% of value.
- (4). Most probable price must have defined range in terms of sale, but range is not a function of terms of sale when you are talking a cash transaction.
- (5). Assessed value should be followed by equalization ratio, mil rate, and most recent taxes plus special assessment.
- (6). Building was expanded in 1968 for Borman's Dress Shop on a 15 year lease. This space was subdivided in 1983 when Borman's moved out.
- (7). Property encumbered by a vendor interest while Anding has a vendee interest.
- (8). Owner had indicated he bought out Coast to Coast for \$25,000 on or about October 1, 1987.
- (9). Store fronts have masonry knee wall; Walgreen's and new tenants on west end have insulated glass. Old tenants have single sheet panes and some wood paneling over window frames to reduce heat loss.
- (10). Section called "application to subject property" should indicate appraisal methods chosen and why and the fact that you will determine full fee value first and then deduct for leasehold and Zevnick interest. Tell the reader the valuation logic to be followed in very summary form.
- (11). Building codes, etc. should be in appendix except for short quotations directly relevant to subject property.
- (12). Lease abstracts and CACI data should be included in appendices.
- (13). The letter of transmittal, the value conclusions and the certification of value should all be identical in defining the date of appraisal, the legal interests appraised, the central tendency and range and any increments to value as the result of special financing or other concessions which deviate from cash value. Each section is a stand-alone section.
- (14). Since value is a function of square footage and income, once you have chosen GLA as a base for comparison then the attributes to be weighted should include average gross rent or net income per square foot of GLA.
- (15). Identify source and author of each computer software program. Tie tables produced by computer directly into your prose.
- (16). If you use DFC to establish most probable price, you need to do a

sensitivity table of critical assumptions (best case-worst case) to establish a range. As rents assumed are lower risk drops along with the equity discount rates. Hard to do if you use somebody else's FINSIM output!

(17). Linear regression of point score against price per square foot is obsolete. It leaves only two degrees of freedom so the standard error is unreliable. Use QP 2.5 for your market comparison quality score method.

BUSINESS 856--CONTEMPORARY APPRAISAL Fall, 1987

Lecture Tape Transcriptions of JAMES A. GRAASKAMP, PH.D.

UNIVERSITY OF WISCONSIN - MADISON

(At the beginning of the tape, Professor Graaskamp is explaining to the students their appraisal assignment for the semester. The subject property is the Parkwood Plaza located at the corner of Park and University in Middleton, WI. The first audible words start here) --- which is at the corner of University Avenue, and Gammon Road -- well, essentially it is Gammon Road but its called Park Street in Middleton and it is an obsolete strip center owned by one of our alumni, Al Anding, and it was the first project that Al built when he graduated as a Masters student out of the program. The center is at a point where it will have to be recycled and repositioned in the market place. It has a few glitches in its title, but Jean and I had to appraise it for estate problems and refinancing problems this summer. Therefore, I was able to convince Al to give us all of the leases and we have all of the materials you ordinarily you cannot get. It changes our locale so all of the old boiler-plate you collected from downtown Madison is no longer relevant, but on the other hand, we do have some types of materials which would otherwise be difficult to obtain and we have prepared a packet on it which will be handed out on Wednesday. And then the following week we'll join Al out there on the project so you can get a walk through and take a look at it and get underway. In the meantime if any of you know of any shopping center and strip center sales that might be used as additional comparables; we have three comparables which are not very comparable, which is, of course, part of the challenge. Nothing is very comparable with commercial properties anyway. We will organize some additional search parties for additional data. We will also give you the CACI retail market analysis not only for the subject property, but for each of the comps. As you see from your assignment sheet, I think that it is the first week of November, your first complete draft is due with everything but your art work, and Ginny and I hopefully will turn all of those around very soon, and give them back to you in shreds, and allow you to rebuild a final professional copy for us by the end of the semester. I want you to pay particular note of the announcement which is

occurring on all of the School of Business bulletin boards that those who expect to graduate and have an incomplete, and, therefore, will not only postpone graduation but will be hit with a \$200 fee by the School of Business for not having had their grades completed in time. So factor that into your plans for those who want to graduate in December. You may want to avoid that fine. Of course, I don't get any money from them. Okay, we'll come back to the Park Plaza when we get the package on Wednesday. The leases will be on reserve in the Business School Library. For obvious reasons, they are confidential and you'll have to treat them professionally. You'll be allowed to read them there. You will not be allowed to copy them and so you will have to set up a little lease abstracting table and take out whatever you consider the key points in terms of rents, bumps, and renewal options, and good stuff like that. Obviously, people like Walgreens and so forth don't want their leases photographed and floating around town for a variety of reasons so you'll have to treat those professionally. There will be five sets over there and hopefully, there will be five sets at the end of the semester. Obviously, the information there is privileged information and you have to treat it accordingly. Okay, -- I think that covers basic administrative matters. The reading set is at Bob's Copy Shop. I know you will find it hard to believe, but the reading packet has been rebuilt, and culled down by 21% on basic page count and, also, updated. Secondly, the Hayes book is apparently out of print. They have a few copies there, but what I did was to xerox at the last moment the required chapters out of the Hayes book, so it is in your reading packet. If you bought the book, take it back and get your money back if you want to. It's still an excellent book. That will solve the bottle-neck problem, as they were unable to find 15 copies extant in the warehouse or where ever. All of the material in the handbook are in the reading packet at Bob's so if you bought the book and don't want it, take it back and get your money back. Okay!!---Appraisal has become an extremely controversial and exciting subject area largely because of all of the

thinking for which Ratcliff, and yours truly and Kinnard and Wendt, and a number of others have criticized appraisal for, has come home to roost. The initial instigation of that (coming home to roost), of course, has been the collapse of the savings and loan associations. Currently there are 400 of them that are bankrupt as a result of poor income property lending decisions. It will cost the FSLIC somewhere in the neighborhood of \$25 billion to simply replace the funds that have been lost. Obviously it evaporated because it (the value) was never there. And as a result Congress is a little sensitive on the issue. A study by the Committee on Banking and Monetary Affairs headed up by a man named Douglas Barnard, has issued its report, the summary report which is in your reading packet. The Committee has come forward with the recommendation that there has to be legislation which controls both the nature of the appraisal product and the responsibility of the insured guarantor or insured lender to exercise care and discretion in the procurement of the appraisal. A basic problem of appraisal has always been that those who needed the loan hired the appraiser, or didn't hire him, depending on whether he was willing to accommodate them with whatever number they wished. And as a result, the entire appraisal process was subverted into a position of advocacy. And the natural American tendency to make the deal by pitting everybody along tended to permit assumptions and formats and certainly, misleading communication that would allow the project to go forward--whether it should have or not, and the result has been disastrous. Barnard's report has come out, in essence, and decided what we should have in the appraisal area is the same kind of quality control that we have in the accounting area. Not that the accountants have the perfect system, but he has in essence said we have to establish a foundation of experts in appraisal who will choose two boards. One board will establish what the standards of the appraisal product are. Just like the FASB, financial accounting standards board, there will be an appraisal standards board that will define exactly what it is you will do and how you will do it and what



methods are legitimate and what kind of presentation is permissible in the communication of the decision process and so on. The second board will be established to certify appraisers. The certification standards in terms of education, in terms of exams, in terms of experience requirements, in terms of review of their product for continuing or renewing of their certification, and certainly punitive sanctions that will be taken against those who violate those elements, will be established by a second certification board. The implementation of the exams and certifications would be at the state level. Should the states fail to implement that program then the federal board would. All federally insured lenders or federally supervised fiduciaries would be required to use only certified appraisers. And that certification would supersede membership in any appraisal organization. The Barnard analysis points to one case after another of absolutely abysmal appraisal practices and they have barely scratched the surface. The conflict of interest, the obvious biasing of the appraiser by interference, by the client pressuring him with the feed of repeat business, sometimes even giving him participation in the project and so forth, just grossly embarrassed all the professional appraisal organizations who were and are aware of it, but who were unable to prevent it because the cost of taking away an appraisal designation is somewhere in the neighborhood \$35-60 thousand dollars. So by the time they went through the legal process of taking away your designation, which some lawyers had successfully argued that it was taking away someone's livelihood and that requires due process under the Constitution plus in the process, of course, you would have witnesses who were sued for slander or liable for coming forward and expressing their opinions that this was unethical or inappropriate and so forth. And therefore, they lost control. So they formed a committee of eight-- the eight major appraisal organizations, such as the Review Appraisers American Institute, and the Society, the American Appraisal Society, and so on, to sit down and negotiate with Mr. Barnard on how the federal government could be

involved and help finance the tremendous cost of establishing a board of standards and a board of certification and then enforce those standards where complaints are brought against the appraisal process. And it was felt the committee just couldn't do it without the assistance of the federal government, financially, in carrying through the program. It became apparent with R41C which in the absence of any other model is considered the model that would be imposed on all financial institutions and probably modified ultimately by the certification board. The lenders suddenly realized that this was going to : 1.) make them responsible for the appraisal and they had to sign on the appraisal just like the appraiser, one of the basic requirements of R41C, and right behind the title page is the page in which the lending officer has to sign off on the appraisal in effect saying he read it, that it conforms to R41C, that it was done for the lender, etc., etc., and represents an objective analysis. And the board of directors becomes personally accountable as a breach of fiduciary duty, if at some point in the future, it turns out that the project failed and that it failed because they obviously didn't do what their homework should have required them to do and that they were lax in terms of how their appraisals were procured and who the appraisers were, and so forth. And, therefore, to get their attention they had to hit all of those jackasses right on the nose with a two by four. And somebody says "Wow, what would happen if there is national certification for all appraisers" and they got a little queasy whether that was such a good idea. But the ones who are really upset about it are the National Association of Realtors. The National Association of Realtors has hundreds of salesmen who are doing appraisals part-time. Every hot-dog commercial broker thinks he's an appraiser,-- "I know the market...". The idea of actually having to take an exam would require mathematics, long division, things of that sort, has absolutely panicked the National Association of Realtors and they have been going around the country attempting to organize the Mortgage Bankers, the U.S. Savings and Loan League, the American Bankers Association and others in a

counter effort to block the Barnard legislation. This has left the American Institute of Real Estate Appraisers in a really tough spot in that they are in the Committee of Eight who have endorsed what Barnard wants to do and has endorsed the program with a resolution to the Committee of Eight. They now find from the National Association of Realtors that they can't do that because as a member of NAR that is not NAR's official position. That leaves MAI's up against something we've been telling them for years, which is that appraisers have no business in a brokerage organization. They are not boosters of sales, and they're suppose to be objective observers of the market place. This is indeed one of the reasons the merger between the MAI's and the SREA's failed was that a good many people felt that an appraisal organization should be independent of NAR. Now for the first time we have this rather interesting problem that they wanted to be a member of NAR because of NAR's political strength in the lobbying that goes on in Washington and now they find that the directives of the brokers is in conflict with that of the appraisers, and the brokers are pursuing their interests Willie Nillie to the appraisers. So to think that this is a yeasty time in appraisal is to put it mildly. Barnard's legislation should be introduced to the Congress within the next two weeks and we will have a better look-see as to how it matches the recommendations in the executive summary which you have in your outline. But, in any event, the world has changed, the game has changed. Appraisers will work for the lenders, not the borrowers, by law. And the appraisal organizations have already strongly modified many of their previous relatively lax interpretations of their code and are beginning to introduce white papers which indicate what an appraiser can say and what he can't say. Essentially, it gets down to the fact that there will be a definition of market value which is cash to the seller represents the central (tendency) or most probable price at which the property will sell. And then there are the traditional six conditions. The strongest of which, other than there be a knowledgeable buyer and seller and neither under any force to sell,

and so forth, is that you cannot include in the value anything which is not a real estate interest or anything which represents a special concession by the seller or ANYBODY ELSE in the deal. If the broker takes a cut on his commission, they (the appraisers) are going to have to find out about it. If there is money paid to the general partner to get him to relinquish his interest in it--this was happening--many, many sales were being made in which the recorded purchase price of the property was one thing, but if you went back in to the general recordings of the Register of Deeds office you would find that the general partner had also been bought off as he was giving up his management fee, and maybe his brokerage fee, and maybe some future participation in the deal, and so forth, and he was probably taking \$200,000 on the side on a \$2 million deal. So the real purchase price was \$2.2 million and the reported price would be \$2 million. In any event, market value is going to become a benchmark on a cash basis and, then, if there are other things to be included in the deal--such as, the seller is providing the financing, or there's an assumption of a mortgage, etc., etc., the increment or adjustment to cash price will then be recorded separately. Those who can read the report will all start out with a common denominator ---- this is a cash, arms length, no residual interest deal, then for our side deals, here is the increment in value or the deduction. For example, in a recent securities fraud case we found the appraiser deliberately selecting properties which were sold subject to a mortgage that couldn't be repaid, which, let's say, was at 12% when the interest rate was at 10%. So the property was subject to discount to represent the difference in market rate interest relative to the contract rate of interest. That gave them a higher overall rate. They would then take those three sales and undervalue the next property that was the subject of the valuation simply because the client wanted a low value because he was buying out a limited partnership and paying the difference between the loan outstanding and the value of the property to the limited partners. So there are all different kinds of

ways to skin the cat. Say here is the market price recorded and so forth, and recorded without too much analysis of what the underlying deal is all about. No more. The appraiser has a fundamental right to inform the seller. We're involved in another case where the lender closed on the deal for a major office building down in Orlando when it met the 81% occupancy clause requirement in the closing arrangement. The appraiser reported the leases and the tenants and so forth, but failed to report that everyone of them were, in fact, subsidiaries of the borrower. It really didn't represent arm's length, market rent transactions at all. They had simply been moved into the building to meet the occupancy clause so they could close on the permanent loan. The appraiser is now being sued for misrepresentation, as well, of course, the borrower's misrepresentation in order to get past the nonrecourse clause in the loan for a building which has since been plowed under and repossessed by the lender. So the appraiser is now working for the lender--PERIOD. That's his viewpoint, that's his perspective. That represents a very refreshing change of status that has been a long time coming and has to come really as the result of a disaster in which the savings and loans and the banks, and for that matter, many of the pension funds have been looted with the aid and the assistance of the appraisal process. So we're in a changed world and its a very exciting area in which there are very few appraisers trained professionally to do what is being asked to be done by the lender and those that can meet that standard are finding their income is moving up very quickly and they're reaching senior partner status in major accounting firms. The fastest growing area of appraisal is currently in the executive accounting area. Appraisal is now recognized as really a part of the financial information business and virtually totally integrated with issues of accounting and accountants in many ways are better prepared to deal with it, than otherwise, but are not necessarily trained in the market search and the real estate process. If you look around the country, it is really shocking to see how many of the powerful MAIs have, in effect, given up their individual

practices and gone with the major accounting firms. For example, Charlie Akerson who had been a lone wolf out in the East coast for years, refusing to work with other people because they wouldn't meet his quality standards, and who has been, of course, a major advocate of reform within the Institute is now in charge of all appraisals for Laventhol and Horwath. In Chicago, Jerry Shlaes, just went with PKF (Pannell Kerr Forster) and became a Senior Partner, which is as high as you can go in a CPA firm, again, to direct their real estate operations. Arthur Anderson picked up an MAI -can't remember his name-an appraiser in Texas. Again simply because there are so few loners around that are capable of organizing an appraisal force that will deliver the standard of work that they expect. Bob Parson, one of our people, is with, oh dear, Laventhol and Horwath in Los Angeles, and so on. So there's this tremendous reform going on and appraisal is being integrated and simulated into the accounting profession as part of the financial information business. And it can be extremely profitable to the point where a number of the Big Eight People have told me that if they had to choose between doing an audit for a major corporation or doing their appraisal work, they would give up the audit contract. So the income opportunities, career opportunities and so forth are in drastic state of transition. Wisconsin has a long tradition in appraisal, coming out of Richard Ratcliff, along with Kinnard and probably Case and Wendt are the original appraisal theorists and probably the sharpest critics of the appraisal process on the theoretical base and they have, of course, spawned a group of second generations, such as myself who have attempted to make it applicable in the field itself. That tradition really has made Wisconsin sort of the gad-fly of the appraisal process. And it is interesting how they have now adapted our language and are beginning to move much closer to the processes. I'll have to tell you a funny story because currently I'm now a candidate for being an MAI. In a trial two years ago I was up against the President of the Institute on a shopping center in New Jersey and he had used an

overall rate based on Ellwood which had produced a value on the property with a loan on it, a super shopping center called (Quaker) Bridge Mall, and he had a negative cash flow. There was no way that you can carry a mortgage of that size on that property. Also doing the cost approach, he couldn't do Marshall & Swift on the computer very well and he ended up with two roofs and no walls which he lightly dismissed because he said that are about the same amount of square feet in the roof as there are in the walls. Anyway we took that apart and compared it to an after tax cash value. We also took it apart on the basis that he had included a series of revenue streams that had nothing to do with real estate like \$500,000 a year made on something like selling electricity to the tenant, adding it to the gross income and making it subject to the real estate tax and so forth. And on the cross examine they asked me if I was an MAI and I said no I was not, I had a reputation to maintain, then he asked if I was aware of the course program which they taught and I said "Yes, I had taught most of the courses as a matter of courtesy for them for a number of years." They asked me if I ever taught their capitalized income course and I said, "Yes, I have in Colorado two years earlier. I had been asked to teach that course at the University of Colorado in the summer." They said, "Are you aware that the two gentlemen who you are criticizing are the chairman and the sub-chairman of that committee of the course?" I said, "No, I had not been aware of that, but explained the lack of substance in the courses." They also asked if wasn't the Institute the final arbitrator of appraisal theory and I said, "Absolutely not, they haven't contributed anything to it since 1936." They were absolutely livid and they then confronted me in the anti-chambers of the courtroom after my testimony and said how could I have possibly have said any of those things, and I because I was sworn to tell the truth." Later they reported back to their committee on the professional practice for reprimand and I had to write back a sweet note that said I appreciated that I had caught their eye but I was like inviting me to the Vatican. Obviously, I couldn't be excommunicated because we

weren't even in the same church. Things quieted down for a couple of months. And then I was invited by five former presidents of the Institute to join the Institute and I said fine, all right I would do that. I thought you can't be thrown out until you're in. Right! And so I made application and there was a question there that asked, "Do you have a college education, and I wrote Ph.D. Urban Land Economics and it was sent back and the lady said, "No I'm sorry you have to have a four year degree." So I said, "All right". So I filled it in -- A.B., English and Creative Writing and that was all right, and beside it I wrote,--"the essence of appraisal". The second time it came back because it lacked the zip codes of the five former presidents whom I put down as my references. It came back the third time because, in response to "What have you been doing the last ten years of your life?", I indicated that between August and June I taught at the University of Wisconsin, but I did not tell them what I did in the summers. About that time it was time for the merger, so I gave up. I figured, "Well, I'll get in under the tent flap on the merger. The merger vote was "No", so I didn't get into that either. And so at any rate -- I told this story at several MAI meetings where I was guest speaker and eventually the president and membership chairman flew out to Madison and signed Jean and me up to be candidates for the MAI and said we could take the exams at our leisure where ever we wanted and so forth and so on. So now I'm an MAI candidate and I get calls from my (MAI) friends like Bill Kinnard and Bob Foreman, "You idiot, they are just setting you up to throw you out." At any rate, I'm a candidate, for whatever that means. I think there is some hope in sight, if not from the Institute, at least for some new appraisal organization that will emerge out of the current ferment and so forth. The Institute is making a really honest try to clean up their act. Their basic attitude, (and this again was expressed by the president-elect at a trial in which he was supporting the other side in a securities fraud case), that the attitude of the Institute is to improve the quality through education rather than punitive sanctions because if they applied



punitive sanctions, they would lose about half of their membership. I couldn't believe that they were that dilettante on the enforcement where there some just outrageous appraisal errors and actual physical changes to the appraisal report. But at any rate, the Institute, despite the prevailing attitude that you need the whole church together rather than throw out half their members, is trying to make an honest effort to clean up the act. Let's go back to basic appraisal theory then, given that introduction to the exciting times of the appraisal process. Go back to the fact that an appraisal is a model and I will give you some lectures notes on this; you don't have to get it all down--because the Xerox machine apparently crumbled under the pressure and it won't be available until next Wednesday. Bring your readings to classes once you get them into a binder; there are some things in the reading packet that will be used in class a little later. I'll try to warn you a week ahead of time so you may keep a lecture ahead. An appraisal is a decision to help; it is really designed to take data and organize it and arrive at a systematic process of decision making; in this case, addressed typically to the question of what will it sell for? In any model, as some of you have heard me say before, has six components, the first is: what is the question? That is the most critical thing to understand in getting into an appraisal assignment. What is the question for which the appraisal is required as a benchmark? Each question, as we will begin to see, redefines the definition of value, the definition of interest, the kind of methodologies that we can use relative to that particular issue. What will you pay for a shopping center as a going concern is an entirely different question than what it should be assessed for under the real estate taxes. What we should insure it for is an entirely different issue than either the real estate tax or the investment value of property. If we were to appraise the collateral elements that are going to be assigned to secure a loan, that is an entirely different question than the going concern value of the real estate. So we need first of all to fully understand the question for which an appraisal is

required as a benchmark. The second thing we need to fully understand is what kind of data is available that would assist us in making that forecast and that's very much related to a third type of problem. What kind of model do we have that focuses the data on the question? I repeat, what kind of model do we have that focuses the data on the question? If all we know about a couple of four unit buildings that have sold, is the gross rent and the sales price, we create a little model with the gross rent multiplier and that says, "Hey, these buildings tend to sell for seven times gross rent." And now we have a third building which looks a great deal like the first two and we hypothesize that given this relationship in terms of our little model and the only data that we've got is gross rents, the property should sell for about seven times its gross rent. And if we have better data, hopefully we'll come up with a better answer. If we know the different operating expense ratios, we know the different finance packages and maybe we know a little bit about the tax motivations of the buyers in each case and so forth, hopefully we can come up with a more refined forecast of what the next four unit building will sell for. But in any event, we need a theory which focuses the data on the question. And much of what we're going to be doing in this course is in fact looking at some of the different kinds of models which allow us to organize information to make a decision, and that's really what Hayes is all about. Hayes is saying, "Hey, there are different kinds of decision models out there. There are models of certainty, models of risk, models of competitive reaction, etc. Now in addition to these three basic components, what's the question, what kind of data, and what kind of models do we have, there are three pragmatic limitations on any model. First of all, of course, what's the problem with the user, whose going to do it? Can he add and subtract, in which case he is limited to the cost approach, or can he do long division that allows him to do capitalized income? What are the skills of the appraiser? This is extremely important so that you are at least given the power of systems which are designed for mass

execution. If you're expecting some guy for \$14,000 to be a real estate assessor in a real estate assessor's office, you gotta design a model that's pretty basic to use. That he can use it again and again with no liability. One of the great problems in Ellwood was that you were using six place decimals and the only guy who could use it initially was the guy who have those old () calculators that looked like a pepper mill, you turned that crank after you put in a series of number, and cranked it out. Long before the HP12, etc. And as a result only those who could deal with confidence with six decimal places could use Ellwood. It is probably just as well not everyone did anyway, but nevertheless, the skill of the user is a very great limitation and, obviously, some real learning curve costs in changing and introducing methodology which may be better, but that depends upon the willingness and the ability of the appraisers. The second decision, of course, is, "What has credibility with the client?" It is not unusual for the appraiser to use after tax cash flow discounted to arrive at his answer and to explain it to his client as a net income multiplier or something of that sort, because that is what has credibility with the client. Your appraisal report is a communication device, it doesn't necessarily mean that he has to understand all of your methodology. You may put some of your fancier statistics and regression numbers in the appendix where they are there to support your opinions, but not to confuse the reader. What has creditability? You're asking him to make a decision based on your benchmark; does he trust your benchmark? And the final constraint, obviously, is cost effectiveness. If you've got a \$300 answer to a \$100 dollar question, you're not going to get a lot of repeat business and you may not get paid for your first assignment. That's one of the dramatic things that is changing in the current environment. Suddenly, if a guy wants to do 300 unit apartment project, the only way he is going to get a loan is if he does a \$40,000 appraisal and feasibility study. And just a couple of years ago he would have gotten by with a \$5,000 study, and then he would have regarded the

appraiser as gouging him. He would say, "Great, get it done in 20 days or less." Now he (the appraiser) may have to do primary research first under the R41C requirements and he will need four months the study is done. And what's more there is only one guy in town that they'll accept for that and as a result you get in a que and the guy keeps raising his price so the amount of work that he has equals the amount of time he wants to give it. So what is cost effective today is quit different. The appraiser is coming into his own like the rating agencies in securitization. In the old days the rating agencies got a \$5,000 or \$10,000 fee for saying this was a double A or a double B or whatever it was and so they were suppose to do that in real estate and they backed off and said, "Hey, hold everything, I can't give away our good name for that kind of money. They expect us to analyze the real estate as collateralizing this deal, and so forth, first we're going to spend a little time doing it, then its going to cost you \$50,000." And you should hear them yelling, "What do you mean you are stalling our \$400,000,000 deal for a paltry \$50,000 fee. It's extortion!!! It's blackmail!!!" "Well, fine, sell your bonds without our rating." Same thing is true, "Try to get your apartment project financed without our appraisal." So suddenly what is cost effective is changing significantly in terms of how many dollars are backed up behind completion of that appraisal and what does that take to get it done to satisfy the lender and those who are regulating. Now given the fact that, therefore, appraisal is a business of defining the questions, selecting the models, and then executing and inputting decision models, what kind of models do we have available? Dillmore who is one of my favorite little elves in the business and who has promised to come up here this semester is probably the best thinker in real estate. Delightful gentleman. He never finished high school, has an extremely advanced mathematical talent and background, but he also translates from the German to English for the Saturday Review of Literature, and plus a little appraisal shop down in Birmingham, Alabama with his son. He doesn't want anybody else to work

for him because he can't maintain the quality and so forth, and has one of the feistiest senses of humor that you might want. Dilmore kind of upset the MAI's by coming out about a year ago or two years ago saying essentially there are three approaches to value: order, chance and beauty. Assuming order, says Dilmore, there's a universe in which all the parts fit and we can shave away the chaotic mass of information until we find the critical pattern. The fundamental assignment of the appraiser is to look at the set of random dots on the wall long enough until suddenly they begin to coalesce into a pattern of red dots in a field of random dots and if you see the red dots, the decision is essentially, I guess, is your color point, or whatever the pie chart shows. But you are looking for patterns within the randomness of market information. And you're trying to find models which begin to extract that pattern out of the data, statistical or otherwise. And then he puts it so beautifully in something he wrote. "Its a little bit like Michaelangelo carving this magnificent horse out of a chunk of marble. And when they asked him how he did that, he said you just chip away everything that isn't the horse." Much of the appraisal work is just that kind of process, discarding as much of the information that you have collected as possible, which seems plausible but isn't necessarily on focus, in order that what is left reveals the pattern. And you will be surprised how often that pattern suddenly emerges, it jumps out at you when you have discovered the correct means of comparison. We'll talk more about that later. Dilmore says chance acknowledges the possibility that in closed systems we're making possibilities that weren't discerned, that there were variables out there that you never found or discovered in the pattern. No responsible scientist, he says, is afraid of the fact that there is error. In fact, it is fundamental to science that you talk about means and standard errors and that you are really trying to simply talk about the reliability of an answer rather than the fact that it is an absolute answer. And in appraisal, imprecision is simply built into the process of choosing data because we choose our data

subjectively. The trick is to treat it objectively after we have selected the sources. We decide that here are the only three shopping centers that are useful comparisons to our subject property. We're not quite sure whether we have closed out some of the other options that investors might have considered. Maybe they would have considered a free standing single tenant building as equal in desirability to a multiple store center. So we don't know. We simply have arbitrarily decided that these are the three comparables and the set of attributes that we are going to try to correlate ????? So we choose our data subjectively in appraisal, but says Dilmore, we must treat it objectively from that point forward. No fair bending it a little bit to support a previously determined conclusion and when we do that there is going to be error. The appraisal conclusions have to be stated as a \_range\_ of alternative outcomes, a range of alternative prices, and that's the chance component. And finally he says --- beauty!.....Beauty, of course, simply recognizes that intuition and elegance sometimes provide very useful insight and answers that are legitimate. What we call gut feeling, is in many ways, intuition. And he points out,---- Dilmore writes with an incredible literature background about Einstein,---He developed  $E=mc^2$  (theory of relativity) 25 years before anyone concluded that the speed of light had anything to do with it, but because the speed of light simply provided such an elegant solution, he proceeded on that assumption without any empirical support that, in fact, it was the common denominator for the theory of relativity. I'm not suggesting that appraisers are in the same league as Einstein, but nevertheless there is opportunity for intuition and elegance in the theory and that if it works, on the test -- like Dewey pragmatism -- you can use it, but intuition does play a part. And so hence, while he begins with that fey sense of humor that there are three choices of appraisal methods: order, chance and beauty--it nevertheless is highly applicable as to what the appraisal function is. Ratcliff concluded that appraisals really are always concerned with predictions of a future event. Nine

times out of ten, the question is what will this property sell for under any specific set of circumstances. Therefore, any business method of forecasting that tells how the buyer and seller how likely to behave, is a legitimate tool for appraisal. It is essentially a business research and a business forecast problem. And so Ratcliff concluded that there are also three approaches to value--one, is inference from historical transactions. Inference from historical transactions as you'll see is a much broader concept than the so called comparative market concept, but it certainly has its roots in the market comparison process. And failing that, you fall back to system number two which is simulation of the buyer. We don't have any sellers, we don't know what sellers were thinking about, so what constraints do buyers place on what it is they are willing to acquire. If developers say, hey the maximum that I can pay today for a townhouse is \$5,000 per unit for the ground, that's an understood rule of thumb that is going to put a cap what you'll pay for a particular piece of ground. So once you figure out how many townhouses, you can put a price on a piece of ground. That is buyer simulation--you don't what the seller is thinking. Maybe the seller will decide he can't do business there. Remember your old logic courses where you drew circles--one circle is the buyer and one circle is the seller. The circles represent their expectations, high and low for what they can get for the property. If those circles don't overlap, there is not going to be a transaction. And the only point where there will be a transaction is where they do overlap. That is what is meant by market inference.

That establishes an understood rule of thumb that is obviously going to put a cap on how much you can pay for a particular piece of ground. So with townhouses, once they know how many townhouses they are likely to put on a piece of ground, they know what they can pay. That's buyer simulation. They don't know what the seller is thinking about. The seller may decide he can't do business there. But what you have to think about is this. You know those old

logic courses where you drew circles, if one circle is the buyer and one circle is the seller, the circles represent their expectations--high and low or what they can get for their property. If those circles don't overlap there's not going to be a transaction and the only point at which there will be a transaction is where they do overlap. That's really what's meant by market inference. Failing that, if we only have one circle, the buyer's circle, we obviously have an answer with somewhat wider potential error possibilities. But at least it's one side of the transaction and representing what people perceive as the economic potential of the site. Failing to have inference, failing to have simulation, we fall back to the normative method. Normative methods are, "What would the guy do if he was as smart as me, the appraiser?" Suddenly, we say, "Gee, I don't know what that church will sell for, but if I were an appraiser I wouldn't pay any more than the cost approach to replace. So the cost approach becomes the normative method at that point. But if people really do use the cost approach, and you can prove it, then it's (the method) upgraded. It becomes the simulation method of how buyers go about the decision process. One of the great problems with Ellwood was that it was a normative method. Buyers almost never used it. Appraisers did. Buyers usually say, "Gee I'd buy at a cap rate of about .095" and an appraiser would go into a long song and dance as to why the cap rate was .095. What are the interest rates, loan ratios, and appreciations and depreciations and so forth? And they'd arrive at the same answer. It had a lot of elegance, but it had absolutely no more reliability than had he just listened to a half a dozen people say, "I only buy at .095". There is nothing wrong with that if that provides the most reliable answer. It doesn't have to be elegant, it has to be behavioral. How did you go do it. And that's one of the things that people really misunderstood Ratcliff for. Ratcliff doesn't necessarily support very elegant methods at all. In fact, one of the articles you will read says, "Don't distrust the gross rent multiplier". There are parts of the country and small income properties that



people buy on gross rent multipliers. John Hoppe has one proof in Chicago, with an ethnic white neighborhood in which people buy their three flats to be near grandma and grandpa. And grandma and grandpa are near their kids. And their kids are near their kids. And everybody buys at seven times gross. The problem is there is no net income. The operating costs on these old tri-flats many of which still have old coal furnaces and so forth, with all of the environmental restraints on what kind of coal they can burn and so forth, have no net income whatsoever. And yet for years after the net income went to zero, people still buy at seven times gross. That's the rule. Now if you want to go into a long song and dance about net income and capitalized income that's wonderful and highly elegant and you'll probably come in at what they should pay, but the fact is you want to estimate the most probable price at which it will sell, the price is seven times gross. And the same is true in Berkeley and other areas where there are many of the smaller mobile tenants, student housing, and so forth. They still sell on a gross rent multiplier. And you will find elegant pension funds still buying at .09 cap rate. They argue it isn't the cap rate; the big argument about the net income that it will be applied to. So you need to discover both kinds of methods in order to simulate the smorgasbord of transactions--what people will do. Now, the fundamentals of the Ratcliffian or the contemporary approach are really very simple and so commonsensical that its sort of hard to confuse. The first step is to first understand the question for which the appraisal is required as a benchmark. We'll explore that in some detail. That is going to have to explain to you a number of different things. One, what is the definition of the interest to be appraised? Is it fee simple or is it an encumbered fee? Is it simply the leasehold interest on a ground lease? What is the interest to be appraised? Second of all, what definition of value is appropriate? The real estate tax assessor has one definition of value, eminent domain has another, insurance may have a third, investment value for pension fund may be a fourth, etc., etc., etc. R41C is slightly different than

let's say, the Institute's definition of market value. Similarly, either from the legislature elements that prevail or the lending regulations that prevail or the nature of the question, you'll get the definition of value. Third, what is the date of the appraisal. I couldn't believe it. Somebody just handed in to me their appraisal from last year completed and says, "Okay, the value is \$305,000". Okay, when? The value can only be at a certain point in time. He may be looking forward or backward, it maybe when the man died. I need to know this value as of November, d26, 1986, which was the value as of the point at which he died. That's what you need to relate. You also need to know the value one year later so that if it went down, you will probably take the lower value. Next you need to know perspectives. Are we looking forward on the problem or back on the problem? Can we deal with conditions of certainty or uncertainty. For example, a couple of years ago we had to appraise a Wisconsin brick company which was about to be developed into a shopping center and in all of the family enterprise there were two branches of the family and so one owned the land and the other owned the company. There was some cross over but not enough to be able to ascribe control to one or the other. A minority share holder that would have an interest in the land died. Unfortunately, she died in the year in which they had the highest rents ever on the ground lease because the ground rent was a simple five percent of gross sales. And the University was building some very big brick building at a time when construction was booming and it was their all time high in growth. And it went to hell right after that and interest rates froze, brick and material sales fell, and the IRS, in their wisdom, simply took the sales in the year in which the deceased had passed on and said, "Fine, here's the net income, we'll cap that at nine percent or ten percent, and there's the value". So we and the IRS were about \$1 million apart. So we simply said, "Hey, wait a minute, this thing has gone on so long in litigation that the lease is now expired and we know what rents were collected for each of the years thereafter. So, I'll tell you what we're going

to do--we're going to appraise it on the condition of certainty. We know what the net income was, and we'll then use a risk free discount rate, and when we do that--here's the value. Now, if you want to use the highest value, and we want to compare that to what the rents have been the ten years before and aft of that--great. Let's measure the variance, and let's take the capital budgeting rule that the basic risk rate is the third root of the variance and we'll add that to your treasury rate and then see where your value is". And we were able to convince them that the perspective should be as conditions certain, looking back now that we know what we know, here's what the value should have been with the condition certain. So we need to know the perspective. What did you know at the time, or what would it be legitimate to know now, in looking back at the value issue. Perspective. (Response to question regarding whether the information thereafter is pertinent.) You don't necessarily assume it is. In this case, the issue was what's the income to the estate. Therefore, what would be the present value of that vested interest? We simply argued with the judge that to take the highest income ever recorded and extrapolate that forward, without an appropriate measure of risk for the risk calculation was unfair to the taxpayer. We didn't have to speculate. We knew what the final outcome was and, therefore, we could discount that at a risk free rate, and the government would get all that it was entitled to. But we don't always know what the relevant data may be. But it is often quite useful to at least confirm the judgement of the appraiser. And we're beginning to see quite a bit of that kind of thing currently in which people are looking at appraisals that were done with six percent extrapolations for the next nine years. For example, this applies to buildings in Denver and Houston at the time they were appraised. People are now saying, "Look, wait a minute, that's not right. "(JBD interpretation of previous lines). If you've read the newspapers recently, the Rosenberg Equity Funds revalued their Denver and Houston properties and discounted them by 50 percent or more. "Hey, get another perspective on this thing. Our appraisals

can't possibly be right because they were extrapolated at a certain rate of increase with a gradual absorption and none of that is going to happen, and therefore, we're going to write down those properties at least for now."

There's a reappraisal by changing the perspective. Once we have the value and the date and the interest defined and the perspective, we also have to know any special conditions that have been applied. Special conditions can be applied legitimately, for example, a couple of years ago we appraised the North Estate, here in Middleton on the lake shore. And it had been platted into five lots, in which two were on the lake and three were inland. Each lot was approximately two and one half acres or something of that sort and there were two houses on one of the lots, and the City went in to acquire it as a park. So they worked out a special agreement with the five heirs to the estate, each of whom had received a lot, that it would be appraised as though it were not platted. And they could treat it as a planned unit development with some 17 acres and that they would proceed from that assumption. So the appraiser had special instructions to ignore the fact that it was platted and in five ownerships and treat it as though it were already assembled and ready for sale as a single parcel. And then you proceed on that assumption--it would be a special instruction relative to the problem. So we begin then with, "What is the question?", and we'll arrive from there, as I have said, with the definition of value and so forth. The second step is to begin with what we know best, the property. Analyze the property in terms of its potential for productivity. We look at the site, we look at the structures, we look at the context in which it is located, and we say, "Hey, what are the alternative uses for the property. There are almost always four alternatives that would have to be explored--one, continuing to use it as it is currently used; two, modifying its current use, but not too extensively; three, changing its current use all together; and four, demolishing and starting over. Now some of those may be very quickly disposed of as alternatives, but nonetheless, you have to review those. And from those

four alternatives you will choose what is called the most probable use of the property. We will come back to that later. As soon as we have said what the most probable use of the property is, we are at step three. (Tape side full, need to turn the tape) (It is assumed Jim said step three is to identify the most probable buyer, usually a type of person that buys that type of property, but it doesn't need to be. Under the contemporary approach it doesn't need to be, it could be a very specific individual, the individual next door who desperately needs parking for his shopping center or he is going to lose tenants or he desperately needs parking because his office building is competing with buildings that have it and so forth. And you may very well have a captive consumer. This is a critical departure from traditional market value appraisals. Market value appraisals taught by the Institute and by the appraisal organizations, even when they use the term most probable value, assumes a statistical market place in which buyers have more than one choice they can make, and sellers have more than one buyer they can deal with. So they should be able to play one off against the other. And if the seller wants too high a price, the buyer can go someplace else and be just about equally satisfied. And by the same token, if the seller wants a certain price, he doesn't have to deal with the guy who is low balling him, because there's somebody else at the door. It's a statistical marketplace that sooner or later the little gas bubbles bouncing around in the container will match the best price for the buyer with the best price for the seller, and there will be a deal. Contemporary theory under Ratcliff says, that isn't necessarily so. That the market isn't perfect, that quite often one party or the other has the edge. Everybody knows that the party who is bankrupt, has to sell now. And so the prices are depressed. Or everybody knows his wife insists on buying that house no matter what other houses are available, and the poor bastard is going to pay 105% of the asking price. I know because the first house I ever built and sold had a Queen Anne front and Mary Ann rear in Milwaukee. And I had a terrible

time selling it; it took me six months. But finally a lady walked into the front door and with her husband on one Sunday and it turned out she was the author of cookbooks for fishing and as you can suspect, the wallpaper in the kitchen was nothing but fishing recipes in fancy patterns and that turned her on. And there was nothing she was going to do but buy the house because the kitchen had fishing recipes. It was more than her husband could afford. He was being transferred to Milwaukee by the Oster Company and he had to go to Mr. Oster and get a second mortgage loan so he could buy the house. I sold it at my asking price after having died on the vine for six months. Now, that obviously isn't a fair market value transaction. But it may be the most probable price at which it would sell depending on how hot somebody is to have that particular property. Ratcliff admits there is this kind of aberration from the perfect market, and the appraiser is obligated to discover whether, in fact, there is that opportunity. I think it's interesting because that's the way brokers think. Brokers in looking at a commercial property say, "Who is the individual that is likely to pay the most for this property? Because that is whose telephone is going to ring first. And only after I have exhausted trying to motivate that buyer do I look at the second most probable buyer. The last thing that I want to do is sell it at the mean price, plus or minus a few standard deviations. I want to sell it at the unfair price." And, interestingly enough, virtually everybody that buys a property overpays, because he edged out the other buyers because his expectations were higher. Just think about that for a while. It will reappear in your readings. But you need to know who is the most probable buyer and what's his motivation. And once you know the most probable use and the most probable buyer you are at the critical stage of the appraisal because now you can say, "Could I find structures or properties of similar productivity characteristics that have been bought by this type of buyer. If this building (subject) is a prime candidate for total renovation and so forth, then I only want buyers to buy for renovation purposes. And what do

they pay for the shell of an old building? Can I find comps like that?" Okay? And how do they differ? For example, down on the Square, I can show you--in fact it will be in 25 N. Pinckney, but there is really more current data that supports the same thing. People who buy 22 foot wide buildings on the Square, buy them for their own use and use only the first floor. And the price is highly correlated to the square footage of the first floor. As you get to the larger buildings, as you move to the 44 and 66 footers, they are bought by professional redevelopers who claim to use every square foot of it including the squeak in the steps. And the buildings sell very closely correlated to the gross building area, not the first floor area. As the building changes in size, the most probable buyer changes, and therefore, the benchmark by which he makes a decision changes. And so if you are looking at 5,000 to 10,000 foot office buildings, what people pay for those as users are entirely different than what most people pay for 30,000 square foot building in which they are going to use 5 for themselves and rent out the other 25. So once you've said something about the most probable buyer and the most probable use, you have a very strong editorial control of what constitutes a legitimate subset of comparable sales. And that's really what it is. We're working in the theory of sets. Comparability is not only because a property has the same productivity characteristics,--it has nothing to do with look alike--,but the same productivity variables, AND because the buyers who bought them were similarly motivated. In past years people would often look at second time buyers buying an apartment building as compared to first time buyers who were always over valuing the second time purchase buyer, because the second time purchase buyer didn't get all the tax goodies that were characteristic of the first time buyer. Therefore, their motivations were different. Second time buyers tended to buy more on cash income and less on the tax shelter. Of course the facts are greatly simplified if you don't have some of those nuances going on. Nevertheless, you have to begin to look at the motivation. Now failing to find

some good comparables, as is quite often the case, you fall back to process number two, simulation. How should the buyer think about this and how hard should you work when you have to go out and interview buyers who buy those kinds of properties. Failing that, you go to method three which is some normative method that you were taught in appraisal school and you arrive ultimately, therefore, at an appraisal conclusion. A number that says 'this is the range and central tendency of the price'. At that point I (as the appraiser) really have to ask, "Have any external conditions, externalities, occurred since those comparable sales were first established-since we first talked to the buyer-that have changed things." Maybe the interest rates are bumped up a hundred basis points since the comparables were sold; is that going to affect our answer? Maybe the tax rules have changed. Maybe there is war in Iran. Who knows. There may be a variety of externalities which really weren't present when the actual transactions that you use as comparables or the behavioral analysis on which they are based, took place. You need to adjust your initial preliminary conclusion to reflect the influence of that, if any. At least, you have to indicate that there were not changes in conditions that made the data obsolete. Right now we are doing a study for the Chicago assessor to establish that with the change in tax law, none of the transactions in the Chicago loop by syndicators are legitimate comparables for the assessment of downtown office buildings in Chicago. That, in fact, the tax law had added so many premiums, the syndicators pushed to get it all out before the tax law changed, significantly distorting the market price. These transactions did not represent what property would sell for today, because the rules of the game changed substantially between 1986 and 1987. It's a hot issue. The school board says, "Hey, you in Cook County, you're under assessing the office buildings in the Loop. Here are three transactions to syndicators who worked out fancy lease backs and so forth, so the bite was \$250 a square foot for a junky old office building. Why aren't you assessing all office buildings at \$250/SF?. If you



were, we wouldn't have this deficit in the School Board." The assessor has to come back and say, "Wait a minute, my charge is to assess at market value." Has there been a change in externalities that make those comparables no longer market value. That will be the subject of the court case. When is a difference in degree difference in kind? It's a tough call for the appraiser to decide if the externalities are such that it is no longer legitimate to use that property as a comparable. But in Madison for a long time it was pretty easy. Nothing was happening in downtown Madison. Prices were going no where. We could use sales that were 4 years old with significant confidence; if anything, they were a little high. Now that may have changed. Once you check the externalities, and said, "All right, here's the adjusted value." Then the final step is to test your value conclusion and decide whether it makes sense relative to what you said about the buyer. If you said under his profile that the guy is buying this as a tax shelter and now you arrived at the value and you run it on your little ATV after tax cash flow model, and it turns out there isn't any tax dollars--something is wrong. Either with your conclusion or with your profile of the buyer. And its amazing how often appraisers are unwilling to go back and test their value conclusions to be consistent with the rationale that was presumed by the buyer and the seller in the first place. If you arrived at your answer through market comparison you probably will test it using some sort of income model. If you've arrived at it through primary attention on the capitalized income approach simulation because that's what you believe is the most reliable answer, then you have to say, "How does that fit the pattern of what market transactions I have? Does it fall within the general range of transactions, or does it fall way outside the range of transactions? And if so, why? Notice, no three approaches to value. You pick one and go with it because it has the best data and the greater reliability. And then you test it with the second best method to see whether it tends to hold up with some element of consistency. At that point you then make your conclusion and say, "This is

the most probable price and here is the range of values because ". In a few selective markets, like residential houses and a few cases where you're dealing with statistical regression models, the range of error may be the standard deviation of your data or at least the standard error of the mean of your data. But in the great majority of major income property cases, that range instead is going to be reflective of the bargaining position of the buyer and the seller. Here is the central tendency, the seller can't go below this point because he owes X dollars on the property and, therefore, its going to be highly resistive of selling for less than what will clear the taxes or/and pay off the loan. But, on the other hand, the upper level price is that it be highly resistant to the fact that rents are going to be at this level for a period of time and buyer doesn't want to end up with a cash on cash of less than x percent on his yield and, therefore, he would pay no more than that. And therefore, somewhere between those two points they're going to negotiate a final transaction price. So while it may be a statistical standard error which defines the range, more typically it is the cap on what the buyer will pay and the floor in terms of what the seller will accept, to the degree that the appraiser can ascertain that. He can't always do that. But, at least he puts a flag on the reliability of his answer and says to his client, here's my best shot. This is the most probable price at which it will sell. Here is the range of error in that estimate. You may want to list the high price, and be perfectly happy to get the central price if you're selling the property. And you may want to make your offer on the low side and settle for the mean price as the negotiations proceed. But it is a much more useful kind of answer. If the lender is a little concerned about your appraisal technique, he lends 75 percent of your low estimate. If you're aggressive and you really want the property, you say so and pay only one standard error over the mean price for it because you wanted it. That increment in value obviously is a subjective statement about how it (the property) fits your needs and objectives and so forth. At

least you understand what it was you were paying to pursue that particular end. So contemporary appraisal never comes down with a single number, it comes down with a number that represents the central tendencies around which the transaction is likely to occur and a range of error which is possible because either the data is unreliable or because the negotiations will be intense, given the relative position of the parties. Okay, so much for your introduction to contemporary appraisal.

All of you meet in Middleton at the Park Plaza Shopping Center on Friday afternoon. I'm looking for a time suggestion. Is 2:00 too early? Someone has a conflict at 2:00. Okay, 2:30. I can't do it earlier because of conflicts I have with other classes and quiz sections. What time is Finance done, Mark? Starts at 12:05, will end @1:20. 2:00 is the earliest I can do it--you'll just have to

postpone your drinking time until 3:30 or 4:00. You have before you a packet of drawings and so forth which I think you will find useful to your report. If I'd were you

I would make extra copies since I'm not going to run multiple copies and you may spill your coffee and so forth on it. It's coming out of a report that we (Landmark Research, Inc.) have done on the property and gives you some idea, anyway, of the details of the property. The leases are on reserve, or about to go on reserve, in the Business Library. You can use them in the Library, but you are not permitted to take them home, nor are you permitted to copy them. There are five sets. Again, remember that the leases represent confidential material, and they should be treated professionally as a result. I think you will find it an interesting property to work on. And we have some additional data coming in on the trade area with an analysis of both comparables and the subject. Now, let's move forward into the general appraisal process which we introduced last week. Let me point out that since Ratcliff and Kinnard and, to some degree Wendt, first wrote on the necessity of improving and refining the

appraisal logic, much of the terminology which they used has been, in fact, added to the lexicon of the appraiser, but it doesn't necessarily mean what the contemporary appraiser intended it to mean. Therefore, if you will, let's go back and look at a few things, such as probable price and most probable use and so on. Most probable price which is now popular among traditional MAIs is nevertheless defined as market value with the six conditions. And of those conditions, the one that is never spoken of, but is most significant, is that it always implies a typical market place. It always implies that the buyer has more than one prospect for his property and that the seller has at least two or more alternative choices which are more or less equally satisfactory. And to the degree that they are not, presumably he can adjust the price so that it becomes a matter of indifference. In effect, the seller has an indifference curve in which he says, "I don't care if I sell to A, B, or C; I have choices", and the buyer has indifference curves, which given adjustments in price, presumably allow him to feel at ease in his own mind that properties A or B are equally acceptable. Without that, obviously you have one party or the other either in a monopoly or oligopsony situation. And therefore, presumably under traditional economics one party or the other is going to pay a premium. Therefore, if you were doing, for example, an appraisal for condemnation which presumes market value, you would have to discard any sale in which there was a hint that the buyer or the seller was captive, that doesn't represent a market value transaction. Charlie had to sell because his wife wanted a divorce; he didn't have any money and the guy next door gave him a vulture price so he had to take it. Now, one, he didn't feel he had any choices; nobody else bid on the property. And, two, a very important consideration, it was probably not publicly advertised as available. It was not put on the market for a reasonable period of time as the definition states. And therefore, you really didn't explore whether you had choices as the seller. The first guy who walked in the door bought it and you didn't advertise it. You sold it yourself. That

transaction is not a market value transaction. And if we're going to go into court and use it as a market value transaction and the other guy is on his toes and knows the details of the transaction, he'll tear you apart. For example, in Maple Bluff where Jean was the assessor for a good many years, one of the things you're really sensitive to is when a house sells for more than its assessed value. This is because the state comes along and says, "Gee, your equalization ratio was only 90 percent last year in terms of the ratio of assessed value to market value and we're going to take the total assessed value divide it by 90 percent, that's your equalized value and that's the rate at which you're going to share in the school board tax or the county tax or whatever else is involved in the tax budget. That can be a pretty heavy hit. So here comes along a family that's going to sell their house and they sell it for a premium to the people who live next door. So we called them and asked them why they bought the house and the buyers said, "Well, we had them over for dinner and they said they were going to sell their house and we asked if we could buy it. They said, "Sure," and we asked, "How much?" And we said, "Fine." As assessors we can take that sale to the state and say, "Hey friends, it was never on the market, it doesn't meet the condition that buyers and sellers had alternatives. We don't know if it was too high or too low. We had a very subjective purchase and, therefore, it doesn't count. And the State knocked it out. And they changed our equalization ratio from about 93 to 99 and it saved the good residents of Maple Bluff about \$45,000 in their Village budget. So it's very critical that you keep that in mind. That classic market value means buyers and sellers have alternatives. That it was exposed on the market long enough for a lot of those alternatives to appear. That gets to be a very fuzzy issue. For example, we finished doing appraisals of a group of buildings for reasons we didn't want to in Arena, Wisconsin. Arena died in about 1920, I think. One of the buildings that was owned by this estate was their original trucking garage and the original blacksmith shop built in about 1890. It sits on their main

street and they resurfaced it with corrugated metal, at one point, so it wouldn't look so shabby. They never did anything with it. They never sold it. The owner simply kept it out of nostalgia because that's where his trucking business started. He ended up a multimillionaire, but his roots were always in Arena. There IS no market in Arena. If you are talking about market value in Arena, you're talking about putting it on the market for maybe three years and maybe getting a thousand dollars for it from the volunteer fire department which is next door. It may take them that long to raise the money. So when we talk about, "you gotta have alternatives and you gotta make some effort to find them by advertising or doing whatever it is to let the public know that the property is available"; this is a very critical fundamental underlying assumption of classic market value, but NOT in Ratcliff. Ratcliff says that majority of properties probably will be sold in a statistically operating marketplace in which buyers and sellers have options, but not necessarily. You really have to analyze what is the context in which the property is being sold because it may be that the next door buyer is your most probable buyer and he's desperate for it and will pay a premium for it. And therefore, when you say most probable price in contemporary appraisal, you mean it is possible to have a monopoly. In fact, the monopoly may go so far as you reach the opportunity costs of not buying the property. The critical battles that Robbins and I are having in Alaska and in several other areas really have to do with that critical distinction. And it has to do with eminent domain, in this particular case. And in this case, you have a power company that's coming along and has to run their lines through your passage, through your land corridor. And they're saying, "Hey, best use for this land is recreational, scrubby hunting grounds and its worth \$50 an acre and what you own is a strip of cottage sites 35 miles long and 120 feet wide." And we're saying, "No, what we own is the only corridor between Anchorage and Fairbanks that you can run a power line on." And, they said, "Well, show us some comparables." And we said, "Fine." In the

continental U.S. there is no right of eminent domain against Indian owned land; Native American lands cannot be condemned. And so we showed them 11 comparables of power lines and then came up to the edge of the reservation and said, "We'd like to go across the land." And, the Indians said, "Fine, how much is it going to cost to go around? You're not bad guys, we'll take 50 percent. If it costs \$2 million to go around, it will cost \$1 million to go over our land, how's that for a deal." At some point the monopoly reaches total monopoly and under most probable price then what you do is you negotiate presumably with a prudent buyer who says, "Gee, anything I can save from going around by going across instead is what I'm going to pay." And there are deals in which they have paid more than 50 percent of the opportunity cost of going around. Now that's the extreme position. Its very hard to find comparables like that, but Indian land gives you a nice clean comparable because there is no right of eminent domain that says, "Hey, I had to pay for public use value and that's not traditional in eminent domain." We're saying, if we analyze what is the top price the most probable buyer would pay and that significantly exceeds the minimum price the seller would accept, the seller is a dummy if he doesn't go for top dollar. That's a different concept. At that point you're saying, "Hey buyer, you didn't have any choice so now you gotta deal with me. And now it's a question of how badly do you want it." The Ratcliffian theory can accept that in appraisal and if you find a context--physical, economic, otherwise--that is most probable price in contemporary theory. They really want to know what is the business situation. Its not a normalized situation. The word fair has nothing to do with it. The question is straight negotiation. What is the supply of alternatives, what is the demand for the alternatives, and how do we arrive at a price in that context? And, therefore, those of you who have been in appraisal and who hear the old farts in the MAI say, "Well, it's just a matter of semantics. Some of us talk market value and some of us talk probable price, but we are really talking about the same thing." Horse manure!! It simply doesn't

follow. Ratcliff wants to talk about the business context and how people negotiate in that context. Now in many cases there obviously are alternatives and there is a cap on what the seller can ask for, and then the buyer is obviously going to flee to other alternatives. But in a few cases there aren't, and unless you explore the options, you are likely to miss them. The Towers Building is a classic case in point (on State Street-Madison). It was a two story retail building with apartments over it dug into the side of the hill and the appraiser appraised it on the income approach of its existing use, missing the fact that the Madison code had changed as to the allowable density on that site and how much cubage could have been put on the site. As a result, the appraiser advised the seller, the seller sold for that price and that price was approximately a third of what the total land value was with the building cleared. You need to explore what the alternatives are. You can't take the status quo as given. Scrub land ain't scrub land, necessarily. The classic one is the one I'm working on in Nevada now with Bob Forman, which is going to be a multiple year project. I don't know many of you have heard of Bullfrog County. Bullfrog County is a really hot controversial item at the moment because the federal government has spent \$2 billion looking for the prime site for highly radioactive materials waste storage. And they have found a huge chunk of tough rock in Nevada, currently owned by the federal government, at the moment partly in the Air Force, partly in the Bureau of Land Management and, partly in the atomic program. And it is the leading candidate for highly active radioactive storage for the spent rods from electric generation and also about 20 percent of the waste will be coming from submarines and defense projects of one form or the other. And in the law, there is a very peculiar quirk that says that which ever property is characterized as suitable and three have been characterized, one in Texas, one in Washington and this one in Nevada. The one in Washington has seismic problems, the one in Texas has water problems. Can you imagine the federal government is arguing that rather than damage the underground water



resources of the Texas one, they are going to freeze all of the water in this particular section for 50 years and drill a shaft right through it so as a result radio activity won't be able to flow through underground. Would you trust the government to keep all that water frozen for 50 years? They haven't been able to do it technically, other than in one hole where, after tremendous expense, they were able to freeze the water. So Nevada is the winning site, but the law says that the state that wins this prize will be able to assess it as though it were a private facility and that the government will pay real estate taxes as a bribe for them to accept. And Nye County, in which all of this land is located said "Hooray!" The only problem is, that in Nevada you can only collect x dollars of taxes by the real estate tax in a given county so in effect Nye County would take all of the benefits and then the property owners of Nye County wouldn't have to pay anything because of the cap on the total dollars they can pay. As a result the state of Nevada wouldn't have a nickel more than they had beforehand; just the residents of Nye County would be able to avoid the tax. So the legislators, in their wisdom, carved out a new county called Bullfrog County which has no residents. And in which the commissions established by the Governor and the Assessor is located in the capital of Nevada and they have some really interesting problems now. If you committed a crime in Bullfrog County there is no court in which the fine can be levied. Anyway, our problem is, what would be the assessed value of land characterized as suitable for highly radioactive activity, if so far it has cost them \$2 billion to find it, and it is going to cost them another billion dollars to finally do all of the tests that are necessary to establish this as the premier site? (Which it is for a variety of reasons) Okay. Is it opportunity cost, how long would it take to search for another one? \$3 million on three sites that would suggest that each site was worth at least \$1 million--right?--without making adjustments for the pros and cons or costs of operations or whatever. Most probable price can handle it. Market value can't even deal with the problem. So the first

thing that you need to understand is that most probable price in Ratcliff has very distinct characteristics which are not true of market value which is often called probable price throughout real estate text books and lexicons today. The second major problem between contemporary and traditional appraisal is that the definition of value may change in contemporary theory depending on the problem. If we're doing eminent domain then whatever the definition of value is in that jurisdiction is appropriate. If we are doing a real estate tax appraisal, then it is the definition of market value in that real estate jurisdiction? You have to clearly understand the question before you can use the definition of value. And, secondly, you must thoroughly understand the question so that you can define the interests to be appraised. How many sticks in the bundle of rights is the critical problem for the appraiser, particularly the contemporary appraiser. Most appraisals that you see immediately assume fee simple title, whatever that means, subject to ordinances, regulations, and whatever. That may not be what you are appraising at all. If we're talking about tax assessment valuation, we are talking about only those interests which are real estate interests or those interests which contribute to the productivity of the property which fall in the category of land, buildings and site improvements. So if you're going to appraise the Concourse Hotel you have to find a way of abstracting out of the income stream of that hotel the contribution of the linens and the furnishings, and the beds and the other equipment. What's the contribution of working capital, what's the contribution of the investments they've had in pre-marketing conventions for three to five years in the future? What's the contribution of management to that restaurant operation which may be highly successful with generating a great deal of cash flow? How do we pull out of that going concern which happens to be housed in a big piece of land and building, but which is highly sensitive to management and highly sensitive to a variety of personal property items tangible and intangible. So the real estate tax doesn't fall on the whole going concern

value. The real estate tax falls only on the land and the buildings. And the appraiser must find out how to abstract those components out. This is a very difficult problem. Hotels are obvious, shopping centers are not quite so obvious. Consider a shopping center. We'll look at this in more detail later. Let's look for a moment at a department store that owns all the land called West Towne and invited Dick Jacobs to come in and develop it with him. And the first thing that they did, was they sold half of the land to Penney's and then they worked out an operating agreement which got very detailed about how the various department stores were going to participate in the management and contribute to the joint marketing efforts and the merchant's associations. And they were all going to abide by the same hours and that the 4,000 units of parking which was set up with cross easements so every shop owner would have the benefit of all the parking in the parking lot--- on and on and on. And they would guarantee that they would remain in operation under the name of Sears and Penney's and so forth, for at least 30 years. And now that operating agreement has created a very unique business climate and Dick Jacobs has sold about five acres between the department store pad. And he goes out and now gets premium rent at \$15 to \$20 a square foot because of that particular operating agreement which creates certainty for the other merchants that they are going to be strategically located between the right people, have parking and know that there is going to be a very synergistic intensive marketing program carried on for 30 years and so forth. Now if they went across the street they could have the same space for \$9 a square foot. It's the difference between what the brick and mortar space costs were to build the free standing across the street and the \$15 that Dick Jacobs says was the base price on his. That \$6 is where? Does the fee simple title include all those guarantees and warranties with the majors? They are in the operating agreement aren't they? And the operating agreement is intangible property. What is the nature of that rent, how much of that rent is real estate rent and how much of it is a premium paid to participate in a joint marketing

venture called franchise. In effect, the owners of the land, the department stores, franchised Dick Jacobs to build a shopping and retail center between their major department stores. And he has subfranchised all of the tenants into what is a joint synergistic marketing effort in which the hope is that the right choice of tenants and merchandise and marketing techniques and so forth will allow each of them to do better than they would have done had they rented cheaper space across the street. It is getting to be really tough in real estate to define what is the real estate interest. But turn it around the other way--what if I was lending on the hotel, and I want to know what my collateral value is. Then the real collateral value is that I can get my hands on that hotel as a going concern, isn't it? I don't want just the mortgage on the land and the buildings. I need to know that I have a first chattel on all of the furnishings. That I have a lien on the various working capital and other arrangements that are available. That I have, for example, an assignment of the liquor license and the business license. And that Holiday Inn will continue their franchise if I take it over. And then as an appraiser what am I really doing? I'm appraising a whole set of interests, I'm appraising fee simple title, true, but I'm also appraising the value of the title and the furnishings, I'm also appraising the value of the assignment of the leases and the assignment of the franchises that may come as part of the hotel with the liquor licenses and so on. The bundle of rights is quite different than the bundle of rights that was characterized as real estate. Unless you understand the question, you're not going to define value right and you're not going to define the rights that are included in the appraisal correctly. And eight out of ten appraisers today still don't understand that. They appraise a hotel as if all of the interest in the hotel is a going concern with fee simple title. And I don't think King John ever conceived of any other franchises or liquor licenses and so forth when he came up with the idea of fee simple title. No where in the Magna Carter can you find it. We have in this country greatly confused real estate

with a lot of other property interests; personal tangible, personal intangible, and value created by management. Now until recently it was very convenient to do that. If I was going in for a loan I sure want to bamboozle a lender as to what the value of the collateral was so I could get a higher loan. Indeed, if I came in and asked him for a loan on furniture, he has one rate, and if I asked him for a loan to provide working capital for my saloon and restaurant, he'd have another rate, and if I asked him for capital for start up expenses and so forth, he'd have a third rate all of which would be considerably higher than the mortgage rate. So I'm much better off to let him think that real estate is securing his loan and I'm entitled to a low mortgage rate, right? So there was another reason until recently to do that, too. If you sell a franchise you're never entitled to capital gains. Sale of a franchise always produces ordinary income to the degree that you have a profit. So when I'm going to sell my shopping center, the last thing I want to do is hint to the IRS that I had sold my franchise. So I can't argue that I have a franchise with the real estate tax guy and then argue with the IRS that I don't. So as far as they were concerned, let sleeping dogs lie. So now, the majority of shopping centers are owned by pension funds who could care less about the IRS, but who care a great deal about cash flow. And they're looking at the real estate taxes and saying, "Wow, what do we do now?" Well, what we do now is we go back and we tell the assessor, "Gee guys, you've got the wrong real estate interest here. The \$500,000 in net income over here--that is from selling retail electricity--that's a franchise that we get from the power company--it has nothing to do with the real estate. It's another little business on the side, so we'll take \$5 million of value out of that on the cap rate system." And now over here in my hotel, my restaurant is doing better than average, but that's because of management. That's because of the chef. That's not because of the real estate. The real estate tax isn't suppose to be an income tax. It is suppose to be a tax on the real estate. And I can rent restaurant space completely equipped and outfitted and manage it for

\$12.50 a square foot. No thank you, the income that we will cap from the restaurant area is an area occupied by the bar and the kitchen and so forth at \$12.50 net--not two times Y. Very difficult concept to put across. Before, people had not traditionally tried to dissect carefully land, labor, capital and management. Yet the contemporary appraiser is very much concerned with that, finding methods to do that. Not only is the definition of value different, the sensitivity by which we define the interest to be appraised is different. The current standards of the American Institute as well as R41C which we'll talk about more later--the standards of the Federal Home Loan Bank,-- have realized that lenders now are bamboozled by the confusion of personal and property interests. And therefore, fair market value today must be the cash equivalent value of the real estate, that is the first value that you must report. Then, if there are additional interests that are part of the transaction, let's say the seller is passing along favorable financing, or the seller is giving furnishings, or the seller is providing comptroller services for a year or whatever. Each of those incremental elements of value must be reported individually and then added to the total value for the real estate plus those interests. That is the way it must be reported. Now today, there are properties that are being sold subject to mortgages which are at very adverse interest rates, but the prepayment clause is closed and they can't sell it. A piece of property on the West Side, the market value if it could have sold for cash was about \$1.2 million, but the discount that had to be applied because the mortgage on it was closed at 13.5% was \$150,000 and it sold for \$1,050,000, the appraiser would also have to report that. Market value is \$1.2 million, but it comes subject to the following adverse financing. The present value of the disadvantage is \$150,000 and therefore, the encumbered fee is worth 1 million 50 thousand dollars. Now sometimes it's important that you report that you are selling the property as encumbered and sometimes you can't. One hot debate in Wisconsin at the moment is in the real estate tax area. Say the assessors, "The

real estate tax falls on all the interests, both that of the landlord and that of the tenant. If the market rent should be \$9 and the contract rent is 6 bucks, fine, we'll appraise it as though everything were leased at 9 bucks, and we don't care how the tenant and the landlord work out how they are going to pay their taxes. But the full productivity of the real estate is measured by the current market rent, not the contract rent. And therefore, the assessment falls on the whole thing. Notice fee simple is relative to the assessor, but it's certainly not what the investor would pay for the property if there's 15 years to run on the K-mart lease and its well below the market rent for that type of space. Now for the first time we have a Supreme Court case in Wisconsin that says that the long term encumbrance on the fee must be recognized by the assessor. The fact that the contract rents go on well beyond 10 years means that the property would be sold at a discount. Obviously, the assessors are disputing that and are currently ignoring it from the way they go about appraising your property. But it's going to be a major issue. Market value presumably is assuming the property is at market rents. If it is less than that market rent, then the tenant has the advantage and you really have to say that the market value of the property is \$1 million dollars of which the tenant has a \$200,000 leasehold interest because of the advantage that he continues to enjoy under his contract. And the encumbered fee is a \$800,000 value. Now in fair market value you must record it that way; you have to allocate it between the interests. Under Ratcliff you wouldn't. Under Ratcliff you would have to look at what is the most probable price at which I can sell that encumbered fee. For example, and this goes back again to this emphasis on what would be the business plan of the buyer. What would be the business plan of the seller? How do we factor that into the price. In this case, a couple of kids had inherited the Sears Roebuck warehouse out there on Fordem Ave. from their father who had to be one of the least imaginative real estate guys around. He had leased it back to Sears Roebuck some 20 years ago or more on a fixed rent basis with he being

responsible for the insurance and the real estate taxes and structural exterior repairs. He then went into a variable rate mortgage at some point in refinancing his affairs, and, then, finally he took the only way out which was dying and leaving it to his kids. And it was appraised for the estate at about \$1 million with the leasehold interest being \$900,000 and the fee interest being \$100,000. And Sears by that time wasn't even interested in the property, they were leasing it out and making a profit on it well in excess of the rents they were paying for it. And there was no net income. The variable rate was about to go up, and this roof which was 20 or 25 years old was about to be replaced and there was no cash flow with which to replace it. Disaster time, right? So we called up Sears and we said, "Hey guys, that's penny ante for you guys; you really don't want to have a corporate real estate officer tied down futtzing around with a warehouse you really don't need. Or on the other hand you're going to have to stand there until the year 2018 to realize the full advantage of your leasehold. Tell you what we're going to do--\$900,000 is the leasehold value -- we'll split it with you. You give us a \$100,000 for our equity, \$450,000 for 50% of the opportunity of selling it for a million and it's yours. And that's what we did. We sold it for \$550,000 cash without repairing the roof and they in turn flipped it and picked up the rest. Perfectly sound good deal. Notice the most probable price was \$550,000; the traditional market value of the (fee) interest was \$100,000. The problem of allocation doesn't recognize the business opportunities that each party may have; the opportunity values and the opportunity costs. I have another one that is really intriguing that we've been working on all summer long. Still don't know what the outcome is going to be-- but we're disposing of oddball properties for Prudential and this is a piece of ground on Mitchell street in Milwaukee underneath a Woolworth store. A deal was struck in 1921 for a 99 year lease, for \$13,500 triple net. Woolworth's is still in the store, the store is swinging along, still making money. Mitchell Street has come and gone and this is one little area that they kind of spruce up



with a pseudo pedestrian mall and so forth, but eh! And Prudential has been trying to sell it to Woolworth for about 5 years. And Woolworth says, "Who needs it? We can always just sell the store on the leased ground and let somebody else pick up the lease." And we're saying, "Gee, I wonder what the edge is? Along comes a friend of mine, Don Spencer, who represents the Padelford Family out in Seattle and the same family owns the land under Frederick's Department Store which is under the same lease, same type of lease, traditional ground lease at that time which had what is called a gold clause in it. Which in the 1920's was a way of indexing against the possibility that the dollar would be devalued. And it states, in effect, that the landlord at any time can request payment in gold with the equivalent of 25 and 5/8th grains per dollar. In the 1930s, sometime, when we went off the gold standard, the courts ruled impossibility of performance, and later on Congress cleaned it up and said that the gold clause was no longer enforceable. So when inflation became apparent and it became desirable to have various ways of indexing against the devaluation of the dollar, in 1966, they reinstated the gold clause that you could have it as long as both parties reaffirmed it. So far so good?

Frederick's Department store eventually sold their store to Batus, a British American Tobacco Company or similar name or U.S., I guess, and in the process of cleaning things up Batus assumed the ground lease under Frederick's. And the courts ruled that where a new party was liable and the old party was no longer liable that was a novation. And the novation, in fact, had reconfirmed the gold clause. And, thank you, the rent under the Frederick store was no longer \$67,000, it was \$780,000, in equivalent dollars relative to 25 and 5/8s grains of fine gold. Batus sued and lost. That means that Woolworth cannot assign their lease and get off liability for the ground lease without, in fact, reconfirming the gold clause. They no longer can sell the store building and escape liability until the year 2020, unless they also own the land. Now look what you do, what can sell \$13,500 for to Woolworth's who is the only person in

the world who really needs it. Fair market value can't handle that one; most probable price can. Obviously, for the appraiser the critical issue is one, how do we get them to move on such a small transaction when they don't even move on the big ones. And, two, what kind of premium over their cost of capital do we have to give them? If their cost of capital was 10% you would argue, gee, 13.5 ought to be worth \$135,000 that obviously isn't enough of an advantage to them at this point. If you give them 20% on their money, which in this case is a good deal. And at what point does the seller say, "Wait a minute, I would just as soon keep the \$13,500 and do the bookkeeping." So most probable price has defined some common ground, but there is probably a fairly wide standard error as to which of the two behemoths are going to give up first. Prudential vs. Woolworth is kind of a Mexican stand off; neither one could care less about \$13,500 on Mitchell Street in Milwaukee. Okay, we need to understand the definition of value and how it relates to the issue; we need to understand the definition of interests and how it relates to the issue. The purpose for which the appraisal is sought as a benchmark is, therefore, very important in contemporary appraisal. In traditional appraisal, they have a throw away line at the beginning of the report which says, "The purpose of this appraisal is determine fair market value on such and such a property as of such and such a date." That doesn't help very much. The textbooks say there's a difference between function of the appraisal and the purpose of the appraisal. You almost never read in an appraisal report by a traditional appraiser what the function was supposed to be. The premise is fair market value means all things; little johnny one note. And you see it with your clientele all the time. "Gee, now that I have fair market value for my loan, I guess that does that for my tax assessment, or I can use that for my estate or sell it to my partner"--they are all too different questions. They all have different answers legitimately. But so many times, the consumer perceives absolutely no difference between the appraisal done for one purpose, and an appraisal done for another. By the same

token the appraiser isn't very bright. If he turns out a generic product which serves all purposes he isn't going to collect very many fees that way. Once he's appraised the property he can quote a pretty good fee on appraising it next time around for a different purpose. So contemporary appraisal starts out with the purpose to which this appraisal is sought as a bench mark is, and then you can say a real estate tax appeal in Dane County, or to evaluate the collateral value of such and such a set of securities to estimate the most probable price at which it should be sold or the maximum price at which you should buy. Those are all different questions and will produce different answers. Just to give you a list of for instances: 1) to validate the purchase price. Most pension funds make a conditional offer stating that they will close if an independent appraisal arrives at a price equal to or greater than the agreed-on purchase price. If it doesn't, at that point, they have the option of exiting from the deal or waiving the requirement. That makes a very significant option out of it. 2) to validate the in-house valuation adjustments periodically. For example, medical partnerships typically own their medical clinic building separate from the medical business. And the major doctors in the clinic each owns an indivisible interest in the property. It has been their practice in the past simply to say, "Gee, inflation went up 5 percent this year", so they take the original cost, mark it up 5 percent. One of the partners dies or leaves, they give him his prorata share of that marked up value. A good many of them haven't checked recently as to what happened to their property values and now suddenly find they have committed to pay deceased or departing members of the clinic prorata shares that are significantly higher than the real market value. So suddenly they said, "Gee, maybe we better have an annual appraisal of the property as the basis for adjustments, as between partners in terms of what their coming-in price is if they are joining the partnership, exiting--if they are leaving and so on." On the other hand we may need to know the liquidating value of a particular property. Liquidating value is a term of art that means

it will not be on the market for a reasonable amount of time. That is, if we were to dump it in 30 days, what would we get for it. Notice liquidating value is different from market value. You need to know that in a bankruptcy case, for example. Is the property adequate to cover all the claims against it, the bankrupt, or are we better off to allow the business to continue operation, because that gives the creditors a better opportunity to collect their money. We may need to have an independent inspection of the property, a review of the property for management effectiveness. We really don't need an appraisal in terms of the value, per se, but we need to know whether it is on course relative to our original proforma and whether it will achieve a certain value in the future, that was promised to the pension fund investors or whatever. We may want to look at a measure of the spread between the full market value and the encumbered fees. We might want to buy out all those interests. We can say, "All right, the property presently encumbered by K-mart is X dollars. If K-mart would only go away our property would triple in price." We had a case like that, in Palm Beach a number of years ago with Bob Calloway, and the owner of a K-mart property had despaired because K-mart had really pounded him into the ground on a very unfortunate lease and he had decided enough of that, it wasn't going to appreciate in his lifetime and he might as well dump it, take his losses like in the stock market and find something else that had more upside and there was certainly an active market in Palm Beach. We looked at it and we said, "Hey, this property has already tripled in value, the problem is that he doesn't get the benefit because of the contract rent. But there are two other K-mart stores fighting each other for the same market. This K-mart has never paid percentage rent, never reached the floor. And that seems to be unusual for something that has been sitting there for at least 10 years, given retail inflation, and chances are good they don't want to be there either. So Calloway went to K-mart and suggested that they could solve their retailing problems if they just paid the client (owner) \$100,000 to break the lease and go away. K-

mart paid \$100,000 to break the lease to go away and immediately upon executing the agreement, the property tripled in value. Quite often the appraiser is called in to measure the impact of an alternative course of action on the property. A good example of that I'm sure you'll hear when John Robert White is in town in December. John Robert White was the architect of the Pan American building sale in New York City, among others. And key to that was saying the property was worth x dollars with Pan American in there as a tenant at their original rent. If we could just get Pan American who is the seller to agree to bring it up to market rent, the property would be worth twice as much. If it was worth \$100 a square foot, it would be worth \$200 a square foot. And so the seller, in this case, tore up its lease and rewrote it. And as a result, increased the value of the building tremendously at a time when Pan American needed capital badly and, of course, the rent simply became a tax deduction in the future so that Uncle Sam was taken for most of the write up on the value, anyway. You may need to know the insurance value; insurance value is quite a different number than both market value, cost to replace or anything else. You have to read the policy to find out what insurance value is. Typically the exclusionary, nonburnable items, such as the plans for the building, sewer and water utilities that are in the ground and things that would survive a fire or a wind storm or whatever. And they may have a very stylized definition of the insurable value of a particular building. You may have the problem of resolving a partnership allocation, two partners in a spitting-match and they want out-- what is the interest of each partner including the fact that one might be a minority interest and subject to a minority discount? How much of a discount? Each of these kinds of different sorts of problems that we begin to define -- what is the purpose for which the appraisal is sought? -- really starts to define the rules of the game. And allow us, in some cases, to modify the definition of the property. For example, the North Estate out here on Lake Mendota; the property was subdivided into five lots, two of which were on the

lake and three of which were not. The heirs agreed to sell it to the City if it could be treated as a single parcel, and, therefore, sizable enough to enjoy a PUD status, and therefore multiple family usage rather than individual lot status. Since that was the purpose for which the appraiser was hired was to, in effect, provide the definitive non-arbitrative value of that property -- the game rules -- the purpose that began to define the fictional set of conditions under which the appraiser could operate. Once we have the definition of the benchmark, the definition of the value, and the definition of which rights and assets are to be valued, the next thing we need to know, is what is the perspective of the appraisal. Perspective, in part, reflects the nature of the interest, and, in part, reflects the nature of the purpose. One perspective would be going concern value. Assuming we can buy the whole hotel, lock stock and barrel, what's the value? Most hotels sell as going-concerns. As a result, if you're going to do tax assessment valuation on a hotel, you're in a tough spot because the assessor always quoting you going-concern prices on market comparables and you're always having to talk about stripped building and land value and the appeal board doesn't see the difference. Or we may need to know liquidating value. Third, we may need to know the value of a partial interest. Look at it from their perspective, as a minority interest, quite often. For example, a couple of years ago we appraised a situation in Chicago in which the real estate broker brought to the attention of one of the major life insurance companies a very good deal which was immediately adjacent to the life insurance company headquarters building. They decided to go forward on the joint venture in which there was several scenarios that could go forward, either they would own it for three years as a joint venture and the life insurance company could buy them out or they would tear the building down and build a new skyscraper on the site. Or they might, in fact, clear the site and merge it with adjacent land of the Chicago Canal Dock Company ? Under each of those scenarios the broker-developer who had brought them the deal had different

levels of participation. Mysteriously, the building was removed from the market just as they were about to make a deal--in fact, the check had already been cut for the down payment and it came back on the market three weeks later and the insurance company bought it for \$1 million more all by themselves leaving the broker and their perspective joint venture partner on the side. This caused the brokers to take umbrage and sue on the grounds that there had been shannigans which had deliberately cut them out and the insurance company had given the building owner a little premium for having helped them cut the broker out of the deal. And, in due course, discovery revealed that is exactly what had happened and that files showed that the insurance company executives had weighed the pros and cons and decided to take a chance. What was the value of the partnership agreement? There is definitely a minority interest, all they were doing was leaving behind their commissions, which gave them approximately 15% of the deal, but it also gave them the property management, it also gave them the leasing and it also gave them the right to do all of the tenant outfitting, etc. And if they had built the building by clearing the old building down and rebuilt, the developer/broker would have been the developer of record and would have been able to subcontract the interior appointments and the leasing commissions and so forth. Therefore, the interest in the real estate which gave them access to business opportunity beyond the real estate became the total value of the partial interest. The damages incurred, lead from their deal as the joint venture partner, were well beyond the interest of the real estate per se. They had interest in the cash flow generated by the real estate including the outlays for various kinds of improvements and tenants' enhancements, and so on. And, in this case our client had very detailed cost records of how much they made per lineal foot of wall, how much they made per square foot of tenant space including tenant improvements and what they made per square foot of lease and so forth and so on. That all became part of the partial interest. Related to perspective is the date of sale. Every appraisal must have a date of sale, a

date of valuation, excuse me. About two weeks ago I had somebody hand one in, finally from last fall, beautifully done on an Apple Laser Printer, with one small flaw--no where in the letter of transmittal, certification of value, or in the conclusion is there a date on the value. Oops. Very expensive omission. And finally, what is the presumed period of market exposure? That's a real tough question. After all, if you say the value on December 12th is such and such a number (time out to turn tape--didn't pick up lecture for few moments) before that time might be considered data points appropriate for market comparison. After all, on the 13th a whole new world might appear. Iran might blow up Iraq, or Iraq might blow up Tehran and we have a whole new ball game. A new concept, a new perception by investors as to the future. So we need to know what is that appropriate period of time. How far back can we go? Can we go back a year, two years, three years? For some cases in Madison, in the downtown, we were able to go back 5 years. Nothing has happened to change the market context in that period of time. On the other hand, if you have a fracture in the tax law, can you even use other comparables? In a securities case that we were involved in, they were using comparables that were four years old in July of 1981, in which all investors knew that the depreciation was going to 15 years and they were using cap rates from four years earlier. Have to say, "Wait a minute guys, hold everything, there is a significant fracture in the economic context which says that beyond that point, nothing is relevant anymore." We are doing a "white paper" for the Cook County assessor presently. Our sales to syndicators in 1985 and '86--in the loop--legitimate transactions for the basis of assessment when what they did was essentially buy bank buildings from bankers and sell them back at particular prices on long term step-leases so that the bank shareholders don't know that they have been gouged for another ten or fifteen years and in the meantime the bank has significant increases in their surplus with which, hopefully, they will be able to make considerable money on their loan portfolio. Because of the change in the tax



law, it means that tax deals of 1986 are no longer legitimate comparables in terms of perspective. Is that a fixed sufficient economic factor to eliminate comparability? Now that time period factor is also affected by a distance factor. Traditionally in appraisal you always like the comparable to be right next door so that they enjoy the same neighborhood and the same access and so on. What if your most probable buyer doesn't care, but if he's certainly willing to invest regionally in a 100,000 square foot office building that are always bought locally. They may very well be bought by asset managers from Chicago or Minneapolis or wherever. Therefore, from the standpoint of perspectives for that type of property, what is the marketplace? Is it local, regional, or even national? Tough call. All of these come under elements of perspective. Next we have definition of method. Here we really separate the traditional from the contemporary. The traditional says there are three approaches to value--market comparison, income and cost. And it says further that you must use all three approaches in each appraisal and then review the results and decide on which one are you going to rely on and so forth. Only under exceptional circumstances are you allowed to state that the cost approach is irrelevant, such as when you are doing vacant land. Most often, you don't build land, but in New York you might. Or the income approach isn't relevant because it is a single family home, but ironically when Babcock went to FHA (Babcock is a professor of appraisal at Michigan who wrote a definitive book that said the only way to value property was to capitalize its productivity), and he wanted to be consistent so he said that was true for houses also. Therefore, what you needed to do was to capitalized the monthly rent. And he developed something called the monthly rental multiplier which presumably measured the income value of the house. And he introduced that to FHA and you had to do a monthly rental multiplier on houses that have an income value as part of your valuation of a single family owner-occupied home. That has remained in the federal forms to this day, as gospel. Take the gross rent and

multiple by some multiplier like 120 and then come up with the value of the house, because you must use all three approaches. Ratcliff says that's silly. That obviously the preferred way of predicting what something will sell for in the future is by inference from what those have sold for in the past. The market comparison method is always the preferred method even though it may not always be available. Failing that, as we talked about the other day, you want to simulate the buyer's approach, and that will certainly put a cap on it. And if the buyer's approach isn't known, then you fall back to the normative method or the method that would say, "What would they do if they were as smart as me, the appraiser." And now when we take a look within that and say fine, "Let's use the market comparison approach, what constitutes the market comparison approach? How do we measure differences among properties that are otherwise similar? Gene Dillmore has put it very well, we select our properties subjectively because they have some commonalities and then we try to adjust them objectively to smooth out the differences in value due to their differences. Comparability begins with sameness, however we wish to define sameness. Sameness may be simply that its a irrigated field in Arena and with Class 3 soils. But now among the categories or subsets of those, there are obviously some differences. Some may have irrigation pipes, some may not, some may have road access, some may not, etc. so having created a category for sameness that represents comparability, what are legitimate tools for factoring out the differences in price caused by uniqueness of each of those properties that nevertheless have a strong element of sameness. What constitutes an objective adjustment? Next, what constitutes an income approach to value? We're going to wallow around in that one for a while. Appraisers don't even have, presently, an accounting system which defines net income, which presumably is the fundamental base for the income approach. And, finally, if we're going to use the cost approach, which definitions under the cost approach are we going to use? Cost to replace, cost to reproduce,--is the object to create a

photographic replication of the building or simply a functional element of the building? In looking at a barn, is it to do a hand hued beam job and a field stone base and so forth. That would be a fairly extensive project today. So if the alternative is to simply call up Wick and get a pole building, on telephone pole frames that will store just as much hay and store just as much equipment and probably do it better. The cost to replace and the cost to reproduce. When we talk about the cost to replace, we're creating a certain functionality, a certain utility. Then we have to say, "Gee, a new building would probably be better than the old building,--how do we adjust for the differences now because of having the steel building on poles vs. an old barn building with all of its romance and dysfunctional characteristics." Okay, those elements become subjects again for delineating between contemporary and traditional (appraisal) and we'll pick up again on those. You'll need to go to the State District Highway Office for Dane County to get the traffic counts on University Avenue and Gammon, Park, Odana, Mineral Point and the Beltline which swings to the west of Middleton particularly the two Middleton entry points onto the Beltline on the west side to get some sense of how the traffic flows go. Who would like to do that? The State Office is at the airport on the east side near the Air Force Reserve. I see a hand way in the back there as well as the lady here--I can't see whose hand it is, all I see is a hand. Scott Sheldon and Cindy Holtz. Coordinate on that and see what kinds of traffic information. We should have some fairly current traffic counts out because they are currently extending the Beltline past Mineral Point going north to University Avenue areas and they should have some fairly current information on that. Second of all, I need two people to go down to Madison Planning Department which has some data on the annual rate of growth in retail and commercial space on the Madison west side market, which has been something of a--there's a gentleman way in the back, again I can see the hand, Tony Zanze. And

who wants to go down with Tony--Craig Lieberman--you go down with Tony. OK-- Evan, the only thing that I have done in your absence was remind them that Ginnie Mittnacht begins tomorrow afternoon at 3:45 in the room directly up above here in 220. I will bring you copies of the CACI census data and retail market information for all three of the comparable sales that we have to date; if we find anymore, wonderful. The next thing I need is a couple of teams to get some market rental data and the first one that we need two people to talk with Ron Gross, a developer in Middleton. He is developing a combination condominium office buildings in what was essentially the old downtown area. He also redid one of the comps, the old Eagle grocery store and the center, which is about a mile east of the current center on University Avenue. And Ron has worked with a number of our students before, try to get some examples of current rents along the University Avenue and Middleton, downtown Middleton area. Diane, do you want to take that? and Dave, you want to work with Diane? Okay. The second one is with John Flad, Lisa you want to do that? And Scott are you nodding you head? Okay. Lisa and Scott. John Flad has the shopping centers that are on Highway Q cutting across to Highway M the west end of the lake. He is also, of course, doing the (old) brickyard (property) currently (University Station). He's has done Walnut Grove and so forth. Those would probably not be good comps both in terms of the location and in terms of the upper end of the market. However, his project on Q would be direct competition for this center and I'm sure he'd have something to say about location and density of multi-family housing and accessibility and all that good stuff. You might talk to John. John also is the one who sold the shopping center which is your comp on Fish Hatchery Road and we have the terms of sale on that, so there's no sense in taking his time on that and it was sold at a defined cap rate based on the 1986 pro forma, so we have a clear meeting of the minds as to what people thought they were buying and what the cap rate is and so forth and it almost never happens. But it would be useful for him to give you at least some sense of what

market rents are in the Middleton area, so primarily confine your discussion to his Highway Q project and replacement rents. And finally I need two people to talk to George Gialamas, who is the big developer on the West Side who did the Highpoint Center near Highpoint Road, that long meandering thing, and he'll have some idea of what the rents were along Odana Road and where those tenants are coming from which obviously is a serious drain on the Middleton market. Who will talk to George? Okay, Wendy and the two ladies in the front will double team that one. Finally, we need somebody to, I'm not sure who the property managers are, but you have a series of strip stores right across from Minnick's and those that have been recently re-rented and there's one there which is just sort of dying on the vine, but two of you back there,--who was that? Okay, can you two ladies take on the investigation to find out who the property managers are and what they perceive the rent structures to be along there. They are not uncomparable to the subject property in terms of being sort of by-pass retail strip stores of somewhat elderly vintage. Again we need some market rents to attach the space. Be sure that in looking at the market rents that you define, in every case, the size of the unit that they're typically talking about. I think that you'll find in most cases they are talking about spaces from 800 to 1,500 sq. ft. and we have a building in which our two major vacancies are significantly larger spaces and are probably too deep for the current market, so be sure you understand what the progression is as spaces get bigger, how does the net net per square foot rent go down? In addition, what kinds of steps or escalators do they have in the lease--are they going three year leases that are flat, which simply pass through the taxes and prorate the expenses on the parking lot or do they have automatic bumps in which every year the base rent goes up three percent and there's a full pass-through prorata to the tenant and so forth. And be sure you understand whether the insurance is included in the common area expense or not. Get a very clear definition of what's in common area expenses and what's prorated to the available tenants, what is escalated

through and are there any special caps that the better quality tenants are able to obtain. Very, very difficult to talk about market comps without being very specific in terms of how that base rent is allocated with respect to common areas, escalators and pass-throughs and to what degree favorites (strong tenants) are capped on how much they have to pay on the real estate. If you can ask George Gialamas and, in particular, John Flad, what are the most marketable sizes, common terms on the lease and so on. Okay, that concludes our group search. A couple of caveats, you're all welcome to find data, however, if any report has data which nobody else has access to, I'll flunk you. The idea is not how competitive you can be, but how analytical you can be, given all of the available information. I'll clue you in right now, if I see that kind of piggishness or hoarding of information, or one of you comes through with a brilliant piece of discovery which got shared with nobody, it will cost you. Now that should either motivate you to share which hopefully you will, or it might motivate you to do nothing, you can sit on your hands and wait until somebody hands it all to you, but in any event. The other element on the report is that we expect and we certainly encourage students to work together and discuss and debate and so forth, however, each of you will write your own report. And I've gotten very good at discovering how to change format and fonts on micro word processors and identifying pages which have been expropriated from other's reports and then changed the format and presentation. I encourage you not to do that because that only peaks my curiosity. Therefore, we certainly want you to discuss it in the open and make it an efficient market and that all the knowledgeable buyers and sellers get to know all the information that is available to be known by all, but one of the exercises and 50% of your first grade is based on your ability to write and present and communicate in a logical fashion, leading the reader to the same conclusion that hopefully you have reached. Therefore, this is not a joint project when it comes to the prose. One of the reasons I moved away from the Square and into virgin territory is so

that all former boiler plate is now dead and you're on your own. I was reading too many of my old appraisals in the stuff that was coming through. Okay, onto the content, rather than the administration. First of all I'd like to go over why we have initiated the courses with a problem solving book. As Dillmore points out so well, while our initial decisions in defining the research problem in appraisal is subjective, once we have the basic information, we want mechanisms that allow us to handle it in the most objective way possible. Hayes makes a very good discussion of the kinds of models that are available. One, for decisions under conditions of certainty, two, for decisions under risk, which is where the probabilities are measurable or at least subjectively attached. Three, decisions under uncertainty where there is no measurable probability. And finally, decisions under conflict or competition in which one move engenders a countermove which causes a third iteration in terms of the ultimate result. And appraisal essentially is going to treat its world as a world of certainty. Not in the sense that you know all there is to know and so forth, but typically it does not look at the negotiations throughout the offer, counter-offer and so forth under conflict. And it does deal with problems of uncertainty, certainly if you were currently trying to appraise the Concourse Hotel--What do you pay? If they build a convention center on the south side, you know, they've got one problem. If they build it on the civic center side it's a different problem. If they don't build it at all, it is probably the best of all possible worlds, etc. So the appraiser is working obviously in a somewhat unstable economic context, but basically, starting with your data dealing with comparables, starting with your data dealing with income projections and so forth, you're tending to take certain things as given and perhaps hypothesizing worst case, best case, and most probable case. In that case, then we're really working in the theory of sets rather than statistics. We never have, with the possible exception of residential, we never have enough transactions in which we can make a statistical statement and we don't have to.

We're working in set theory. We're really saying, Gee, in this case, initially we have three comparable sales that are set and hopefully we'll have four or five in a couple of weeks. And as far as the comparable sales, go that's the universe. We're no longer dealing in statistics, we're dealing in parameters. And we're looking at the pattern and so we're really working under that kind of model. And in that case, then Hayes is optimizing models and satisficing models work very well. After all, when you say dominance is one of your decision rules for models what are you saying? I will take all fireproof buildings. Built out of fire resistant concrete and so forth, bang you've set class one (A). Now you say, "Okay, then take out only the two stories buildings that have a freight elevator." We really have a lexicographic system now working for you that says if you fall into group A, within group A, I want subgroup B, that's two stories high. And within subgroup B, I'm going to subgroup C which now has the two stories and freight elevator. You are really using a lexicographic decision method to say that in each of the comps we see criteria in this order and we now have a decision model that says this is the subset which I am going to use for my comparables. We can define sameness with these kinds of rules. Where we go one attribute at a time, we prioritize them if we want or we can make it a requirement they have all three of those attributes--the absence of any one of them drops it from the set. So far so good? Sameness works with that kind of modeling. But our second problem is adjusting for differences, that was in that subset of sameness, we will have very distinct property differences, or we will have very distinctly different buyer motivation for the property. So we need some kind of method on which we can adjust and eventually abstract out the differences of the value differences that are attached to these attributes, which are not the same, in all cases. If we could make the properties absolutely homogenous in terms of their sameness, then presumably there is no difference in their price per unit. Right? There shouldn't be (a price difference) in an efficient market any way. So the object of any form of



adjustments that we make for differences is to cause the prices to converge towards the same unit price comparison. Whether we use the old appraiser's squint over the thumb that this one is 5% better than that one, really we're saying this one sold for more because it had two bathrooms instead of one. Therefore, I will adjust it downward for \$3,000 because it was sold for that much less without the other bath. Right? You're starting to converge the prices toward some common denominator. But you're looking for your system that will do that one, that is somewhat objectively so there are rules for the adjustments and second of all, one that recognizes that there's probably only four or five major variables that one can deal with objectively before you finally get into such fussy pieces of business that it's pretty much in the mind of the appraiser rather than in the buyer. Consider, for example, we're talking about a single family home, where you use square foot of living area enclosed and heated as our unit of comparison. We can probably explain 70% of the differences between house A and B simply based on the amount of living space enclosed and heated that each one has, we come up with a price per square foot for each of those as defined per square foot. Everything we're doing after that is trying to explain the residual errors. We're really trying to say, what explains the other 30% of the difference. We will probably find four or five components that likely caused those prices per square foot to converge rather closely. How closely we can determine in a variety of ways, simply by taking the mean price of the adjusted prices and we may find that out of six sales one of them is three standard errors out and so we have to say to ourselves, "Hey, maybe that isn't a very good comparable; something is going on there that we don't know about," so we either have to find out about it, or we redefine our sets so it drops out. Its perfectly legitimate. Most people feel that in real estate dropping a property out of our set is somehow cheating. As you were trained in statistics, if you don't like the average you can pull one out, sort of thing. We're not dealing in statistics, we're dealing in sets. And if

there's one property that doesn't have enough sameness to fall within a couple of standard errors of all the others, chances are it doesn't have enough sameness to belong in the set. So it's perfectly legitimate to drop it out. Either we don't know what happened or something unique happened there that we know about and it certainly distorts the picture. Now how do we deal with different kinds of differences? There is obviously a variety--one would be regression analysis. Regression analysis, as we'll see later, has some real problems--both theoretically and from a very practical standpoint of credibility. Another method, we're going to look at, is called market comp. Market comp is a bracketing technique, that says, if we come down with enough sameness, that now we have a subject property that's bracketed by, let's say, three sales on either side that are reasonably comparable, and now we adjust those sales. The mean adjusted price is going to come really close to where the subject property is. We'll be able to demonstrate that later. A third technique is going to the additive weighting process that Hayes talks about. We'll set up a point scoring system that says, "Hey, we'll set up some very specific rules as to how to assign points for the presence or absence of certain attributes and factors and then we'll come up with a price per point per unit and a pricing algorithm." And the test of the formula or the algorithm is going to be, how well does this system anticipate the price at which the comparable sold for. If we could take our pricing formula and come very close to the price at which the comparables sold for, we'll make the leaping assumption that the same formula will anticipate the price at which the subject property will sell for because it has the same kind of sameness as our comparables and we've adjusted for its differences with the same kind of objective point scores. So we have another decision model that we can follow. Or we may use some sort of index and set up criteria on what we call a comparability index. Comparability index flows out of our market comp model and the effectiveness index of that particular kind of model is kind of an interesting one. We say, "Okay, tell you

what we're going to do. What we're going to so really look at the least square method and that property which is most comparable is the one, when you square the adjustments and take the sum of the squares, has the lowest sum of the squares." If you look at each property relative to the subject property and we've made our adjustments however we have made them, the one with the largest sum of the squares of adjustments is the least comparable property. Right? If we have a photo reproduction of the subject property, there would be no adjustments, then we have a score of zero. If there was simply a time differential, than whatever adjustments we made for time would be the only one made. And therefore, we can begin to rank comparables. In the 200 field of my inventory the computer can tell me which five are the most comparable to the subject property and do it automatically. Having selected the most comparable we can shift to another system for making our adjustments between the comparables. So all I'm saying at this point, and we'll look at each of those methods later, is that the Hayes concept, that there are decision models which can be used in a variety of fields that are very applicable to real estate. There are as many methods for valuing a property as there are in terms of objective ways of handling data to reach a conclusion. The contemporary approach is any forecasting method which organizes information, focuses it on the question and sorts out the relevant from the irrelevant as a legitimate tool. And this is where the professional societies and the contemporary approach part company. They have specific methods that they teach, and they do not acknowledge the other methods at this point. So we can look at dominance, look at lexicographic, look at additive weighting, effectiveness index or satisficing models. Apply that back as we move through the semester so that you can see that the system works. By the same token, real estate has a great deal of uncertainty about it and, therefore, many of the strategies that deal with uncertainty are relevant. Probably the most relevant in Hayes is the one called minimizing the maximum regret. Isn't this exactly what a developer does who

says, "Gee, I'm going to build 244 apartments, but I'm going to do it 28 units at a time, and when the first 28 get rented and occupied, I go into phase II, and get to the next point and so forth. If I do all 244 at one time and only 44 rent, I have maximum regret and if I don't, the lender does. But you continue to create escape hatches in a real estate deal to minimize the maximum regret. I'll buy your land on an option so that if I know what the zoning is going to be, and once I've obtained the zoning, and I've obtained the building permit, I obtain the financing, I'll exercise my option on those conditions. And then once I've gotten to that second step, now I may structure it in another way with a corporate shell and I receive the sign (O.K.) on the mortgage, etc. and, again, I'm minimizing the maximum regret at each separate place. And in the appraisal process that's essentially what you are going to do in some cases. You can say, "Gee, the greatest use of this site for the maximum value would be a 600 room hotel. But nobody is going to pay a price for that. If the probability of achieving that is relatively remote, that may be the highest price that somebody would pay for it if in fact that were going to be the use. But the most probable use is probably going to be something much more conservative that minimizes the maximum regret. If you're going to buy a piece of corn land that hopefully will become a subdivision, you're not going to pay anything more than corn land price. So if your fall-back position is if you can afford to go back and raise corn and hope the price goes over \$2.40 a bushel. If you can create value for that by achieving the building and achieving the entitlements and effectively marketing it--that profit goes to the buyer, not to the previous seller. That's value added by the developer, not the seller. So minimizing the maximum regret becomes a significant decision tool for screening out the more aggressive, ambitious probable higher value types of things. I want you to look at Hayes from that standpoint. He is generalizing about models in general and we're going to create specific applications of each one of his models relative to appraisal as we go along. He has put appraisal in the

mainstream of decision theory and not out with something sort of cultural cult which still quotes 1938 textbooks. This is also consistent with economic theory today. There's a little piece I think in your reading today on bounded rationality. Bounded rationality says that we may be talking about a prudent man, we may be talking about a business man with a certain kind of profile, but probably he can handle about four to six factual components to his decision process before his trade-off matrix simply exceeds the ability of the mind to deal with it rationally. Then after that it is intuitive and subjective. And the appraiser is dealing with bounded rationality. There are obviously an infinite number of plausible factors that may influence the decision. But there is no way that you can hypothesize about what that most probable buyer is going to be doing on those nuances and so forth. You really have to go for the central tendency and assume some plausible rational, relatively limited number of trade-offs that individual is making. The more creative you are in creating variables that incorporate a variety of elements into that variable than the better off you may be. For example, you don't know why somebody may want to be at the corner of State and Mifflin as a prime retail area possibly or an office area and so on. But you can set up a factor that says, "Okay, any project that is within one block of the center of gravity." Let's say the performing arts center on State Street gets a five, anything that's one to three blocks away gets a three and any more than three blocks away gets a one. But in that single attribute of proximity you're really accounting for a series of relatively subtle kinds of differences in location and so forth, without having to be so precise about it that you can immediately be challenged, "Gee how could you measure that, or how could you compare that?" And the appraiser is always on that trial thing; he always has to think of himself as going on a cross exam and having to face an attorney who says how did you arrive at that decision. So by creating a locational factor which is on one hand specific, but on the other hand, undefined as to what environmental context that may imply, you're able to

grade your comparables without getting yourself into the box that you're omnipotent in terms of what you perceive in the market place and that you have control of an infinite number of variables. And, you'll struggle with that as you try to bring three very non-similar strip centers in to a common denominator with the subject property. And as I say, I hope I will have one or two more strip center sales for you in the meantime. An appraisal is an artificial feasibility study because in general it defines the profile of an archetypical investor who will operate in an average way. And his motivations will be defined rather broadly and we will ignore the fact that he has a sentimental attachment to buying the house because he was born in it 47 years ago, etc., that type of thing. Where we were feasibility analysts we would be very personal and very specific as to our decision maker's decision process. Here we're portraying that classic picture, a cartoon if you will, of how the buyer works, and therefore we're creating an artificial feasibility study. One of the things that we don't do very well in this course because it is just administratively and technically difficult for the student, is to let you go out and dig up your own data. One thing the course has grown so large that we would crush City Hall and the real estate industry by having you all tag along and so forth. So you get a very false sense as to where the time goes into the project. Your problem will be the analytical format and methodology and so forth. Most appraisers have pretty well decided on what their methodologies are going to be and tend to be very repetitive about it. But they spend most of their time trying to find legitimate fact information. And most of them don't do it very well. Obviously, your first problem in appraisal is to define the problem and the second problem is to define what kind of data do I have that's relevant to the problems. The first source of data is obviously the client himself. And in developing that client relationship you are going to request permission to see his accountant so that you can get the best operating data available. And, the proformas and, in some cases on major projects, where

you're going to go into court, and you know that the client has obviously a bias, let's say, in overstating expenses, understating income so that real estate taxes will be lower and so forth. You may have to go all the way back to the general accounting sheets and rebuild his proforma so that only those things on the operating expenses are legitimate. For example, Jean is doing the appeal on the First Wisconsin--by examining the past operating statements she finds in the payroll that they've got a couple of extra repairmen, carpenter, electrician types and so forth, who circulate among all of the First Wisconsin banks. A legitimate expense shows up in the payroll account its all very legitimate and so forth, but you have to say, hey wait a minute hold every thing--Is this personnel compliment legitimate to the building, and if not, throw it out. If the bank hires a specialist-type gardener who keeps all the little trees in the greenhouse green, then you have to say, "Whoops, wait a minute." The next buyer of the building will let the tenant pay for the landscaping if they want to have pots in the lobby, but that's not a legitimate charge for a building, and that's part of the image of the bank, etc., etc., etc., so OUT. So your first source of data is the client and you have to be skeptical about the relevance and the validity of it, and take nothing for granted. The second source of data will, of course, be your own records and files. Established appraisers have a very significant edge over students. They may have been that way before First you may end up appraising the same building more than once in your lifetime. There are a number around town that I've probably done seven or eight times, which gives you a good start on the next time This gives you a break for the next time. You may have comparable sales that you have just done and you have rent structures of other buildings that are comparable and so forth. So in-house you have the data base. And the well-run appraisal shop, obviously, will have a very well structured data base so that people can have access to that data. People like Gene Dilmore, for example, and Chuck (Karel) Clettenberg have it all on computer. They'll have one disk that's

nothing but industrial buildings, they'll have another disk that's nothing but medical office buildings, etc., etc., and it gives you a real running start in terms of the time required to work at it. But invariably another choice of data is going to be going out into the public arena. And the public arena is going to begin first of all with the Register of Deeds office in the County in which the property is located. Appraisal ethics require that on any major commercial structure today you provide a five year history of ownership and all transactions affecting the property. Smaller buildings and single family homes need a three year history. Lenders and regulators finally wised up to the fact that what was going on, of course, in many areas was flipping of the property. So that the last sale of a particular property is presented as the comparable, but nobody is saying how much you paid to the previous seller and what his relationship was to you and etc., etc., etc. There is a wonderful old book, certainly not new, but I urge you to read it called, \_Child of the Century\_, by Ben Hecht and a second book about the same era also by Ben Hecht called \_Charlie\_. \_Child of the Century\_ was written about Ben Hecht's experiences in Chicago as a newspaperman and in Florida as a great promotion specialist to perform a land swap, and his partner in that was the wonderful Charles MacArthur, the playwright and husband of Helen Hayes, and all-around nut. The two of them single-handedly created the Florida land boom with their rather innovative exploitation. And one of them was just a traditional (scheme). They would buy a corner lot in Boca Raton in one name and they would sell it to his buddy at a little mark-up and would then sell it to a third fictional party who would then sell it to a fourth party--There's no way of telling from the Register of Deeds whether those people are alive or exist unless you would really research it. And then about the fifth or sixth bump in the price which now has maybe quintupled the original price of the land, they would flip it to some idiot from New York City who had come down to get into the land boom and who could look at these transactions and find the series of comparable sales at



ever-rising prices. In one case they sold a piece of Boca Raton Island by getting an old alcoholic from New York to come down and live down there as a hermit for several weeks and then come into one of the local saloons and try to buy a beer with a piece of eight, arguing that, "Oh yeah, they're scattered all over the sand; you don't have to scratch around much to find these" and they then sold a good piece of the island in 10 foot squares. People went out looking for Captain Kid's treasure and pieces of eight. They sold a large chunk of the island and screwed up the title for years with that kind of promotion. They always got paid in cash--they never owned real estate in Florida. At any rate I think that you will enjoy the old promotion techniques. There is also a book called \_A Few Buttons Missing\_ in which a very famous psychiatrist here in the country paid for all of his medical schools by going to San Diego and buying and selling the same piece of land between he and his room mate under a series of fictional names and then spinning it off again to some sucker, all based on the fact that his father's name was a very good name, and was able to get credit at the bank without investigation. He made enough money on that killing to go to medical school and become a psychiatrist. So in any event, you need to investigate the title (of the property)--this is a critical one. However, there are at least three records that you have to look under. Not only do you have to look under the grantor and grantee index to find out who is selling to whom or adjusting rights back and forth, for one reason or another, with mortgagees, quick claim deeds and so forth. You must also go to the miscellaneous records -- whenever you see a property that has been sold by a partnership or a limited partnership or some other form of group investment of that sort where there was a lead manager, quite often what has happened is that lead manager has been paid off on the side by the buyer of property. So he relinquishes in effect, his claim on the property management fees, perhaps he had the exclusive brokerage (contract) fees or there may have been a number of other little service goodies which were part of that property and the buyer, in

order to get rid of him and get him to go with the deal, they tend to buy him off. And that will be shown as a sale of a partnership interest and not as a sale of real estate. Yet the total price of the comparable is going to be not only that which was recorded as a real estate transaction, but that which has had to be recorded as a partnership transaction for extinguishment of the partnership. You have to track on both of those. And then you may also find under miscellaneous a record of personal property sales that may have been involved in the deal and so forth. In effect, it takes a great deal of research to be sure that you are aware of what the transaction price total was and then you will have to, under appraisal ethics, confirm that with the grantor or the grantee - someone who participated in the deal. If you haven't done your homework first, they're not going to tell you what happened. There's a difference between calling the seller and asking what you sold it for, and calling the seller knowing what he sold it for and getting him to confirm it. And that's a very difficult thing for an appraiser to do. You're always on the outside looking in and there are a good many reasons why the seller doesn't really care to advertise why he structured the sale the way he did -- either the IRS may be sore or his partners may be sore, and so on. But if you fail to do that, your report obviously is worthless and when you go to court you are going to get killed. You have to know inside details of the transaction. One of the reasons the market comparison approach is of less and less use to the appraiser, although it is the preferred method, is that the engineering of the price by both the seller and the buyer for accounting purposes or tax purposes - sometimes just for awe purposes - is such that it is almost impossible to arrive back at what was essentially a clear price for the real estate interests on a fee simple base. For example, if you were to look at the sale of the day surgery center over on Regent Street, you would find an exceptionally high price per square foot for the sale of that particular building. At the time it was sold we had a medical facilities council which had to issue permits as to

whether a certain kind of medical facility could be built. And it had the permit to be the day care surgical center. Second of all, there was a rule in the IRS, which still stands, that if you are a franchise you can never take a capital gain; it is always ordinary income. Third, if you sell the medical practice which has now been franchised by the regional medical facility center, you would take quite a hit as ordinary income particularly under present ordinary income tax rates. So when the seller sold the clinic and the business, they loaded the price on the real estate, on where they were permitted to take a capital gain. And under-valued the business which went with it because of the franchise tax that would occur in that part of the business. If I were buying an industrial building with a going concern within it, I would tend to understate the value of the building, overstate the inventory so that I could release my inventory against sale and understate my profits. If you have that kind of interrelationship going, there's a great temptation to manipulate the prices of the various components to get the most favorable deal. If you're trying to track on the price that the Manchester building sold for to be demolished and create a new office building (Mohs and partners purchased building from First Federal), you're going to have a hell of a problem for several reasons. One, when T. A. Chapman's bought out Manchester's, Manchester owned some of the land, the balance of the land was leased, and in order to get a liquidating dividend to him in the most favorable way, they were much better off to in fact (end of side one 3.1) over-pay him for the real estate, and under-pay him in terms of stock in terms of capital, and he was better off because he got the cash out immediately on a capital gain, rather than taking dividends over a long period of time on the stock. Then they, in turn, sold it to a Savings and Loan Association that paid too much money for it and discovered that they couldn't redevelop it as they thought they could, but they dare not take a hit by selling it at a loss, so they had to convert it to a lease at a less than market rate in order that the capital value is preserved on their

books. Okay - even though there are opportunity costs in that they're not getting the rents they should have gotten on the ground - unless, something really unexpected happens to the value of the building mushrooms at some future point. Notice all of these other things that are motivating sellers begin to distort the sales price for a variety of reasons that either the appraiser cannot discover or if he can discover, doesn't know how to convert back into cash equivalency. What would that factor be worth as an adjustment so that we can say by subtracting this amount of money from the deal, we're back to what the market price would have been. Commercial properties - they're extremely difficult to dissect after the fact as to what occurred. Getting a nice clean sale is relatively remarkable so that Fish Hatchery sale is beautiful stuff. Unfortunately its not very much like our shopping center, but it is a beautiful sale. But you have to research each of those elements. When you get into the Register of Deeds office you try to understand what the record is telling you, then you begin to pull away at each of the angles. Who did what to who? And we may find leases being filed and special mortgages being filed and seller financing. You may find partner fees bought out as miscellaneous public records under the partnership element and so forth. And that can be used against you if you want to really distort something. For example, in the securities fraud case that we talked about before, one of the tricks of the trade was the fact the in virtually every case, the comparables were owned by partnerships which had then sold them to new syndicators for re-securitization. And in almost every case, the general partner had been paid off on the side anywhere from \$50 to \$200,000 for his interest. They never reported any of that. Now if you take a \$2 million building - for which the reported sales price was \$2 million, - and the buyer paid the general partner \$200,000 on the side to recommend that they (the limited partners) sell the building, the real purchase price is \$2.2 million and that has a pronounced impact on the cap rate, in fact it drops it from about 8.5 to 7 percent. So now if they use a cap rate from that comparable at 8.5 percent

they're going to undervalue the subject property, which of course is exactly what they wanted to do because they were going to pay the limited partners the difference between the mortgage and their appraised value. Now you go back and you say, "Gee friends, how could you be consistently so wrong?" And the appraiser looks wide eyed and said, "Golly, I didn't know I had to look in the miscellaneous records. I always go to the Register of Deeds office to find out what it sold for and they always had a stamps on it that tell me what the price was." And you can get away with it--and did get away with it. Now, the only way you can do that, of course, is go back and back-track and investigate every one of those sales, and blow each one up in front of him in the court room and then ask where he's at. And then he says, "Of course the value relied primarily upon the income approach" Oh! "Did you know that the day after your appraisal they raised the rents on all of the units by 15 percent?" "Well, of course the date represents the limiting condition on the value." "Was that a surprise to you?" "Golly, its been three or four years, I really can't remember if they had mentioned that or not." So there are obviously problems with the Income Approach, as well. The appraiser has to do his homework you've got to investigate that. In some cases, it is not within his specialty to do so and, therefore, one of the significant elements in an appraiser's statement of limiting conditions, ultimately, is going to be who's responsible for giving him the information. Later on in the semester when we talk about doing business as an appraiser, there are going to be very specific caveats in the appraisal that say the owner is responsible for telling me if the property has (or had) hazardous materials like asbestos or radon and PCBs and so forth. I'm not an expert on that. I wasn't hired to be an expert on that. There's a duty of disclosure from the owner, or he says, "Hey, if I can perceive cracks in the building watch it settling into the mud, obviously I can report that as visual, but I have no responsibility for any engineering deficiencies which I can't see, and I never said I was an expert on HVAC, etc., I'm not warranting the roof,

etc., etc. Again there is a duty of disclosure on the client to tell the appraiser of known defects in the property. Third, the appraiser obviously will pull in experts on whom he can rely on certain technical matters. Particularly people matters. Your attorney drafted the legal description for me, your attorney indicated how this feature of the lease should be interpreted, etc., etc., etc. The appraiser must know the limit of his ability to review and collect data. When we get to the professional standards, you will notice a brand new emphasis both in R41C and in the appraisal standards by the Institute and the Society that says that if you incorporate the work of another in your appraisal report, let's say a market study by someone that has determined what the absorption rate for apartments or office space is going to be. Or let's say a traffic study that says what the impact of this new building is likely to be on traffic and so forth. You must concur with the results because in effect you will be held equally responsible for any report that you represent as the basis for your decision. That's heavy. In the past appraisers used other experts as an escape. "So and so said there was a market for it, so as the hold harmless clause goes, if you have an issue, go to him, not me." Can't do that any more. The appraiser must concur. What he's saying is, "I endorse the conclusions. I read the report, I agree with where that expert got to and that's why I'm using that as a premise." That's a very significant departure from where they were only a couple of years ago where in fact a major loop hole for the appraiser to get out from malfeasance was simply to take a market report provided by the client as to how quickly the building would rent or at what price it would rent, and so forth, and use that as the jumping off point on his appraisal that says, "If you believe this, you will believe anything, sort of thing, so here's my appraisal based on that hypothesis." You can't do that anymore. If the appraiser doesn't believe it, he can't use it. So the information that you collect and utilize, you must feel is reliable and concur even though you don't warrant it as absolutely true, you have done the best you can to validate it,

much like a newspaper reporter trying to get two comments for the same point in order to support the contention. You must be able to indicate where areas of expertise are that you don't have and that you're not representing to have had. And finally, of course, that data collection that you provide yourself must be comprehensively researched in order to arrive at data that is used in the report. And its sometimes very messy. Just did one out in the Town of Arena. The records are lost so we're not quite sure how deep the lot is. We think it's 132 feet, but it may or may not be. As a result, you have to indicate that no survey was available, that dimensions are estimated from field inspection, etc., etc., etc., not that it makes any difference, because even if you've got 100 sq. ft. more in the lot, it would still sell for \$1,000, on a good day--Arena's not going anywhere very quickly and there are a lot of lots available for sale. This part of the investigation is something very hard to simulate in the classroom and I simply want to bring it forward as a caveat in looking at what the appraisal process is about. You will spend probably 80 percent of your time trying to find relevant data, validating it, and organizing it so that you can communicate it to your client. And about 20% of the time actually writing the report. Here you'll spend about 80% of your time writing the report, and about 20% of the time on the data, simply by the nature of the (class) size and the time available to do the report. The next problem to deal with is establishing the purpose of the appraisal that you're going to write and we're going to put (in) two purposes. The first question to be asked is what is the most probable price at which the center would sell, as defined by Ratcliff--most probable price as defined by Ratcliff -- on October 1, 1987. The second question, is a peripheral one, is the most probable price more or less or the same as the fair market value if the property were to be acquired under eminent domain for some public purpose, again as of October 1, 1987. (tape cuts out here) fair market value. How does that relate to your analysis of most probable use, most probable buyer and their motivations, and does that, in fact,

meet the conditions of fair market value? If it does, most probable price and market value should be the same. If on the other hand, there is some unique condition, positive or negative which would adversely effect or positively affect, the bargaining position of the seller then the most probable price may be something different than fair market value. For example, that was last year's problem. The 14 W. Mifflin building sits right in the TIF district and the North Square Redevelopment District and the owners of the Concourse have been making noises that they would like to acquire that for an expansion of the Concourse. Well, as a result any buyer that bought into that would be the beneficiary of special subsidies available in a redevelopment district and would be the beneficiary of potentially captive buyer, virtually everything else on the block is either owned by the Concourse group or by the Gordon Rice group and either one would be interested in an assemblage, and so you have something less than fair market value. You have potentially captive buyers at the back of the site and to the side of the site which would obviously pay a premium because of the plotted value since the other unique urban redevelopment plans for the area. As a result, the most probable price would be higher than market value. Fair market value would tend to ignore the fact that the guys next door are going to pay the loan for it and says (instead) what does it sell for on the average, which would be a lower value. A classic example of where the failure to use the right definition of value gets you in trouble, was a couple of years ago when the car dealers were moving on to the Beltline--there were three major car dealers and only two sites of sufficient size and accessibility to be attractive to a major dealership. One of the major dealerships here in town got an option to purchase one of the sites. What had been happening, of course, in the meantime, was the owners of the two desirable pieces of property had gotten together and said "You know we really can't loose on this basis. There's at least three maybe four dealers that would like the ground and there's only two of us so if we hang together, we're obviously going to do better than if we hang



separately," and so the price they negotiated was a nice premium price for this highly desirable site. However, the acceptance corporation for the major automobile chain that was going to help finance the dealership called for an MAI appraisal of the site presumably to discover whether their brother in the franchise was getting a fair price or not. The MAI did a fair market value appraisal of the property using all of the various transactions up and down the Beltline and arrived at a price that was about 25 percent less than the agreed on purchase price, conditional on the appraisal. As a result the acceptance corporation didn't let them buy the site on the Beltline and they never have gone out to the Beltline. Well, fair market value really wasn't the critical issue. The critical issue would be what will it do for my sales if I've paid 25 percent too much for the land. If I pay that price, can I still have a viable dealership? By being on the Beltline, will I sell more cars?--that's the really relevant issue. Not what market value is. They were using the wrong benchmark to make their decision. Now if you said, "What's the most probable price," you could have admitted the fact that it wasn't an open market, that there was probably an oligopsony going on--that the two sharpies that own the land are undoubtedly working together and they have never left a dollar on the table before and weren't likely to do so again and didn't, as a matter of fact. So again, if you had said "What's the most probable price it will likely sell", the contemporary appraiser probably would have been much closer to the deal as negotiated than the fair market value appraiser, with conditions being equal and you're having a free choice of all of the alternatives based on historical transactions of what it should sell for. Okay, I quit, see you tomorrow afternoon. Professor Graaskamp begins this class with the former mayor of Middleton (Judy Karofsky) giving a brief history of the center in terms of political context within which this shopping center operates (and doesn't operate), and a little bit of the history of the center on how it got to where it is today. (Have not included her

presentation.) We want to pick up on the Ratcliffian view of life before plunging on into each component of the appraisal process. The traditional appraisal method, among its other difficulties, is a deductive method that establishes really a logical framework, if you will, a structure which is to be applied consistently and, in all cases, to the appraisal problem. It begins with a premise about market value, which obviously is a highly-structured premise, about a fully competitive market in the Marshallian tradition, with all parties having choices and being fully informed, efficient markets -- all of the traditional elements of the basic economic model. And then it goes further and says that the decision makers, the buyer and the seller, are prudent men who are operating obviously to maximize their net worth. That also comes out of Marshallian economic tradition, and is establishing some premises which are then highly deductive about how people are suppose to operate. As a result when we talk about market value in the traditional sense, sentimental value, nostalgia, even aesthetics may have very little to do with value. Very utilitarian, very neutralized in terms of the idiosyncrasies that the buyer and the seller may have. A prudent man is a homogeneous robot operating to maximize net worth. The seller is also presumed to be motivated on that basis and everything can be translated into some kind of quantitative statement about what they would do or pay for in terms of attributes and conditions. The next element, of course, is very deductive about it. It says, here's how people operate. We have certain principles, principle of substitution that people will tend to put a limit on their expenditure if they can feel that they can get virtually the same satisfaction from an alternative purchase, it doesn't matter what it is, but the premise is that there are alternative ways of meeting the unique real estate in this case, and therefore, the principle of substitution becomes a very significant element. Second of all, the presumption is that in exercising that, the prospective buyer is going to analyze his alternatives with three approaches. One, under the principle of substitution--what can I find in the

marketplace that is comparable, and what are those priced at, what have people paid for those in the recent past? And therefore, I can infer from those transactions what it would cost me to have an alternative. After I make adjustments for any elements of difference that meets the principle of substitution. The second course of action is that virtually any property is also an investment property. Therefore I really can say, what are my alternative courses of investment. And there's been a great deal of debate in the appraisal circles over the years in the literature as to whether those alternatives have to be limited to real estate alternatives or whether it really represents alternatives to stocks and bonds and gold bars and any other medium that they are talking about. Now the current consensus here is, essentially, that real estate competes with all other capital investments and certainly among the institutional investors that is true. Certainly my insurance company can evaluate the rates of return that they are getting on their bond portfolio versus their real estate versus their convertibles versus their private placements -- and reallocate their resources accordingly. There is some suspicion that, what shall we say, the amateur market tends not to do that. People tend to buy duplexes because they trust the tangibility of it and they can work on them. It is all I know and I don't trust the stock market, etc., etc., etc. So they really don't perceive of themselves as having alternatives. And even if they did perceive of themselves as having alternatives, they will continue to buy farm land long after they really don't need any more farm land or buy another duplex or whatever the case may be. Not because it's getting them a great rate of return; or they're even doing as well as their savings deposit or cash accounts, but simply because this is what they are conditioned to do. So we certainly have a multiple tier market relative to investment. But, nevertheless, the deductive theory is that, again, the principle of substitution prevails and we have to match the real estate investments against other alternative investment opportunities. And we see in the literature,

particularly in the case of 556, all kinds of struggles to do that. The so-called built-up rate which was popular in the early 40s and late 30s said "Gee, if a U.S. Treasury with a 20 year maturity at such and such a rate of return on interest, then real estate is going to have to add on to that for its lack of liquidity, its higher risk characteristics than the coupon on the Treasury Bond, and, perhaps, the added management that is relatively unstable--you have to keep it heated, pruned, shoveled, and so forth--whereas the bond just sort of sits there in the safety deposit box and doesn't require the supervision and so on." So the theory tried to really implement that concept of substitutability and that capital opportunities can all be put into some kind of rainbow, if you will, of risk and yield in which real estate has a place in that particular mixture. And the cost approach says that barring finding a comparable property on the market or comparable investment, that the maximum people would pay for something, is the cost just to start from scratch and create it. You can buy the land as vacant and you can build the improvement that you require. And you included in that the costs of the delay, management, risk of the build-from-scratch process. That was always one of your options and, therefore, the cost approach presumably puts a cap on what you would pay for anything else. Because if you didn't find what you wanted, you could create what you wanted at a given price. And there's been, of course, a great deal of debate on that. The argument was that you really had to go through all three approaches to define what the buyer was going through in his logical process of making an offer on the subject property and that you then synthesized those three. Interestingly enough, if you go back into the literature of appraisal, there are some very serious gaps in their deductive logic which they have had a terrible time working out of. In the 1920s, with the crash, the National Association of Realtors ruled that the use of the cost approach was unethical because the value of the thing is the price it will bring, and you had seen many buildings that, let's say, cost \$25,000 to build a duplex in 1929, selling for \$6,000 in 1931.

And, therefore, if you try to use the cost approach to anticipate what the property was worth simply because it had that amount of labor and materials and so forth into it, which, of course, the Austrian economists would have argued was the case, was terribly misleading. And the code of ethics of the National Association of Realtors ruled out the use of the cost approach as an appraisal tool. By the same token, the literature of appraisals during the late 20s and early 30s took two divergent approaches. Babcock, who was at that time Professor of Valuation at Michigan, was writing that only the net income approach was the appropriate methodology because real estate was a capital asset and all capital assets should be priced based on the discounted flow of benefits that you are going to receive. And that was true even in the single family home and that as a proxy for the value benefit was the rental price that you would have to pay for a single family home. By the same token, of course, people were in total disarray by the mid-30s and said, "Gee, if you look at the market, you know the market is now virtually squashed for a lack of buyers of any financing, financial institutions trying to liquidate their inventories, and, therefore, really the only measure of value currently is market comparison." And the brokers were saying, "We're the only ones that really know what is going on in the marketplace, therefore, we're the only ones that should be in the appraisal business, because we have the current market data--we are at the inside of the transactions, we know what the buyer and seller were thinking about and so on." But the literature, particularly by Atkinson, who turned out to be one of the major powers in organizing the American Institute of Real Estate Appraisers, said it didn't matter which method you used other than the one that gave you the best data. That the availability of information and the reliability of that information really determined which methods you use. And then you only needed to use one method. There was absolutely no obligation at all to use all three methods if it was patently apparent from the start that one or the other either didn't have the data or didn't seem to be relevant. What

was the cost approach to the value of the lot? Trying to price a lot on the cost to replace that lot is kind of a foolish exercise, and so forth. And so the leading writer for the Institute at that time was arguing that you really do not need to use all three approaches. We use the ones for which we have the best information and you have an article coming up, I think, in a week or so by Ken Luscht who essentially says the same thing. We know, in part, the availability of data as well as the nature of the problem, pretty well determines the method if we can use one method with reliability, that's enough. We'll come back to that theme in a moment, but right at the end of WWII a guy name May came out with a book on the appraisal of single family homes, heavily influenced by the FHA for development in the late 30s and he's the one who said you had to use all three integral approaches, arrive at an independent value using each method, and then, in fact, synthesize those in such a way that the influence of each factor, as well as the reliability of the methodology in each case, determined your answer. And a large portion of the appraisal industry began, because of the single family explosion following WWII, to all read May. None of them ever read Atkinson or even anybody as esoteric as Babcock. And as a result, the myth was established that you had to use all three approaches and then do something called synthesize. And the one thing you were not allowed to do was average, which is kind of cute, but you could use a weighted average. You couldn't take all three numbers and come up with a number, but if you said this is worth 80 percent, this is worth 10 and that was worth 10, that was all right. You have evaluated the reliability and relevance, and merged them into a single conclusion. So the number one source of the mythology that you have to use three approaches began with May and it continues to haunt the industry. And yet many of the leading writers of the industry still deny that; they still argue that you don't have to use all three approaches. And now, Lord help us, it is back again!! Because the Savings and Loan industry, which was brought up on May and the residential appraisal report

has R41C, and R41C says you gotta use all three approaches or give a good darn reason why you didn't. So we have this terrible inbreeding of theoretical methodology which continues to haunt us in the appraisal industry. It is very hard to get rid of, as long as the rules are being written by the old guard that's now 60 years old and still on the committees that dream these things up and obviously you cannot come up with an edited version of what it is they're suppose to do without, in effect, implicitly implying that what they have been doing all their life has been wrong. So we're still haunted by the three approaches even though legitimate literature of appraisal denies that. The second reason for the three approaches is more subtle. With the collapse of the real estate industry and the obvious inability to finance anything in the mid-30s and much of it being pinned on the appraisers, a great many sincere and well-meaning people decided that what we really needed was some private organization to establish professional standards. Teach those professional standards and then enforce those standards. And there were a number of groups that had a vested interest in doing that. The three major ones were--the life insurance industry who made most of the commercial loans, the National Association of Realtors who typically did appraisals on the side line and, of course, depended on them for closing their deals, and the federal government who was trying to, at that time, totally reorganize the mortgage banking industry via the FHA and in effect took over the mortgage lending process of the banks and savings and loans relative to residential property. They did their own market studies, their own appraisals, their own loan management, and so forth. And so all three major groups sat down to decide what it was that appraisal standards were going to be, because you couldn't have malfeasance and accuse somebody of not doing what should have done unless there was a consensus on what it was they were suppose to do. After all a doctor has not committed malpractice in removing the appendix until there is a prescribed method for removing the appendix and then you can demonstrate that he didn't follow the

appropriate methods at which point you may have a case of malfeasance or malpractice. Well, the life insurance industry had a peculiar viewpoint of life. They wanted to be very sure that any borrower had his money in the project ahead of theirs so when they made a loan at 75 percent of value, what they really meant was 75 percent of cost and the first 25 percent of the dollars put out on the project were going to be the borrowers. If something went wrong, his money was out there ahead of theirs. And as a result the life insurance industry took the position that the only dependable method was the cost approach because they were dealing primarily with buildings that were going to be built or built new or projects that were relatively new and were being acquired shortly after their development and, therefore, they said they couldn't have a legitimate appraisal method without the cost approach. NAR, the National Association of Realtors, at that time the National Association of Real Estate Board, took the position that they had positioned all along--that only actual sales were indicative of value. The value of the thing is the price it will bring and, therefore, you have to use the market comparison approach. And, of course, the government was represented by Babcock who had his own pet theory that no matter what you did it should be the income approach to value, some form of capitalized or discounted net income. And so the three reached an accord that the standard methodology should be three approaches to value. And in exchange for that accord NAR removed the prohibition in their ethics from using the cost approach and FHA expanded their forms to include market and cost to replace and the insurance companies, of course, moved grandly on their method to a point where ultimately, of course, their dependency on a loan to value ratio shifted very subtly from loan to cost to loan to value. And of course the developers discovered that; that they could come up with a capitalized income of the project as completed and get 75 percent of that and then build the project for what they were willing to lend, and the insurance companies gradually lost that presumed defense that they had that somebody's dollars were ahead of theirs



and we were off on the donnybrook of inflated values and a development game that received 110 percent financing for loans that were 75 percent of (appraised) value rather than cost. So we had two sources to the mythology. One was the accord struck in order to start the American Institute of Real Estate Appraisers and define a standardized methodology, and the other was simply the explosion in the residential finance area following WWII based on the book by May. We are still trying to live that down. But its nevertheless a very deductive system, which is much more concerned with form than substance. It presumed that fair market value, as defined, is the answer to all your questions and, as presumed initially, that we were always talking about fee simple title and that having determined what that was, we then allocated it to the different interests in the property. So there might be a tenant leasehold interest--because we enjoy the contract rent. There might be somebody else who owns the land under a land lease, and so forth. But initially you looked at the project in total--now that's the whole bundle of rights that were available for sale, determine the value on that basis and then reallocate it or disaggregate it to the different interests. But, ultimately that was lost and it was lost, in part, because of the pressures that the brokerage industry placed on the appraisal industry in order to make their deals go. For example, the Society of Real Estate Appraisers, which was very much into residential property and which had their origin, primarily, in the savings and loan industry, realized that if you sold a home subject to FHA financing where it enjoyed a 4.5 or 5 percent mortgage in the earlier days that there was a premium being paid for that property obviously for the next buyer who was going to finance it. So they changed their definition of value, so that in effect it said for cash or for terms generally available in the marketplace and then very quietly and statistically defined marketplace to be--there is a market for homes that are financed by FHA. And then they got themselves further out on a limb because condominiums came along and condominiums were hyped with all kinds of extra bennies in order to market

them. And they said, those are the terms common in the condominium marketplace and so the fact that you paid \$100,000 for the condominium of which \$15,000 went to buy down your interest rate, so it looked like a 9 percent loan only it was a 14 percent market and so forth, it simply got smoothed over. Market value had been carefully elasticized to cover virtually all of those kinds of sales and if you define the market small enough so there is virtually a market of one then those were the terms customary to that building since that was the only building that sold like that. And, of course, the pressure was being placed on people that were in the brokerage game in order to make their deal go through. The people in the syndication game, obviously needed numbers that covered not only their cut and so forth, but the excess financing for all the fees that were involved in the game, and so forth. And suddenly the appraiser had lost control of 1) the definition of value, the methods that were appropriate, and 2) which set of interests they were valuing. But it was all consistent with their form, it was all consistent with the deductive logic, the principle of substitution. I can remember my father talking to me about real estate, he said, "I don't see what's so tough about real estate." He said, "You get to name the price, I get to name the terms, no real problem there at all. You have special terms, that's fine, and I get to set the price. So we can always do business." The appraiser got himself in the same box. If you get to tell me the number you need as an answer to support your deal, then I get to define the terms in my appraisal. The terminology became highly elastic. The American Appraisal Company is notorious for that. Sure, we'll give you the number you need for your syndication, only somehow they came up with definitions of fair market value that nobody had ever seen before. They almost looked like the old ones, but there was always a little wiggle in the words there that allowed them to include the band of financing, or allowed them to overlook the rent structure and so forth. It was very easy to come in then, with a number and be very gracious about it. And charge a fee that was pretty heavy because obviously the deal

couldn't go through unless you've got the appraisal to support the price and when you considered how much the investment bankers and the syndicators and the brokers were making, they were only too happy to give their cut to the appraiser. Because unless they could past him, they didn't have a deal. And the appraisers figured that out. We are now moving back to an era in which the basic definitions are going to be critical (end of side one) (side two) Both the Institute and the Society have incorporated their key definitions right into their standards of conduct, right into their principles and methodology, and into their ethical statement. Now, in some ways, that's very threatening to a contemporary appraiser for several reasons. Ratcliffian appraisal is inductive; it says the first thing we are concerned with is what's the problem and we need a definition of value suitable to the problem. Stated that baldly, it suggests that we have all the subjectivity of the appraisers that just got everybody in trouble. What's your problem? Well, I gotta get a \$1 million loan. What value do you need? I need 1.3 million value. Good! Now that we understand your problem we have to get an answer that is \$1.3 million. That obviously is not what the contemporary appraiser meant, but it certainly sounds like that. We have to define the problem very carefully so that the appraiser is not an advocate of the solution, but provides only a benchmark for analysis. If the appraisal is being done to support a mortgage loan, it has to be done from an underwriting viewpoint, not the borrower's viewpoint. Not telling the lender to make a \$3 million loan on the property is really trying to say, here are the cash flows that would be available for debt service, here is the probable resale values along the way of the assets--and you decide how much money you're going to lend on that basis. But its a very difficult ethical row to hoe, to distinguish the problem for which the appraisal is required from the solutions that is desired by those who hired you to be the appraiser. And that's the critical change in the appraisal process being advocated now, both by legislation and standards, is that the appraiser be hired and paid by the lender

where the appraisal is being used to assist in the underwriting of the loan. Undercutting of the deal is the potential buyer of the more traditional methodology of letting a borrower hire an appraiser and hope that appraiser won't horn-swaggle the lender. Ratcliff is also inductive because he requires that you identify the interest to be appraised and spell that out right up front. Notice you could not do that today where there is a loan, let's say for a lender. You would have to take fee simple title and appraise that for which is unencumbered and then allocate that value or adjust that value for encumbrances which may come with it--in terms of the tenant's interest and so forth. So you have to be careful in comparing the traditional with the contemporary approach. That, if your client is a regulated lender and needs R41C, then the appraiser is going to have to abide by the rules of R41C. (Question re: value of a hotel vs. value of business that are part of hotel or nursing home) When you're appraising a hotel, you are really appraising a going concern. And you're saying, "What is this business of the hotel worth and what components do I need to be able to run the business if I have to take it over as collateral?." And so the interest not only includes the land and building, but the liquor licenses, the business licenses, food permits, the franchise that you may have paid for it and so on. You're really making a going concern loan. And, of course, its very desirable for the hotel people to conceal a hotel loan as a real estate loan when it is really not. A hotel loan is a real estate loan plus venture capital for a whole series of businesses called restaurants and bars and retail and so forth and so on. (Additional question from same student) What an appraiser would do today is to say, "All right, what would the space occupied by the kitchen and the restaurants rent for? If he's coming down on the real estate value, he's going to treat what it would lease for. He would look at comparables that say okay here is 250 room hotel that's owned by x, and leased to so and so and the Sheraton runs it and operates it. And so by and large lenders don't want to hear about that. That

value is considerably less than the going concern value. And so what you have, especially in a hotel/nursing home and, now, in the sanitary fill area is a real confusion between that which is attributable to the land and building which is traditional real estate, and that which is attributable to management and title. For example, a nursing home, there is a moratorium on nursing homes. You can't build anymore nursing home beds in the State of Wisconsin. Therefore, how much of the value is inherent in the bricks and mortar and the site, and how much of it is a monopoly created by regulation and the fact that you now have a licensed nursing home because you have so many beds, etc. How much of the value is created by astute management? Maybe the management of one nursing home that has been very good at wriggling out from under Medicare patients, and has only a private clientele at rates which make it very profitable. And the other one is subject to state rate regulations because 75 percent of its occupants are Medicare and those rates are paid based upon a very artificial formula for capital projects. So you picked a very real live problem, and, by and large, lenders tend to ignore that. We have a major case going at the Boca Raton Club in Boca Raton in which the assessor says, "Hey, you guys syndicated that and financed it for \$130 million. Therefore, we will assess it for real estate taxes purposes for \$130 million. So when they bought it, which they happened to do for \$90 million, they got a going concern. They had all the furnishings, all the reservations, and all of the staff, and a very significant element of good will because the Boca Raton Club has a very toney image and one of the major disputes at the moment is the Boca Raton Club sells club membership annually for like \$2,000 a piece and they have 1,000 members from the local area and all that allows them (the members) to do is to go on the premises and spend money like everybody else. You don't even get a discount. Now, when you take \$2 million of virtually all net income and cap it at 10%, that's \$20 million of value. The assessor says that's real estate value. That's locational value. Our argument says that's management value. If you can sell somebody the Brooklyn Bridge ---

after all, to go to Boca Raton there's lots of beach you can walk on without having to walk on the Boca Raton Club beach, lots of swimming pools. You know, the price of substitution - what's that? It is virtually zero. So all you're doing is selling prestige and good will. And that's not necessarily real estate value. So there's a great deal of confusion in service type industries that have more than just the hardware of real estate. How much (of the value) is attributable to the real estate? By and large, the traditionalists have appraised the going concern value when, in fact, they probably shouldn't. Now one of the interesting elements of that, of course, is the fact that, in past years, when most investors were subject to the income tax and enjoyed depreciation, the more of the purchase price they could assign to the real estate, the better off they were under accelerated depreciation rules and they could sell the tax shelter and so forth. Now that (1) most investors of major projects are tax exempt pension funds, playing the game relative to depreciation doesn't count any more, and second of all, since many going concern values are franchise values which are subject to the income tax, that doesn't bother the pension funds either. And now the pension funds are going back and starting to look at the implications of the valuation system and saying, "Hey, wait a minute my shopping center shouldn't be taxed, or my hotel shouldn't be taxed that way-- the real estate tax is suppose to fall on land and buildings so therefore we have to abstract out of the purchase price everything that wasn't land and buildings. Okay. So in appraisal we're getting into a change of philosophy. The English have given up. The English appraisal rules on hotels are appraised as a going concern and you don't allocate as to what the dishes contributed relative to the restaurant relative to the front desk or the decor or anything like that. The Americans are trying to make that distinction. Okay, the first problem the contemporary appraiser has is trying to establish the legitimacy of his approach of saying inductively. First of all, "what's the problem?" And relative to that problem, which interests are we going to appraise? Which

definitions of value will be most informative to the client? And what legitimate special conditions can we make on our appraiser? A prudent man, for example, in the traditional sense is a special condition. The guy is going to operate rationally to maximize his net worth, that's a special condition. That is not a foregone conclusion in contemporary appraisal. If we decide that the property owner next door wants the property at virtually any cost, most probable price then is really how high is up relative to his ability to pay. Not an acceptable premise in traditional appraisal. So the contemporary appraiser, in an era of reform, has a credibility problem. If I was going to argue with him why did he determine fair market value of the central assets first and then adjust it up and down because of the elements that are present in this case--whether you have a captive buyer, or you have special financing, or whatever else may be present. Ethics, obviously, is not a special condition if you tell how you arrived at the higher price, but they may define it and say all right, what would it be worth if it had a lease for this amount of space in this particular facility as opposed to no lease at all. Or when we talked about the appraisal of the North Estate--ignore the fact that it is platted because we have an agreement among the five owners to sell it as a single parcel. And we're getting, obviously, in a very gray area, what are the special conditions you've given us in defining the real estate problem and, what are the special conditions, obviously, that bias the results so that the report becomes an advocacy of the client's position relative to an issue of some sort--a loan, eminent domain, syndication, whatever. Today special conditions also have one further threat to the appraiser, both traditional and contemporary. And in the days of securitization where there is a prospectus out on the property, there's always an innocuous little line that independent appraisal determined the value of these properties to be da-da-da-dah!! Under the court system, independent means that the appraiser did that all by himself, without help from his client who might otherwise have an interest in it. Now the client gives him special

conditions--is that a violation of his independence? If so, it's securities fraud. The prospectus said he was independent and if the investor can prove that he was not independent, all parties involved in the prospectus can be had for the damages. We have a case which the judge is about to decide in which, in the acquisition of multiple properties, the appraiser submitted his answer at \$6.5 million and the client called him and argued about it and said, "Wouldn't it be true that it would be worth such and such if the rents were so and so. And he (the appraiser) said it would be and they (the client) said the rents were changed yesterday to that. And so the appraiser changed his appraisal and made it \$8.5 million. In the files it turned out that it was the client's son who had a 67% position in that particular property which signed the lease. All of the other appraisals in the set were done under the old method; that was the only one that recognized the financing and the change in rents. Prima facie violation of the very innocuous statement that this is an independent appraisal. Very expensive mistake. (Question from student re: if the appraiser noted that it was a special condition in the appraisal, is it OK then?) Yes, that would still be a violation of ethics. If the special condition can be treating some sort of factual matter or boundary matter or something like that, but if it becomes an instruction that you should use this method or that your conclusion should be higher because it is inconvenient for us to have it lower. One, I don't think you would want to mention that in the appraisal report and, in that particular case, the appraiser kept the note in his file as to the date of the phone call and the nature of their discussion and what he did about and under discovery that was available in the court room. That also falls into the OOPs category. You not only don't want it in your appraisal report you don't want it written down anywhere, and then you'll want a very convenient memory. So the contemporary appraiser has a very fine line to walk during this era of reform. As to the definition of the problem, the definition of interest, the definition of value, special conditions that they be attached to the appraisal. (Question



from a student - does an appraiser have to swear to the facts or can't he just give an opinion?) He has to state that he has made reasonable and due diligent efforts to confirm his information, he does not have to warrant that everything he has been told was true, or that he has to indicate that all the information that he has used he had attempted to validate. That's the qualifier. Now due diligence for the appraiser is a significant factor. In the old days you could simply use somebody else's information and make that a limiting condition. So and so said there was an adequate market absorption rate of 20 units a month and that is the basis on which I did my appraisal. Can't do that anymore. He would have to concur with the conclusion of the other analyst if he is going to use it in his report. Which, in fact, means that he is endorsing that conclusion. And that suggests that he do some due diligence to find out whether in fact he believes that. OK, we'll quit and we'll see you on ?

The Real Estate Club is scheduled to meet on Wednesday at 7 o'clock in room 22. The guest is John Flad talking about shopping centers relative to Madison which is

highly relevant to 856 and the data on the Minneapolis shopping center was one of the items handed out. Scott Miller and Lisa Graham did a little interview; they got the current rent schedules, the critical leasing terms and so forth. You should have gotten a one page handout on that. Second of all, the team on the Middleton traffic counts, that has the map of Madison in two parts and the Middleton sector on the front of it so that will give you some idea of vehicle counts in the general vicinity. The third item (in your handout) is going to be used for lecture, we won't get into it today, we'll be at it on Wednesday. So please include that item in your lecture (notes) of market comparison methodologies. (Elaine Worzala spoke on the upcoming Alumni Reunion) ...O.K., a couple of other administrative items; Al Anding will be here to kick off the Wednesday session so you can ask him some questions about the shopping center. There are some leasing plans for some of the spaces and so forth and we'll talk

about what he wants to do and the general market for property at this time and that will give you a little more input from the owner's viewpoint. I think that takes care of administrative matters. Okay, the subject for today stands on something we've already talked about. Specifically, the issues to which the appraiser is required. We may repeat a little of what we have said before. Most clients do not fully understand what they are requesting when they request an appraisal. There tends to be a presumption that "...if I going to do something in real estate, I should have an appraisal to do that." They generally call and say, "How would you like to give me a quote at doing an appraisal at such and such an address?" And often as not, the knee jerk response of the appraiser is to assume the client knows what he wants and that the premise is always a market value appraisal in the classic format. Right there you should have, as an appraiser, some professional skepticism for several reasons. One, he may not need an appraisal, what he may need is an investment analysis of why the hell is he going to do that anyway. He may need a market study; he may need a feasibility study; he may have the cart before the horse. There may be a series of premises that you had better define before that. I spent two hours on Friday afternoon arguing with Darrell Wild. I've appraised the Concourse Hotel at least three times and so forth, and he called me up and said, "I need another appraisal." Oh wonderful ... why? What do we need it for? What is the scenario? Are you going to refinance the existing structure, or are you going to refinance a refurbishment of the areas that were not redeveloped with the Governor's club and so forth. Are we talking about some sort of addition or power attack? What are we going to do about PKF's (Pannell, Kerr, Forster) study that says such and such about there being no demand for additional hotel and now the city is going full blast forward to build one anyway. You gotta sit down with your client and begin to say, "Hey, what's the purpose of this, what's our perspective, what's the scenario that we're operating under" and then, you, as an appraiser, have to decide whether that

scenario is acceptable. In other words the a developer may have a really wild ass scenario that he's going to do 27 stories down on the square and he wants to know, "What would it be worth if it worked?" Well, appraisers can't do those kind of things anymore. You're not allowed to write a blank check scenario and up front on the front page say to the lending officer, "If you buy this idea, 1. Here's my number and 2. I've got a bridge in Brooklyn you would like" which was the old way. Only a couple of years ago you could paint the most incredible picture and if the lender bought it, wonderful. I looked at a fraud case down in Kissimee, Florida, which is in the heart of the cattle country of Florida. The only thing you could say for the site, it was within 20 miles of Interstate 75. And a guy comes in with an idea for the developer who had once developed the golf course at Disney World,--limited to the construction end-- that was his credentials. He was going to build a 27 hole golf course in Kissimee surrounded by 2,000 acres of residential development. And the basic theme was that each hole was going to be a model of a famous hole somewhere around the world. He's going to replicate it that you can play in Scotland at one hole and then play in some other country at another hole. At any rate in Florida they assumed that they were going to do 2,000 or 2,200 residential units for a price range and so forth. The appraiser came back with a residual value of the land at \$85 million and it (the appraised value) sold to a small Savings and Loan in Arkansas who then proceeded to lend, safely secured by \$85 million dollars worth of collateral, \$57 million dollars. The developer drew \$25 million in the first draw, none of which went into the project, but all of which was used to pay off loans that he had on projects in Texas. The Home Loan Banks caught that on the first audit and put the cabash on it after \$32 million was out and nothing was built. The developer has disappeared; he's gone to South America some where. They have a couple of warrants out on him. The President of the savings and loan was fired, but he hasn't been seen much either since then. And the appraiser, upon the request of the Home Loan Bank, revised his appraisal from

\$85 million to \$3.5 million after corrections for a few assumptions. And he still has his designation today as an MAI. That tells you something about the MAI's. Their basic position is that nobody is a bad boy; they just need more education. At any rate, there obviously are scenarios which you as an appraiser cannot accept. If that's what your client wants you to evaluate, you thank him kindly and regret that your work load is such that you'll probably get at it in two or three years and that probably won't be a help. You need to understand the issues for which the appraisal is required and define that with your client. It's not only good business, it's professional. For example, a number of years ago a firm in Madison which has a chain of radio stations came in and said, "We're going to buy such and such a hill out here on the West Side and we need your appraisal of the land." His presumption was that apparently they were all set to go forward with it and all they needed was an evaluation. My immediate assumption was that the only reason a radio station chain would buy a hill would be to put an antenna on it and I immediately countered with, "So let's put an antenna on it anyway. And he said, "Who's talking about antennas, we're going into the subdivision business." Ooops wait a minute, hey, I thought we were a radio station. Well we have a little problem in that we're making more money than we're suppose to and we're now paying out to the five partners and Uncle Sam is going to confiscate it on the grounds that we now have more public surplus than is required for business and we're tax avoiding by not taking it out. So we gotta find another business to invest money. Okay what it really is at that point, is a consulting assignment. Why do we want to create a subdivision on Madison's west side if we have a lot of cash and there are a lot of other things that we might do. At that point you do a feasibility study. And we worked a long process with them but essentially it boils down to how do you make money doing what you're doing. And so we hired young people and we trained them in our Madison stations, one that's good at programming, another that's good at selling time, and we put them out in a defunct radio station that

we find at a bankruptcy sale somewhere in the Midwest, and then put it back on its feet, and we get 51% they get 49%. We do all the accounting work and all the legal work so we know exactly what is going on in any particular point in time, and then we give them the option of either selling it or buying it from us and live happily ever after. So I said, "Fine, you're in the people business. Let's go find an engineer, let's go find a marketing guy, and we're going to go into real estate somewhere and let them figure out what it is we are going to do. You've got the cart before the horse if you're buying land before you know what your investment strategy is. Which is what they did; they went into budget motel rooms. But they still have a problem of too much surplus and Uncle Sam is upset about the fact that they don't pay dividends. But, nevertheless, they are continuing to build more motels and using up the surplus. But the point is that most appraisers are approached with the presumption that all they do is appraisals. When in fact what you're in is the business of real estate analysis and you're not quite sure where your client is coming from until you sit down with him and talk it through. The fact that he called you and asked you for an appraisal, really reflects an implicit assumption on his part that that's all you do with an appraiser. And that fact that you respond back and say, "Fine, what's the address, I'll get right on it." You're making the implicit assumption that that's what going to serve his needs, and both of you are misfiring. There has to be some dialogue. What do we need this for? What's the benchmark for which the appraisal is required? Or are we ahead of ourselves? Maple Bluff comes in and says--"Do a feasibility study on the park on the far North side of town as to what it would take to build condominiums." And, I say, "Hey, wait a minute, how do you know if you can even sell it (the park)? Who gave you the park, what are the deed restrictions on it? It turns out there is a deed restriction on it and they can't build anything on it anyway. But if you went ahead and did the feasibility without challenging the assumption that they knew where they were going, you are obviously doing your

client a disservice. You've got to fully understand the business situation for which the appraisal is required. Now, in addition to the practical reason for expanding the services that you can offer or not doing something that for which he (the client) really didn't have a need, and therefore, establishing yourself better as a professional. It gets down to the fact that ultimately once you understand the issue, then you understand the value definition that's required. If I am doing condemnation, I can't do a Ratcliffian appraisal per se. I can hide it, I can make it look like fair market value ( and that is what I generally do), but nevertheless I have to use the language and the terms of art that are appropriate for condemnation. And certain rules of evidence and so forth, that will constrain. On the other hand, if what he's asking is what do you think that I can sell it for--obviously Ratcliffian appraisal is much more relevant than fair market value. I have to understand the issue to even get down to the fundamental of what is the value I am looking for and how is it defined. Until it's understood by both the client and yourself, you're not going anywhere very fast as an appraiser. As an appraiser, that's your business, defining value and then arriving at a forecast for that value; (you need to) find out an obviously legitimate and organized systematic process. Now, ironically, once you have chosen the definition of value and defined the problem, then you also then now define the area of professional standards that you're going to have to use to govern your answer. If we're doing a value situation on a project that you have never done before, you are professionally obliged first of all to explain to you client, I have never done a hotel before, I have never done a trailer park before or I've never done a sanitary fill site before. And what am I going to do to augment my experience to make this approach legitimate. Maybe I'm going to have to double team with someone who has that experience. And maybe they will take the lead, there is nothing wrong with that at all. Appraisers do that all the time. Maybe you're in a market in which you don't have good market data. You have the client, but somebody else

has the data, you put them together and do it as a team. You have to be able to understand, what is the business problem, as well as professional standards. You can't represent yourself as being an appraiser that knows all about hotels if you haven't done any. For that matter if you've only done one. You have to be forthright in that element. Second of all, depending on which data you're looking at may determine the methods that you'll use. If you're going to have to do a fair market value and it has to meet the American Institute procedures, or it has to meet the Federal Home Loan Bank procedures, then certain things are out. If you're going to do something for a Savings and Loan loan application or if you're going to go to the Federal Home Loan Bank member with it, you can't use Ellwood. You can't use a number of methods which are determined by their analysts to be biased upwards and so forth. So again, "What's it for?" not only determines your professional standards, but it also determines the methods that are legitimately acceptable. That is further refined when we look at the impact of litigation type issues in which reports will also further constrain what it is that you can do and present. And the reporting format will also be determined. If he's asking me for counsel and advice on what it is I think I can sell it for, I can use a short memorandum form to say, for example, "We have analyzed it and the notes in our files which are available to you suggest a range of (prices) of which this may be the asking price or this may be the selling price." You couldn't do that if you were doing a MAI market value report. You must provide a full narrative appraisal in writing. Professional standards and practices are getting fairly complex and it's very easy to trip over a sin of omission or focus, which ever the case may be, which can be very troubling to both you and your client at a future point in time. For example, a securities case--the appraiser defined value without defining it according to the Institute's Standards; they had made up their own definition of value so they could circumvent certain problems in their data. Then in their prospectus they indicated an independent appraisal had been done by an MAI. Those sins of

omission--one, the MAI would not have been permitted to use that definition of value and, two, the appraisal was incorporated by reference into the prospectus by that line. It was not independent nor was it an MAI appraisal. Two significant errors in misrepresentation which essentially is securities fraud. Their client will have to give all of the money back and damages plus interest at the wish of the court because of that little six word error in the prospectus or deviation between the prospectus and the appraisal. So you have to understand the rules of the game once the problem is defined and under what professional standards you are operating in that particular situation. Beyond that, there are some very significant constraints imposed by litigation for which the appraisal may be intended, or for the client. For example, if you're doing a savings and loan appraisal or an appraisal of a property for loan purposes, where that loan may some day be participated in by a savings and loan, it must be R41C standards. And you better read every one of those standards and find out what that is. It begins with page one, that says that the appraiser is to provide a form in which the lending officer has signed off indicating he's reviewed and concurred with the appraisal conclusion and so forth. All the way through there are certain contingents and certain elements of language and so forth that must be there, from page one all the way through the limiting conditions. That's an administrative rule, if you don't follow it, the client can reject the appraisal. Pension funds generally use a letter of engagement. And in that letter of engagement there may be certain obligations imposed on the appraiser relative to inspection of the property, relative to reporting transactions that are in the immediate area. The only malfeasance of a pension fund is if they are doing something that is out of the range of the norm. As long as they all stick together and they're all wrong, there's no mistake. On the other hand, if you're the only one in left field, the presumption immediately is that you were in error. So one of the great comforts to a pension fund is to know that if they own an office building in an industrial



office park, what other pension funds also own office and industrial buildings in the same office park? What is the pattern of ownership? Are we going to stand in the middle of the pond with the rest of our associates in pension work or are we the only one there? It is very difficult for a pension fund to do something innovative which is a "first time ever" sort of thing because at that point, their directors are running the risk of malfeasance because there is no precedence. You need to understand the precedence that control many fiduciaries. And the appraisal report has to indicate whether this is consistent with precedence or if it in fact represents a departure from normal procedure. And if so, why so? One of the hot topics right at the moment is the investment in satellite community land--3-4 thousands acre tracts that will ultimately be developed into a total community plan unit development kind of thing. And pension funds typically have regarded that as a very high risk venture. There is now evidence to show that the returns are significantly higher, all be it perhaps somewhat delayed, with no immediate cash flow, than there is in regular investments. Perhaps it is a better investment than an office building. Probably has been a better investment than office buildings in the last ten years. The first pension fund to go in and finance a new town builder or satellite community builders, as they are generally called, is running a significant risk. The third and fourth one doesn't have any danger of malfeasance at all; they are simply fitting into a pattern that has already been established. The litigation process is a very scary one for the appraiser and one that tends to modify the reporting process. A major element of litigation is what is called the discovery process. The plaintiff and the defendant go into the judge and say, "Sir, we have reason to believe that this and this is the case and we want access to the client files to find out what are we really thinking about in this case and so forth." It is contempt of court and you can go to jail if you dump out your files after the litigation has started. They have access to anything that they want. They can get a discovery order that

says you can have anything relative to a specific property or a particular time period in the business and the opposition's attorney can park and go through your files. Not only that, when you are called forward for a deposition, they require that you bring all papers that may have any relevance at all to it along with you. And I have seen cases in which they virtually had pick-up trucks arrive and unload cases of materials. Attorneys have access to all of that. Therefore, if you're moving into litigation, what you want in your files and what you don't want in your files is a critical element. A case we were in last year, one of the things that they had kept in their files were telephone memos of all the conversations they had for trial. That's the most damaging hold to the client's side they had. The client had called up and said, "Gee, your value on that apartment project is low, we think it should be higher." And the appraiser said, "Well, it would be if there was seller financing on it." And they said, Good, assume that the seller would provide financing on such and such a rate, now what's the number?" And they came back with that number. And they kept the telephone memo on it. And that destroyed the independence for that appraiser, and it's going to cost the client millions, simply because he kept a little memo of a telephone call in his file which emerged and dropped into their laps in the search. There's almost no confidentiality anymore. And, therefore, you may have some great telephone notes and you have a little gossip on this one and a little misinformation on that one and so forth. If there may be litigation, throw it out. You have to learn to keep most of what you know in your head. And the notes that you do keep are pretty neutral and pretty objective and pretty factual. Or they're going to trot it out, did you or did you not say to so and so on such a date that Herby was a klutz, a smuck and not to be trusted and you would just as soon settle. And if you said that, then there goes your independence. Those are not the kinds of things to keep anywhere. Confidentiality means that the only thing that is confidential now are those things which are in the work notes of the attorney. As a result, your

contract may not be with the client at all. You'll be hired by the lawyer to be of service to the lawyer. All of the communication will be with the lawyer so it remains in his confidential file and he can require that having done your analysis, you can call him up and tell him where you think the conclusion is going to fall and he will either tell you to write it or get lost. Or the that initial format of the presentation will be oral, while he can't change your opinion, he sure doesn't need to put it in writing for somebody else to discover. As a result litigation very much changes who you communicate with, what you communicate, what kind of files you keep, what kind of files you don't keep. A whole change in protocol. The second step in the discovery process is the fact that both sides have to decide who their professional experts are going to be and on what issues they are going to contribute. And then they have to be made available to the opposite side of the question. And you are walking a delicate line. Your report may or may not be concluded, it may or may not be final. Typically your client wants you to be talking in preliminary terms so that if you get trapped on something in the deposition, you still have options to modify or change the em-pha'-sis it to a different sy-llab'-le in your report. And the deposition essentially is a cross exam by the opposition. Who are you? What gives you the right to comment on the subject matter at hand? What precedence do you have? What research have you done? What were the instructions from your client? Show us everything that your client has provided you and at that point you open up the box and then say, "Okay, here are the documents which they gave me. Here are the leases which they gave me, here is the correspondence which we've had." And they can go through all of them. And then they can start to probe. They're trying to discover several different things. One of them, of course, is do you know what you are talking about? Two, obviously where's that logic that falls out a little bit and they can perhaps confuse or discredit or throw you off base and to find out what kind of poise you have under relatively hostile attitudes. There are all kinds of art

forms in a deposition. Some people come in hard as nails, other people come in with trick questions and act deferentially, some are just as sweet and disarming as could be. Every attorney has his own approach. The object is to answer his question directly, but with as minimal amount of information as possible. You don't want to go on and ramble at length, because if he fails to ask the right question you have no obligation to point that out to them. In the regular court room, if you were asked the wrong question, you would help him redefine it to make you look good. "Sir, you need to be talking about the after acquired clause, property clause right? And you help him rephrase your question, that's good courtroom technique. In depositions you just maintain a blank look, you say, "Yes, no, yes sir, no sir. Step one was to gather my data, step two was to organize my data, step three was to produce the table that you have before you, step four my conclusion was, etc." If he wants to ask you more about that, great. And if he doesn't understand regression, that's his problem. You don't have to explain that. In depositions you are giving away everything as grudgingly as possible without being uncooperative. You know, if you are a totally uncooperative bastard he can go back to the judge and say that. "He's unfair, the witness has been primed not to give answers etc., etc., etc.", and come back with a judgement order that you open up and talk, but you can't do that either. There's a very fine line of presentation. You have to know the questions to ask. You are a coach in a sense. So sometimes in a deposition he'll bring his own expert. He has his appraiser there. One of my roles quite often in litigation is to be coaching the attorney to ask the right questions. The only one who can ask a question in a deposition is an attorney properly delegated and designated to do that and, in that single case, as one of the representatives of the client. So I can't ask questions directly, but I can whisper in the attorney's ear and he can repeat it. In Atlanta a year ago, we had an interesting situation. It seemed like there were 14 attorneys representing all the different interests in this room and all from an elite law

firm in Atlanta. The senior partner was formerly a federal judge. Very distinguished gray haired gentleman. And we're taking apart their appraiser who in turn was also endorsing the original (work). This guy was the expert to show that, he may not have been a little sloppy, and that boys will be boys, with the standards we're capable of in the South. And I'm firing the questions to our attorney who doesn't know much about appraisals and it is going slowly, as a result. And I'm trying to explain to our attorney why he wants to ask this question and you're trying to do that quietly so that you're not giving away the sequence of what you're going to go on. Finally, one of the other attorneys turns to the former federal judge and he says, "Judge Smith, given your years on the federal bench, could you designate the professor as a member of the Georgia Bar for the afternoon so that he could ask the questions directly, and we could be home for dinner?" In the time honored fashion the judge who is on the spot says, "I'll have to take it under advisement." But, nevertheless, if you start down that road and you participate in litigation you really have to understand what you want to do. You really have to understand what the issues of the case are, because you really don't want to be on a wrong side of the case. It's very hard to provide a rationale and logic for somebody who's just being stupid. You might I have to say so, "Hey, look, this is the way that it is; if you're given a a settlement, you'd better take it because and so forth for" or "Gee, thanks but I think you have a pretty fair value there on your eminent domain and if you want a number made to order, call so and so." And, so again, the appraiser really has to understand the issues of the case. What it is in terms of his skills that he brings to those, and what it is in terms of topic that he shouldn't touch because his credibility, and his experience, and his expertise is not in that area. Then you have to define the window in which you can participate, if any. And those subject areas which are out of your area of expertise. One, because you do yourself a disservice if you venture out into deep water and then you get cut to pieces on the stand. A lot of people don't

forget that. And two, you do your client a disservice if you get cut to pieces on the stand because you don't have the legitimate experience and that type of competence on that particular turf and so on. Once you get past the deposition, then you typically finish your written product, and you deliver it to the attorney, who at some point in time, will have to trade it with the other side. And the other side will then have an opportunity to nitpick your appraisal to pieces. An appraisal written for litigation has to be careful that it presents exactly the facts that it has collected, but offers no open or dictum statements by the appraisers that aren't necessary to reach a conclusion. It is terse, it is sparse, it's learning to write like a Western Union telegram, the (facts) have to be there so that people can follow your logic. But at the same time, you tend to leave a few things out hoping that they will ask you about that so that you can come back with additional facts in the court room that gives you credibility and which obviously come as a surprise to the other side. There's a basic rule in examination and cross examination--never ask a question you don't know the answer to. But its very nice to dig a few little surprises along the way, that you hope he's going to ask a question that he doesn't know the answer to. And when an attorney walks into one of those--he's dead. And sometimes, you know, they just don't pay attention. That's wonderful. I saw one that was just gorgeous. Years ago we were doing a case on an extension of the highway around Stevens Point. And the major part of the case was an aerial photograph of the site which had terrible soils for anything. By happy coincidence or because of the skill of their grandfather, they had put the cottage home on a little spit of sand that then drained into a creek up there, so the septic tanks had always worked. But all around this little spit of sand was a soil type which has the absorption of concert, maybe a little less and the highway was to go over the top of it. And we had on a gentlemen who worked for an appraiser up there for the highway department and he's a little frisky guy whose about 5 feet one, hair parted down the middle, flipped to each side like it was a very cheap

toupee--little glasses on the end of this nose, feet which hardly touch the floor sitting there in his little wooden chair. He wants to be a powerful guy. Just delighted that anyone asked his opinion. And this attorney comes down really hard on him, he says, "How dare you expand a photograph of the soils book so that you went from 1/250,000 to 1/24,000?" He said, "Isn't that, in fact, going to lend a great deal of distortion and blurriness to the picture and what qualifies you to make that kind of enlargement? And he smiles sweetly and he says, "For 15 years, I was with Consolidated Paper Company as an expert photographer. My job was to take pictures of paper coatings and enlarge them so that we could study the crystalline structure." And he was off and running about lenses, etc. And he is so pleased he had been able to answer the questions--the attorney died. Question number two, -- his attorney doesn't know when to quit and comes back and says, "Well, sir, isn't it true that the soils book that you're using is really just for farmers to help them in the rotation of their crops?" And, again, he's trying to help, "Oh, no sir, if you look right here on the front cover." And right on the front cover it has "Wisconsin Soils are da-da-da-dah and the reason it was prepared to help the farmer in the husbandry of his fields, the engineer in the construction of roads, and the appraiser in the valuation of property." By that time the jury was giggling. And that is a very bad sign. But you have to remember that the way to make your presentation in court rooms is largely oral rather than by written word. The complexities of your report, the nuances of the prose that you have carefully crafted in your report, is not the way it's going to be communicated to the judge who may read the report, after the fact, but probably not. And the jury (who probably will never read your damn report). The attorney has to ask you question by question, "What is it that you do, what did you do then, etc.?" And if he allows you to ramble too long, the other attorney is going to jump in and say "Your honor he's rambling, these are leading questions, da-da-da-da-dah, and so forth." Make the attorney ask a specific question, and so you have to write

a script for the attorney to tell you what the right questions are to ask, in which sequence so that you can begin to explain to the jury and the judge what it was you did and how it is that you arrived at the conclusion. Now you may have a few props, they're going to ask you relatively simple ones (questions). You may have arrived at the answer on a super duper 10 year cash flow projection and so forth, but you may have a jury of auto workers out of Kenosha who could care less about that and you're going to put them to sleep. So you have to find that happy medium of using techniques which have credibility, but then be able to explain them orally in such a way that they add credibility without (confusion). So the communication process becomes a significant part of the appraisal process. Obviously, it's different depending upon whether you have a jury or a judge only. When we look at litigation towards the end of the semester obviously either party can request a jury, either can go to the judge. And it really depends on whether the judge understands or cares about real estate. Many circuit court judges and many federal judges find real estate a bore and the people who are in real estate boring. As a result they tend not to care about the questions. Others are very sensitive to the nuances and you can talk to them about some fairly complex issues and they'll come back and hold a dialogue with you. Where you have a judge only, the judge can query the witness just as the other party and he may hold very intelligent dialogue with you. Again you have to communicate in a way which is deferential but, nevertheless, firm as to your views are and so forth. Finally, of course, whatever you present is going to leave you vulnerable in cross examination. The cross examination isn't designed to get at the truth; it's designed to conceal the facts by undercutting your credibility, seizing on some point of weakness in your presentation, or what appeared to be an apparent contradiction, or, in fact, they really don't care about what you say. They may simply want to keep repeating a question to plant an idea in the jury's mind. And it may be the question that's communicating an opinion to the jury. For example, they really



don't care what I have to say, because the more I say will hurt their case. But on the other hand, they would like to say, "Well, Mr. Graaskamp, how many security issues have you been involved in?" "None." "Doesn't the security business require a special kind of expertise, etc., etc., etc., do you meet that kind of expertise?" And you have to counter attack immediately. If you're not on your toes and don't understand what the issue is, you'll have to come back and say, "Wait a minute, the issue here is not securities, the issue is appraisal and whether the appraisal was independent and whether the appraisal was done according to standards of the MAI Institute and on those things I am an expert." And they'll try to cut you off. "Your Honor, I've asked him to answer "yes" or "no." I have to come back and say, "Your Honor, you can't answer that question yes or no." And depending on whether the judge likes the case or not, he may let you retort or not. By the same token, on the cross exam I've been in situations in which there was a time limitation placed on the trial. A case in Milwaukee in Federal Judge Reynold's court in which he said, I'm so tired of hearing about this" (it was in court for about four weeks) that he said all cross examination will be terminated on Friday at high noon. And I'm the last witness and I'm going like sixty on Tuesday, and so forth, and we made a long presentation with all of the details because that used up some of the time. And then when they would ask me a cross exam question, I would tend to ramble and give a lecture on why the models used a flat rent because of the pass-throughs and the escalators, etc., etc., and finally the other attorney looked at the judge and said, "Just have him answer the question yes or no." (end of tape 4.1, side 1) And the judge said, "That is a perfectly improper direction to the witness. He can answer the question." And with a wink to the jury, he said, "We all know professors tend to lecture a little." Which was a license to ramble. So when the attorney asked me another question, I again answered it very thoroughly and again the attorney complained. And the judge said, "I think that was a very complete answer." What they didn't know was that I had worked

for the Judge when he was Governor. Somehow that subject never came up. But, nevertheless, the appraiser has to be prepared and to know when to duck the question because it's obviously going to take you down a side road that reinforces issues that the other side may want to plant or reinforce in the mind of the jury or the judge and pick up on other cases at which you can turn the question to your advantage and so forth. The premise that the witness is totally neutral, just ain't so. The first thing you're doing is protecting your ass, and the second thing you're doing is protecting the lawyer's ass that you're working for. That doesn't mean you lie, fib, steal or cheat, and so forth. But it does mean that you learn the nuances of the case and what you are going to emphasize and what you are not going to emphasize in terms of your answers. There's quite a different type of communication process than just simply writing a report and letting it speak for itself. The last major element to be understood and settled early on with the client is the significance of the appraisal conclusion in terms of dollars to the cost of the methodology. If you're going into an eminent domain case in which you're only \$25,000 apart or have the probability that 60 percent of the time you made your point, it's some part of the difference between the offering price of the condemnor and the asking price, if you will, of the condemnee. Now we're looking at maybe a probability of say 60% times \$25,000, so \$15,000 is the maximum you're going to be able to get, and the attorney is going to cost five or six grand to try the case. How much can they afford to pay for the appraisal? Probably can't afford to pay more than \$3,500 or \$4,000 for the appraisal, and what's worse is that it has to be done in 60 days or the State won't pay for it. And if you spend more than that, the State will challenge it on the grounds that they could have gotten anybody else to do it for less; I have this problem all of the time. I'm always doing battle with the State. They hate to see me coming and so, as a result, they always make a big stink about paying Landmark's bills because they want to get the word out that if people use us to oppose the State under

eminent domain, there's some possibility that they're not going to be fully compensated for the appraisal. We always have been fully compensated, but it's always been a long fight with the State Highway department, who hates our guts by this time. So you really have to look at it. On the other hand, relative to the appraisal that Mike Robbins and I did for the folks out in the Northwest on the taking of the wilderness district, we're talking about 25,000 acres which the Department of Natural Resources is saying, essentially, it's worth \$50 an acre and we're saying it's worth somewhere between \$750 and \$1,250 an acre, there's a considerable budget there. And, ultimately, I think they offered \$12 million and they settled for \$28.5 million and our appraisal was \$34 million. And it probably cost \$350,000 to do the appraisal. The pay-off matrix of going into a highly detailed analysis of 10 acre cells of all of the land not only was in the subject property, but over 100,000 acres of comparables as well and then developing computer systems to not only catalog all of that, but match all of that and, so forth, has a payoff matrix that allowed you to do that methodology. Where you might not be able to do that at all for some of the much more minor appraisal problems. So you have to understand, how many dollars are riding on this baby? And, therefore, what methods are legitimate relative to cost effectiveness? And does the client understand that? Not only does the client understand that, but does the client understand that maybe they're not going to bid this on a fixed price basis. That it's a cost plus expense deal, and the range of expenses will be from \$100,000 to \$200,000. And we'll bill you monthly and give you a report on how we're doing. The appraiser who finds himself locked into a fixed price before he fully understands it gets killed. Just ask Jean and me about that, because we did that this year and we did about a \$75,000 appraisal for about \$32,000 and died. There are two ways to do that. One is you cut the quality, or two, you remain a compulsive perfectionist and bitch a lot. And we should have been much better off--we should have inspected the data and the property, and so forth, beforehand. But the assignment looked

fairly innocuous to us and we really didn't understand what the records were and what the history of some of the properties were. As a result we got killed. So went the summer-not a good summer. All those things need to be ironed out and the issue for which the appraisal is required. That really defines the business problem, not only in terms of your relationship to the various parties, but in terms of the value of your product, the cost of services that you are going to provide and the rules under which you will operate. Many appraisers hardly bother with any of that, they simply assume that if you called up for an appraisal, that's what you want, and you get the same product no matter what it is going to be used for. And if they find out it's going to be a litigation they won't do it. One other element in the business plan is some preliminary investigation of what kind of data is available, from whom, at what cost, and probably it's wise to visit the property. For those that are operating primarily in their own territory, say Dane County, it's quite often true that they are familiar with the property and they have already appraised it several times, or at least once. But more and more the national appraisal firms are, obviously dealing over a very wide geographic area, and they may or may not have familiarity with a certain market. And it behooves you to figure out how am I going to find out about that market, and whose got that kind of data, and will they cooperate with me and so forth. Relative to that kind of data, more and more the appraiser is no longer the lone wolf. More and more the appraiser has to identify expertise that will assist him in the analysis of the property. And by understanding the property, he will be able to make his proposal to his client with allowances in the proposal to hire outside expertise. The most obvious sources of expertise are going to be: (1.) Soils people, and related to that, of course, those that are able to identify possible hazardous materials on site, or knowing the possible presence of those. (2.) Architectural historians, if he's doing a landmark structure, he will need some form of architectural evaluation and history of the building, and possibly structural deficiencies

that are going to be in need of cure or that could pose some sort of limitation on the reuse of the building such as the floor load or the fire protection code (end of original micro-cassette tape -- blank for 3 digits on the counter) What is distinctive about this building?--is it the general age and style, or is it the woodwork and the fireplace mantels and the latest interior detailing, etc., and they always do a better job of that than the appraiser. (3.) The third kind of expert, more and more required particularly when we're dealing with older commercial buildings, is a mechanical engineer. We want to understand the energy efficiency of the building. Does it meet codes in terms of the BTU budget, kilowatt budget? Are there minor adjustments which could be made that would drastically alter the utility budget? When the first energy conservation waves hit there was an engineer in town by the name of Sweeney with a group called The Capitol Design, Inc. He had a standing offer that if he could come in and evaluate your old commercial building, he would make whatever adjustments were necessary to improve the utility efficiency and he could have 50% of the savings to your electric and your heating bill over the next 5 years. Don't do it. It is very easy to find those kinds of efficiencies. It is a matter of changing horse power, going on to sequential fan switching systems and a variety of relatively minor adjustments, that accomplished very significant economy in your surge costs and in terms of your heating costs and so forth. The appraiser has to understand that or he is going to tend to undervalue the building. Remember it's a knowledgeable buyer, knowledgeable seller, if you're doing it for the seller, you've got to really tell them hey, your problem is here in your heating system. If it's the insulation in the roof, do the following or otherwise it will make a significant difference and you're going to permanently depress the value of that building with a utility bill that doesn't have to be taken for granted. You have to understand that. Or they (the seller) won't let you do that, then you have a limiting condition that says if you continue to operate the building as it is currently, then the value is such and such, but we

believe there are economies to be had, etc., etc. That's part of being the a professional service. The mechanical engineer today may have to look further for the presence of asbestos and florins which are regarded as hazardous. You may have to look at possible structural flaws. A couple of years ago we appraised a building which is now a big office furniture dealer on East Washington Avenue. That building is built on rather poor soil, the water table is extremely high on East Washington Avenue, and a couple of concrete beams have literally sheered, and so forth. So an appraiser really can't decide whether the building is salvageable or not salvageable until he gets an engineer to come in and say, "What do we do about that sheer, and what's it going to cost?" The building without the sheer is worth \$500,000 and it's going to take \$150,000 to correct the structural failures. You have a \$350,000 building less whatever risk factor the market wants to discount that at. Now, the alternative is to say, "I didn't see anything, so my appraisal is not subject to any of mechanical difficulties." But at that point you would be doing something that would have no use to the client at all. If it's a perfect world, and this was a golden pumpkin, it would be worth so much, but it ain't. And finally, ask a mechanical engineer. You may want to either use a life safety engineer or fire engineer; it depends upon the nature of project. This is all part of the information gathering process. The responsibility of the appraiser today to not know the answers, but to know who to bring in to ask the questions, is growing, so that the appraisal is becoming a team approach. I see the day ultimately where the appraisal office will be a clinic of specialties in which there will be an engineer for the mechanicals, and a civil engineer for the soils and traffic patterns, and a variety of other subject areas that are in the topic area of civil engineering. And then probably someone who is also in the area of life safety. One of the predominant areas of obsolescence today in buildings and one in which you can expect a new wave of code enforcement is in the whole area of fire and related consequences of fire, namely toxic air conditions and so on.

They are discovering, obviously, that most of the loss of life in the building is not due to the building failure or the structural plane, but in fact to the interior gases and so forth from the destruction of the furniture in the interior or the ceiling materials, the wall materials and so on. And that's going to become a significant element of refurbishment and restoration of the building. But beyond that the air handling equipment is also, in many cases, counter productive. For example, major office buildings require that the stairwells be pressured so that if you are going into a fire stair to escape, the air pressure in the fire stair has to be higher than that in the corridor so that the fumes in the corridor can not flow into the stair well and simply make a flue for the toxic chemicals that tend to kill. In most buildings that's almost dysfunctional today, it's not operating properly. It will cost a considerable amount of money. Sprinkler systems -- the adequacy of the sprinkler systems. More than once it's been discovered that when a mechanical engineer goes to look at it, the sprinkler system was actually turned off because they had a couple of leaks. And rather than replace the pipes, and find out where it froze or whatever and risk another burst of a sprinkler head with resulting water damage and so forth, they simply turn it off. That kind of thing can be a very expensive element. This is not to say the appraiser is holding himself forward to be a building inspector to suggest that it meets all the codes and so forth. But on the other hand, if you're working for a client who says, "How much should I pay for that building?" the more professional information you can provide him with, the critical questions that the client should be asking and paying to find out about, the more you render your professional service. Simply reporting the value of the building as if everything was hunky dorey, is no use to him whatsoever. The question he asks you is how much to pay for that building, and not an imaginary one. Upon the result of the appraiser and his collection of data he's quite often totally out of his element. There's nothing wrong with that, other than knowing that you're out of the element and that

there are critical questions that should be asked by other people who are trained in that particular area. So the data collection problem on major commercial properties is becoming a significant ethical problem, if you will, for the appraiser. Many of the major appraisal firms doing work for the pension funds never ask, they don't ask for an allowance or anything else. They simply hold harmless agreements that presumably lets them off the hook on anything they can't see with the naked eye. As a result the appraisal isn't worth anything. Now if your client wants to keep the papers in a file drawer in case anybody would ask, then I suppose you've met your purpose. But on the other hand, you haven't done a professional job. And the Institute is beginning to recognize that. The Institute is beginning to recognize that there is certain justification for hold harmless or limiting conditions within the appraisal report, but simply wholesale disclaimers that say "I don't know anything about the soils, I don't know anything about the structure, I don't know anything about the mechanics." And so forth, simply were never intended to be examples of the hold harmless cause. And that's what makes appraisal intellectually exciting today. Understanding an older building, it doesn't have to be very old--1970--and they still using sprayed asbestos in the building. We're not talking about anything from ancient history or even an historical landmark, we're just talking about basic industrial base and understanding what makes it work, and what the limitations are and what it would take to correct it and so forth. A really intellectual challenge of the appraisal process. Ok, with that we will quit, and see you next week.

Introduction of Al Anding, the owner of Parkwood Plaza in Middleton, the subject property for #856 Contemporary Appraisal. Al spoke on the background of the acquisition of Parkwood Plaza. Ground lease on 95% of the property which was assigned to us etc. His presentation has not been transcribed. This part of the

presentation runs from #1 to 486 on the tape counter. \_Graaskamp lecture:\_ The



subject which we have initiated, but certainly by no means completed, is analysis

of the property and the determination of alternative uses for the property.

The object of the exercise of property analysis is to arrive at a minimum of four

alternative uses no matter how implausible they might be, but only so that you can at least indicate that you have analyzed the alternatives and that their most probable use represents your opinion of what the ongoing use is likely to be. Any property at any point in time can go forward as it currently exists and is configured, (or) can go forward with some slight modification of its current use. For example, this property will continue as a retail strip center undoubtedly, but it may be modified as to the number of stores and the average size per store. And perhaps even in the physical appearance of it could represent some updating, upscaling - whatever you want to call it - to adapt to the current market. The third alternative, of course, would be a change in use. And the fourth alternative would be demolition of the existing improvements and presumably reuse of the property. In most situations at least one or two of those are highly implausible. But it's appropriate for the appraiser to at least investigate it without discounting it immediately, lest he miss a significant opportunity in value or value that could be added to the property. In some cases it may be only partial demolition. I can remember the Park Plaza down on South Park Street, in the valuation of that one, really would have called for demolition of about 50 percent of the property and a reorganization of that property in order that it would be an effective retail structure. It began as an insurance company office and headquarters and then went down from there as various things were tacked on by a doctor from Illinois who was not playing with a full deck. Good thing they were one store buildings because his elevator didn't go anywhere. Although you may have some intermediate position, at any rate these are the four alternatives which should at least be given a

cursory examination by the appraiser. Now, the definition of best use should be read so that the appraiser is ultimately going to set up a grid which tries to state in terse fashion how he has addressed each of these problems. And if you read the definition of best use from the terminology handbook, which you don't have to write down at this point because you have it in your readings. "It's that use from reasonably probable and legal alternatives - reasonably probable and legal alternatives." So first thing you have to know is what does the zoning say we can do, is it consistent with that. Occasionally, the appraiser is allowed to hypothesize a zoning change, but if so he must demonstrate that there were comparable precedents of other properties of similar characteristics perhaps in the same general area in which the zoning board reviewed the zoning and changed it, or granted an appropriate variance. There must be empirical evidence that the attitude of the community is to arrive at certain zoning and quite often that's critical. For example, in a case involving the Wisconsin Brick and Block Company one of the major issues was what was the most probable use of the site. And the Internal Revenue Service was alleging great things in terms of a high rise apartment building and so forth. But when you talked to the Chairman of the Planning Commission he said, "Wait a minute, we allowed a density of let's say ten units per acre for the condominium project which failed next door. We're sorry we did that. We had actually scaled them down, but what the zoning would have permitted at 14 unit. We feel the site is too dense and overbuilt and the maximum we will allow on that site if it goes residential is 6 units per acre. So the appraiser not only has to look at what's legal, but talk to those folks who are addressing and administering that and then is allowed to cut it down. You cannot simply take the black letter law as final on that point, but must examine what the precedents are that may be germane to that. Next it says, "those found to be physically possible." Therefore, the appraiser is not permitted to hypothesize again. (Build) Camelot (an apartment complex in Madison built on soils with high water table that had to corrected)

if the soils won't carry it, or the massing is simply not appropriate to the Planning Division or whatever. And if you're in an historical zone and you can't change the outside of the building, then they are obviously significant limitations. If the historical zone says it's R5 and you can have residential, but you're permitted a maximum of 1500 sq. ft. of commercial use, that becomes the cap on what you can do. So you have to know what's physically possible on the site. Quite often that means that on a blank site, for example, you have to sit down with an architect and work out with him what the alternative building envelopes would be on that site given different setback lines, under different interpretations, or different massing of the buildings and so forth. Next it says, "Appropriately supported." Appropriately supported is a euphemism meaning there's effective demand. Somebody needs it at a price that they can afford to accomplish what it needs to be done. So if you're thinking about doing class C office space in downtown Madison, and that's the appraiser's most probable use of the property, he has a real problem satisfying that constraint. Where is the effective demand going to come from, if you've got 37 percent vacancy to other class C space and no (end of tape 4.2, side 1) and no parking on the existing site. We'll look at one like that and give you an example. And finally it has to be "financially viable." I like to use the word "financially viable" as distinct from "feasible." The official definition uses the word "feasible." "Feasible" I like to look at in terms of all of the physical, legal, and market constraints that impose on the property because financially viable really depends on the current interest rates. What can I borrow money for? There may be something that is perfectly feasible to do, but it is only viable when interest rates are below 9 percent, and wouldn't be otherwise doable. I think it is important to distinguish between the fact that financially viable shifts with the capital markets and the price of money, whereas what's feasible, is more a long term set of contexts to the constraints. And finally which results in the highest land value. And the highest land value obviously is going to be

the total nominal value of the project, on some basis, minus the cost to accomplish that, other than land. What falls out the bottom is residual land. Residual land is a very messy concept. Obviously, a very small error in the cost (calculations) results in a very high error in the land since land is only about 10 percent of the deal anyway. So if you're off one or two percent on the total cost of the project, you're off 20 percent or more on the value of the land. So we look at highest and best use, we're really not looking at the value of the land so much as we are at the order and magnitude of difference in terms of what that residual might be because whatever residual we calculate in a preliminary way is really mooshy. Now, if one use is three times as big as the next use one has some comfort in saying this is closer to best use than this one, but we really don't know by how much. Doesn't decide the value. And so our initial pass as an appraiser in attempting to rank the economic power of alternative courses of action is really looking at orders of magnitude of difference. And while the numbers have a specious life of their own, it's just that, it's specious because the appraiser doesn't have time to price out four alternative projects and detail it in such a way that there's very much reliability in the numbers. What's important is simply that we can say this is more than that one, and we'll hope that the degree of error in each of our approaches is about the same. We'll come back to that and I'm sure that you'll see what I mean when we start using back door approaches and saying, "Gee, if office rents are \$8 a sq. ft. triple net, and this is the budget we can spend in office buildings is about \$55 a sq. ft., then how much do we pay for the land? You know, it's a pretty broad brush treatment and it may still come to the fact that as office space it is worth twice as much as apartment space and half as much as something else, but that's about all that we can say about it. We can rank them, but we can't really value them that way. But beyond that, the official definition says "...that implied within these definitions is recognition of the contribution of that use to the community environment or

community development goals." The official definition says, "In addition to wealth maximization to the owner..." But that was originally, according to Byrl Boyce, was suppose to be, "...at the expense of wealth maximization to the owner", but that was more than the National Association of Realtors could take. That was the socialists taking over right there. And so we said, "Fine, if you wanted 'in addition to' if you could figure out how to make the same pie bigger, wonderful, but obviously if you assign some of the incremental value to the community, the private sector is going to be less. Also implied is the germination of highest and best use results from the appraiser's judgement and analytical skill. It represents an opinion and not a fact. But at least it sets up for us the grid that says, "Okay, we're going to look at four uses across the top and those four uses we have to address some major issues, one, is it physically possible to do that or there are some real problems?" If the soil is so bad that the gasoline tanks would keep floating to the surface, so it's not going to be a good filling station site. Or two, is it legally and politically acceptable to do that? And if the (City) Council has decided the area behind GEF is to be upgraded as a residential area and they don't want to introduce parking and so forth, it may be zoned for office buildings, but they're probably not going to let you do one. Madison's got some pretty strong Council members. A perfectly legal taco parlor was going to go down on Williamson Street, zoned all appropriately. But the Council says it's not an ethnic taco parlor and we have Hispanic Americans in the area who would be offended by a commercial taco parlor-and therefore you won't build it. That's Madison. So you have to look at the legal/political. The third thing you really have to look at, obviously, is the effective demand. Again, a broad statement, -- all zoned residential area, \$0.75 sq. ft. rents that will justify remodeled construction or whatever. Or perhaps this is a Class C office building and the most you're going to get is \$5 sq. ft. after you remodeled and you can't afford to do that, etc., etc. Fairly broad statements, but is there

effective demand? What is the base rent (you need) if you take out all the expenses and so forth look like; is that enough to make it run? Yah, or Nay, or Maybe. A favorite word of real estate students- soft market, what is a soft market? I don't know! Try to find another word. Soft market is usually the right of "Bush" ? thinking. And then the next category, of course, is what is it going to do for the community? What is it that this will get for the community? You can say, "Gee, this is a tax increment district, they need the tax base. This would be a good thing for them to do," or "Gee, if it were sold as a school for school use, it would go off the tax base. I don't think that's something they want to do." This has been painted by the master planner as being for a park; this would be a head-on assault against the open space, green space boys and so forth. So you really have to look at what are the community plans for the area. Is it going to be a source of friction? Are they going to care that much?, Or are you taking a head-on assault against the forces that be and so forth? And you have to evaluate each of the four alternatives that way. And, then finally, you want to look at the final item, "Is it financially viable?" And financially viable means that there's a positive value when you take your back-door approach and you arrive at money available to spend for land. If it comes out that there's a huge negative value attached to the land, obviously it's not financially viable. Now if there's only a minor negative thing and it's tax increment district, and it meets all the other criteria of community, you might argue, "Yeah, it is viable if the user can get the TIF grant to cover the difference." The "but for" clause that characterizes UDAGS and TIF districts and so forth saying "It's a good idea, it advances are to meet community goals, there is effective demand at this price and, so forth, but we still have a short fall in terms of the value relative to the cost. At that point, it is legitimate for the appraiser to argue, "Hey, the TIF district is adequate to cover that difference. Therefore, the most probable use, in this case, will be a subsidized, public use." A perfectly legitimate conclusion, if

these resources would be available. You can't advance a UDAG, you can't invent a TIF district if it doesn't exist. But where we're talking, let's say the north square area (CDBG Madison) and the area adjacent to the Concourse where there's \$2.9 million sitting there waiting to subsidize somebody, a buy-down on land costs or a buy-down on parking costs, consistent with the master plan for that area, is a perfectly legitimate factor to be incorporated into the appraisal. That's why it's so important to look at each of these zones, because what was traditional appraisal as to what its best use, isn't necessarily sold today. We now have a great deal of community participation and capital subsidies of real estate. Now, that's the goal. I think it is always useful in terms of doing analysis to say, "What is the final report that I am trying to provide?" and drive toward that conclusion rather than ramble. (Question? Don't most appraisals just reaffirm the current use as the highest and best use?) Absolutely, it's been a throw-away for years. They have one-liner which says "The highest and best use is the current use." Period-that's it. Boom! When you have buildings in transition or areas that are certainly on the verge of change and so on, extremely dangerous to take that for granted. Now, we can't do that anymore under professional standards that say that we must be able to support that opinion. Now the appraisers in the old days used to escape that by saying that, "If you have further questions on this I have notes in my file." The challenge is that they can't find the files, let alone the notes. They don't exist. Well, those kinds of days are over. If you're going in under R41C, you better have a couple of pages on how it is you arrived at the best use statement. Full investigation doesn't mean you have to do a feasibility study of each of the alternatives, but it does mean that you should be able to check the major perimeters just like I am suggesting. It's certainly going to be an order of magnitude ranking and it may just be common sense, you know, putting in a chart, but, at least there has to be an indication that you did what the definition says. That you chose from those legal alternatives that which seemed

to suggest the highest present value to the land. You have to be able to show, "Hey, I examined these four alternatives. There may be more, there may be six alternatives, but at least I examined the four classifications of all of these and I examined it from the four attributes that are important. Does it work physically, is it legal, is there a demand for it, is it viable to the community who wants it? And you have to strike some compromise between that which is cost effective and that which is going to be a more of an ongoing in-depth analysis. To you people, I'm suggesting the matrix that is in your handout from the other day and we'll use that on Monday to go through a couple of 'for instances'.

And in your handout also there is a page or two of purple prose (in the literature) indicating what you had to say. But we're talking about a subject property in Middleton which is a property in transition. It's a property which in terms of its original concept and function is now obsolescent and obviously it's going to be repositioned from a retail stand point. Okay, now in looking at those elements we define (blank spot-end of side 1 of the original microcassette tape) 135 we have legal/political attributes, we have the linkage characteristics of the property, we have the dynamic attributes, those that exist in the mind of the beholder that may be particularly strong on which we can capitalized. And, finally, we have environmental attributes which probably would be better stated as contextual because not only are we concerned with physical environmental problems like, where does the water run off to and so on, but we are also concerned with political environment. And whose got aspirations for the property and whatever. And what are the social implications of the property and so on. And then the appraiser is going to have to apply the analysis accordingly. We'll reserve some detail analysis on that particularly relative to building codes, land ordinances and so forth to next Monday. But, additionally, this section in analyzing the property, item A is going to be who owns the property? What's the entity? Item B, what's the nominal identification of the property, typically the name of the building and the address on the



street--the Tenney Building at such and such an address, the nominal identification. The third item you're going to have, Item C, is going to be typically the legal description of the property. Often the legal description is quite complex and they use it either as an exhibit, such as Exhibit One with a full prose description and survey comments and so forth. You'll probably incorporate some sort of survey map and zero in on it so that map number one is going to be the community as it sits in its general region. Item two, may be the block or the immediate block within which the property is platted--using a plat map or some other similar identification of all the properties in the immediate area. And then map number three would be a the actual survey and dimensions of the subject property so that you zero in on it. Sometimes you can do that in two maps depending on how you set it up. But that would be part of that description. Legal descriptions being what they are in terms of complexity, you may do a number of things. One, as I say, you can have verbiage in an exhibit where it is quite complex. You could have it directly in this section if it is relatively short, block two block one subdivision such and such, county of Dane, State of Wisconsin. It's nice to have it that quick and dirty. Other than meander around forever or still stated in rods and you have to figure it out. I just went through one of those. Figured out three different ways three different times and ended up with three different shapes of drawing then we finally got it right. Those you may put in the back (of the report). Quite often the appraiser should request that the attorney for the owner or the deed by which the owner acquired the property be simply replicated in the appraisal report and you simply indicate the source of this legal description is so and so and such and such, and you don't try to retype it. The minute you retype it the chances are that somebody is going to do it wrong and by the time that they have done it wrong, one of the most boring things in the world is to proofread a complex legal description. Not only is it boring, it is terrifying because if you go into court and you made the mistake yourself, and

somebody hangs you with it and points out that you now have a property which flips to the left instead of to the right, you're in big trouble. So the degree that you can use the legal description provided by somebody else you should know, or a document which presumably defines what it is you are appraising and if you can simply incorporate that by reference, you have eliminated significant potential for error in your final report. Remember a legal description may consist of three major components. One, the actual legal description of record, and the one you may want is the one on the title insurance policy, if available. Two, the exceptions which have been defined and identified on the back side of the title policy. And three, the survey or plat which is, for this specific property or the subdivision in which it is contained. The surveys, all of which should be available in the Register of Deeds office in the county where the property is located. Title insurance should be provided by the owner. However, if not, you may have to get the owners permission to go to the title insurance company and get a copy of the title insurance policy which is available. As you will see, title companies have a great many functions other than just issuing title insurance. They will help you search for comparables, they may help you search for property ownership, chains of title, and so forth. The next section in the report for commercial property requires that you provide a five year transaction history for the property in question. For residential properties it's three years, for commercial properties it's five years. It is a professional standard required of all appraisers that are designated, but it is also a requirement now of the savings and loans under R41C. They want to know that the property value isn't being kited by a series of transactions which are pretending to push that value up. And they want to know what the interrelationships are among the various parties because you may have partners buying and selling between each other. You may have somebody spinning off the property to a corporation which is wholly owned, etc., etc., etc. There may be mechanics liens outstanding, there may be other kinds of encroachments and

claims on the property and the lender wants to be aware of just what that dynamic has been. (Question regarding leases.) Leases are particularly significant to a lender. Following the legal description and the transaction history, the next item will be, of course, the tax situation. They want to know the tax parcel numbers and many properties have more than one tax parcel number. You will find yours has two and I believe that information is in your packet. Because you have two ownerships, one, that they own free and clear at the back of the property and the other which is still owned by the lady in Mt. Horeb, or someplace. And obviously that tax parcel number should identify: (1) the value placed on the land, the value placed on improvements, the mill rate, and you will want to know whether the taxes are current or have been paid in installments so there's still a balance due as a lien on the property. And next you want to know what the special assessments are on the property, if any. And what their payment plan is on those special assessments. It's not uncommon even in a basic subdivision where the developer will have had the city install the street, curb and sidewalk, sewer and water, and he'll have five years in which to amortize that. But at the time of the sale of the lot, all those special assessments must be paid off so that you get a fully improved lot without special assessment pending. All of the University Hill Farms area was sold that way by the University. The City financed the development, and the University sold the lots and paid the special assessments out of proceeds. And finally you may have special assessments for a special use system. I don't think you'll find that in Middleton, but you will find that in downtown Madison. All of the properties along State Street and the Square are assessed, (1) the original construction of the mall and landscape improvement and so forth and now are annually assessed based on square footage of the lot, as I recall, for a maintenance assessment which covers the cost of clean up after the Halloween gala, etc., and a funding of a supervisor of events and all that type of thing. So all of those elements go into the ultimate description of the tax position.

And when you're all done you really have to conclude, all right, here's what the tax has been historically, and here are the other claims on the property, here are the unpaid tax liens on the property, etc. (Question regarding proration of taxes at time of sale). It is not relevant to the appraiser. But typically it is prorated by the number of months in the tax year that will go to the benefit of the buyer. That's not the appraiser's problem; he doesn't care. That is an adjust to the sale price at the closing of the sale that has nothing to do with the value of the property. However, if we're talking about selling the property in fee simple and the taxes haven't been paid for two years, then to bring it up to fee simple, you're obviously going to have to pay the taxes and penalties or you won't have a fee simple (title) to market. And the appraiser has to alert the buyer to that. So up to this point all we have done is describe the property. And I guess we have to quit until Monday.

(After dealing with some noisy, group administrative matters, the lecture begins at

approximately counter #40) The exhibit that is being handed out has a definition of

highest and best use. The definition of highest and best use came out of a joint terminology

handbook that was initially done in 1975 and then updated in 1981 by the Society of Real Estate Appraisers and the American Institute of Real Estate Appraisers. The Institute decided later to change that ?? and the Institute decided they couldn't do anything jointly with the SREA, so they (Institute) printed their own terminology textbook and a good part of the definition of highest and best use has been left out dealing with the community components, the underlining portion there, and they have fallen back essentially to the first two paragraphs (which rely) on the opinion of the appraiser, not as a fact to be found. And there still is a good deal of controversy within the National Association of Realtors as to whether they need any sensitivity to public policy or for that

matter, at all or whether that's beyond the purview of the appraiser. I think that is very unfortunate and certainly not consistent with the Ratcliffian or Wisconsin view so we continue to use the 1981 definition as a responsible definition. Interestingly enough the definition appears in the terminology book under most probable use and in the terminology book under highest and best use is the simple three line statement " that use which maximizes the value of ownership of the real estate at various times. " So again, Byrl Boyce, who is a good friend, has bought the Wisconsin argument that highest and best is an anachronism, representing really laissez faire economics of the 19th century and really not appropriate to a responsible professional real estate industry. But the industry continues to have it both ways so the old guard feels comfortable. They continue to use highest and best use and the new guard tends to use the more expansive definition. The more expansive definition then leads to the chart which is on the second page (in the handout). Ultimately, this is the way in which we can begin to summarize the analysis of the appraiser. Not all of this needs the extended narrative and so forth, but at least we want to set up a matrix that indicates the factors taken under consideration by the appraiser in establishing his opinion as to most probable use of the property and, therefore, that analysis leads to this type of presentation. There does not have to be six alternative scenarios. Four may be explored and of those four, two may be virtual zeros as not applicable or appropriate or whatever, but at least you have to indicate the area which we're exploring. This particular one comes out of an appraisal we did a couple of years ago of the Cardinal Hotel which is now a respectable apartment building and saloon that needed to be cleaned up a little bit on the first floor. And at the time the appraisal was done, it had been, just prior to the appraisal, in fact, a flop house type of hotel in which most of the clientele were on some sort of voucher from the welfare department on a night by night basis and they suffered a fire on the third floor which had caused sufficient damage so that they lost their occupancy permit for

everything, but the saloon on the first floor which continues to flourish, and the city in upgrading that part of the area and neighborhood wanted to participate in a renovation of the building and were willing to step in and provide some assistance under several of the city housing programs, but needed to appraise it as it was and then needed to have it appraised according to whatever development plan was proposed, which in this case converge the upper floors into a middle priced or maybe a little higher, apartment building. That involved then really looking at it as a building in transition whose original purpose in life as a railroad hotel had obviously long since gone and was on the route from the railway station to the square, and I think was the third hotel built in the City of Madison. I think the Fess was first and I think the one corner was second and this one was the third or fourth hotel built. In looking at that building, we will talk about physical analysis in a moment. But essentially the scenarios were one, simply to repair it in terms of the fire damage, regain its occupancy permit before it became nonconforming and go forward really as some form of flop house for transit men which was a very major problem, which was a very hot issue politically at that time--what to do about the transient male population and there are presently 65 to 70 persons in Madison per night, with no place to go. They had no rooms, no place to stay, and so forth, and it's a problem which we tend to ignore and obviously, it's not one which most people want to deal with. But it was very hot politically at that time and this was a major repository for the welfare agencies dealing with that problem. Therefore, it's true that it wasn't a very attractive use, but it did address the problem of allowing them to simply repair the fire damage and remove the condemnation thing on it and go back. The second alternative which was certainly in discussion was to purchase it by a welfare agency because it would be cheaper in the long run presumably to own it rather than pay somebody else to run it and so on. The third alternative was to convert it to a class B or C office building. The fourth alternative was to convert it to an apartment

building with some sort of office space on the first floor because it was felt that the bar, its hours and its aroma coming out of its kitchen and its clientele would detract from conversion into a legitimate apartment project. However, the bar had a very strong lease which went on into the future for some time and it wasn't clear that they could, in fact, on an economic basis buy him out and he indicated he wasn't going to go anywhere at any price. So the alternative would be to convert it to an apartment building with the bar facility within it and the final alternative was to simply tear it down and start with a vacant site. So those became the legitimate alternatives that grew out of analysis of the property. Now in terms of market demand, obviously that's the first question in feasibility. Who needs it? And if they need it, can they afford to pay enough towards it that you can make the system work. It is clearly sufficient demand subsidized as it was for as a flop house. And, indeed, if you ran the numbers on it using the back door approach in terms of revenues and operating expenses which is what you do for each of these scenarios, it ended up with the highest net residual value. The alternative was to purchase it by a welfare agency, but now notice that a very subtle shift occurs. It is no longer the effective demand of the residents that counts. Did any of the welfare agencies have effective demand in terms of capital funding. Could they do something, and the answer was no. They could only lease and, as a result, if they could only lease they could start, anywhere, essentially and create a facility. So if we look at that effective demand of the welfare agency immediately falls, so that's strike one against that solution. Conversion to a Class B/C office building, strike one against the solution again. You'd have tremendous vacancy of 25% or better in class B/C space, and no parking with this building, so you really had no competitive edge and it was in a neighborhood that was not really recognized as an office area. So really no effective demand there. Certainly not at rents you could charge. When you look at rent on the Square (Class B/C space) and the second, third floor space, you are looking at

\$5.00 to \$6.50 a sq. ft. including some services and so forth and you couldn't remodel anything that falls in that budget. Relative to apartments--there was strong demand for apartments in the area and in fact, Randy Alexander, was going forward with Canal Place at that point in time and we had just done an apartment study for that particular project and there were several other apartment projects coming along or proposed in that area. So there was strong indication that rents in that area for a medium sized to maybe a little larger apartments probably would rent at that time pretty close to \$0.55 a square foot and moving upwards slightly and at \$0.55 a square foot, you can make it work. That was one element. The problem was, of course, if you put the bar on the first floor you're not going to get \$0.55 a square foot; if you're lucky, at least that the way the bar has been constituted to get \$0.35 or \$0.40 sq. ft. which is what they are getting over some of the saloons across the street which I won't identify here--Scott knows what I'm talking about. So as a result, notice what happened at that point, you drop the rents on that apartment remodeling, you drop into a negative value on the project, so that drops out. And then, finally, there is a really soft market for land in this area, (so) what would you do with the site if it was razed. Having torn the building down what are you going to do with 66 x 132, in fact it wasn't quite that big, more like 60 x 132. It wouldn't have adequate parking for commercial uses, you'd really have to chart an assemblage. It didn't look like the little greasy spoon next door would go along with the Cleveland Lunch's need to expand parking. In terms of looking at effective demand, that's your first step. Now the second problem in the legal/political acceptability of it regardless of whether it has effective demand or not. In terms of the flop house it was certainly in contradiction to long term City plans for the area. They're trying to move that area, clean that area up, move the bowery back, as it were, and so to institutionalize the flop house was not consistent with certainly the political attitude of the alderpersons's attitudes in the area. The same would have been true for the



welfare site. Again, a mixed blessing that would serve the public policy of solving the agenda issue of transient housing for males, but on the other hand it was not only institutionalized a problem area in that particular neighborhood at a time when they are trying to upgrade the neighborhood. In terms of office, the neighborhood residents would oppose it because of the parking problem. There simply is no parking available on the streets and there's constant conflict between the office user and the resident. The preferred use was apartments. The City Council was very oriented to creating more middle class units downtown with the presumption that you could stabilize retail and residential activity in the area and so forth. So now they have something that has effective demand, not only in the market place, but effective demand in the political market place, so now you have plus two there. If we look at the apartment building with the existing bar, obviously the apartment uses were still preferred while the use of the bar was certainly mixed, and relative to the clearance of the site, there was some obvious political support for making that a landmark structure that was ultimately part of the tax deal that made the deal go together. It essentially was an odd building. It had a stage front facade that had a brick and point corner facade on three sides and the backside was in fact corrugated metal on two by four construction. A nonconforming building. And one of the problems they had was to strip that off and fire proof the rear wall with concrete block wall replacing the old construction. Anyway, technical construction problems---pretty well self explanatory. Again, simply restoring it to what it was under the fire code could be done because the damage had not exceeded a certain percentage that would have been required to have been brought to code. So the first one, technically, was the cheapest solution in terms of restoring the structural integrity of that building. If we had gone to a public welfare agency, they would have been required to meet all of the current code which would have been a very heavy load to reconstruct that into a more fire resistant kind of facility because obviously, to have a publicly-

managed flop house which burns would be a political disaster. And so on--the rest are pretty self-explanatory. (See second page of hand-out on Feasibility of Alternative Uses.) So, now we have looked at what's technically feasible, that's the first issue of feasibility, what is there effective demand for, is there legal political justification for it or against it or absolute resistance to the idea. And now we want to know what works economically, what's economically viable? At this price we're working with some pretty crude methods. The appraiser isn't expected to do a full feasibility study on that. He simply wants order of magnitude numbers and if he knows what the rent structure were likely to be-- what did they get per room per night for a flop house?, what do they get per square foot for office space? He can come up with a very simple back door approach and say, "Okay, operating expense are such and such, loan to value ratio (should be debt cover ratio) for that kind of thing might be a 2 in the case of a flop house, or 1.5 for a C Class office building or 1.25 for an apartment building,"--ride down off that debt cover ratio and say, "Fine, I can borrow x dollars at the current rate in the market place. By the same token the cash that's left over available for the equity position, I'll cap at 6 or 8 or 10% whatever you think is appropriate for the risk or the character of the property. And bang! that is what the equity might be worth. Now, if I cap the equity and the amount I can borrow together and I subtract the cost of whatever remodeling and so forth that's necessary to do that, I come down with what's the residual value of it "as is"." Land and structure such as they may be. Now, the appraiser's not expected to do an elaborate planned cost. They can look at it and say, "Gee, to convert this to office space it will cost me \$25 a sq. ft. or if not office, then to convert it to residential, it's going to cost me \$40. Or maybe they're just going to do a cosmetic job and put in new carpeting and new ceilings and it's \$10 a sq. ft. Simply set up a reserve that has some reasonable plausibility to it. You're not going to be going through a spec sheet and all that kind of crap. You're simply trying to

come up with an order of magnitude number, that when you're all done, allows you to rank these alternative courses of action with a very preliminary cursory cut that says, "Gee, to do a flop house would be great except 1)politically it's not a very popular idea, might not do much for the area, etc., etc. 2)The welfare agency couldn't afford to buy it anyway so that's out. By the time I'm done, number three is the apartments with an office on the first floor, and that becomes my scenario for most probable use. There's effective demand for it, there's political pressure for it, and so forth. Now, if that's not enough, now we get down to two that are pretty close to one another. Then the next two elements really become the critical elements. One is, of course, what does it do for the public side? Does it help our real estate tax base, does it create something that the community didn't have before? Alternative number one doesn't do anything for our tax base because it would be assessed about the same as it was before. If it was owned by a public welfare agency, it would be off the tax base so that's not going to do anything for us. The office use thing certainly is attractive from an income tax standpoint in terms of rehabilitation tax credits, which was 20% at that time, and so forth. The other tax credits available to private investors were historic landmark status for 25% of the rehab costs for residential and so on. And then if we look down at the bottom at the real estate tax consequences which I started on by accident a moment ago, really no impact to number one, lose the tax base in number two. It had a tax base increase at least three as an office use but the tax base going up for apartments would be considerably higher then the base rents on apartments is .55 sq. ft. per month are higher than the rents if you go to B or C Class office space which has no parking which would put it closer to \$0.40 a sq. ft. As a result we've got a little kicker on the tax base and tearing the thing down and leaving as vacant land would cost the city \$150,000 or thereabouts in tax base. So when you look at all of those variables you come down on the conclusion that the most probable use, in terms of all the categories, is apartment conversion

with commercial on the first floor. Now, you get down to the nitty gritty of the negotiation and ultimately the tavern owner agreed to renovate and modify his modus operandi and so forth, and he stayed on, not because they necessarily wanted him, but because the lease was in place and the income wasn't bad and it stabilized the P & L statement. Here's the synopsis then of looking at a building as though you can do anything and zero in on, "O.K., why did I decide what I decided." And it meets what is required of the appraiser to rigorously go ? through the same check list. If he agrees with your observations about the property, in this case, understand how you concluded what you concluded. And it can be presented in bullets (short statements), it doesn't have to be presented in long-winded narrative which the reader isn't going to read anyway. Now some of it will follow from your analysis of the property and so forth. And the analysis of the property is going to be partially in bullets (format) and partially in prose analysis. First of all it's going to be divided between the site, the site improvements, and any structures. In the case of site and structures, it will be further subdivided in terms of your analysis in the classic 550 (course number for The Real Estate Process) physical attributes which are purely factual and descriptive -- dimensions, scope, geology, hydrology, etc., etc., etc., where you get on the site, where are the various constraints on the site physically, and so forth. Factual information. The same is true of the structure and that's going to be a little more elaborate and I will give you a checklist. Most of the checklist can be done in the form of a table (or exhibit). So if you remember 25 North Pinckney, it simply starts out STRUCTURE: Brick mill -- dah dah ta dah boom! Next item on the chart and so on. You want to communicate as much of that information in bullets or tabular rapid form as possible. One of the things that is very useful to understand the structure, is some sort of explosive isometric drawing so that people can see how it's stacked one thing on another. Where the elevators are, where the stairwells are, where the entrance is, and so on. Most of the samples that you

will see as well as 25 N. Pinckney have such an isometric type of drawing in it. Why is that important? When you're talking about buildings in transition, the position of the elevators and the stairwells are critical as to the efficiency of conversion and whether, in fact, it is even convertible or not. For example, I don't know if you have been watching the Penney Building kind of thing, but as a department store it was designed to pull people through the store. As a result the elevators are always at the back. You have to walk through virtually the whole store to get to the elevator. It's generally with intent to get you to walk through the whole store. But when you're going to convert it into an office building, that makes it very inconvenient because one, you gotta lose a whole portion of your first floor to provide lobby space access and the security problem is really bad because ultimately you get into corners which cannot be observed by the folks ?. So you look at 14 W. Mifflin, they have a real security problem there with their elevators. You have to walk in, go around the corner, you cannot be seen from the street once you're at the elevator. The elevators are perfectly natural where they should have been for the department store that use to be 14 W. Mifflin, very poor for an office building. What's more is you gotta have so much more corridor space at each floor then to get from that relatively isolated corner location, that the efficiency at conversion is badly hurt or you end up with space that is oddly sized. So if you're talking as an appraiser about the layout and you show them isometrically that, "Hey, we have a square building and the elevator is right in the middle," and anybody who is knowledgeable reads that and lights right up, "Wow, we've got a live one here. Convertible, efficient corridor space, the elevators are relatively accessible to the street, visible, etc." Okay? Physical attributes are the first thing, legal/political attributes the second, then linkage attributes. What are the relationships of this property one to the immediate contiguous property, then to the immediate neighborhood which may encompass two to ten sq. blocks and then to other elements that may be important

to it. Highway systems, other employment centers, other amenities and so forth and so on. If you move out from the particular to the general, which is just the opposite of what you do in the traditional appraisal that starts out with the economy of the country, then the region, then the neighborhood and you're finally down to the site and you haven't the foggiest idea what the first fifteen pages had to do with anything because nobody described what it is you are appraising yet. And in a neighborhood, it doesn't matter. If you build a duplex next to West High School, all you gotta do is figure out how many teachers rent in order to pretty well factor neighborhood into your economic region and have it nailed down. What Reagan does next, doesn't really matter. That fact that he doesn't do anything is probably best! In other cases that may be economically different. If you're totally dependent on the defense industry and somebody has decided that they once did a missile system which was going to be based on a liquid fuel rather than a solid fuel and you're doing an appraisal in Sacramento, that's pretty critical because Aerojet was the sole supplier of solid fuel and they've gone from 5,000 to 26,000 employees and they (defense) made that decision to go with liquid fuel, they (Aerojet) went back to 4,000 employees and poor Sacramento was on the rope for 4 or 5 years. At that point national policy does make a difference to the appraiser. If you understood the economic base of what was causing it to grow or what would cause it to collapse. But you want to begin with the particular and move out. Begin with the contiguous property owners. The other reason for looking both at the property and contiguous property owners is that the most probable buyer often is not the lady on the block. It may be a tenant in the building. If you're a real estate broker and a building comes on the market, the first thing you think of is which tenant in the building would best own the building rather than be a tenant. Either that he doesn't want to move or he because he's reached that point where he needs the tax shelter. And the second thing is whose putting anything together on the block. So in looking at those elements not only are we

beginning look at what kind of economic support do we have in terms of ancillary services and amenities and so forth, we're also beginning our search for most probable buyer. You want to know the ownership. When did they acquire it. If so, why? Linkages -- we'll come back and talk more about them later. The fourth one is the so called dynamic attributes. Mental images attached to the building - positive or negative. That's ugly or that's historical. Or there may be some politician whose hung his career on protecting that poor family from the bulldozer. That's a very real dynamic attribute which may kill the whole deal. And finally we have the environmental attributes which are off site impacts of anything which occurs on the site. The most immediate ones are what we're going to do in terms of generating traffic or air pollution or storm water runoff onto somebody else, or those types of things. We're not only interested in physical environmental impacts, we're also interested in social environmental impacts. For example, "I think I'll take out the grocery store and do something fancy with that space in our shopping center" would have some very adverse social impacts because we have a significant elderly population that is living where it is living because of access to a, more or less, full-line grocery store. Indeed, Voss Haus (in Middleton near the Park Plaza Shopping Center), which is just a block away, is where it is because WHEDA required that it be within a block of a grocery store. The social impact generally leads to political ruckus; people are going to fight back and say, "You can't do that." For example, in the El Rancho facility which is just being completed now near Bay Drive and University Avenue, -- that El Rancho Market, again, had attracted a good many elderly associated with the apartment projects there on the back side of it and we had to advise Father Fiore (priest on leave taking care of his family's real estate interests) that we would have to assume that we would have to have a food service - grocery type outlet in the building or politically, as well as socially, he was going to have to deal with the problem. That was designed (originally) to have a 12,000 SF food market coming in on the backside

with a garage door that provided for the truck door and that sort of thing. That was there immediately in front of all of the feasibilities, in order to quiet, if you will, or avoid a confrontation with those that thought that was a necessity. If you go at it too strong you end up with really stupid things like the Park Regent Medical Center which is built in an urban renewal area with the elderly housing along side was required by one of the alderpersons to have a grocery store on the first level, which never worked. In fact I don't think they ever got an operator for it. And so finally it was necessary to create a second option grocery store called Midway Foods where West Washington and Park Street come together. And when WHEDA built that elderly housing project on the Park Street side, a condition of that was it wrap into the package and actually financed by WHEDA was the market on the corner. So that it met the standard of having a grocery store convenient to the elderly, of which there were three different (elderly residential) projects on this block. Also by doing that WHEDA got, in effect, for the developers in that project (Park-Regent Medical Building) which was already in bankruptcy, permission to remove the covenant that required that they have a grocery store on the first floor of the medical building. So those kinds of things become very critical in looking at what the legal/political development traps are going to be. Most of you, I'm sure, are pretty capable of analyzing the site, so I'm not going belabor that, other than to underscore for a moment the latest wrinkle, of course, that has become a significant concern and that is hazardous materials concerns. The appraiser, like the real estate broker, is not qualified to know whether there are hazardous materials either saturating the soils or having been dumped there at one time or another and so forth. Or weather even the geology is such, that the radon leaks into the basement ultimately and so forth. That is not his line. Therefore, one of the elements that you have to have in your contract or letter of engagement is one, the owner is obliged to disclose all known hazardous materials or possibilities for such conditions. Including a history of



ownership and use of the building because most hazardous materials have been introduced by previous occupancies and uses of the building. Now if the appraiser has been told, he obviously has to include that in his analysis of the site as having these potential problems and so forth, and he may have to request that some kind of audit be done to determine the extent or the reality of that suspicion as disclosed by the owner. His report will also contain, in his statement of limiting conditions, that he is not an expert on these matters and so forth, and I'll show you the language on that later, but nevertheless he has to be very careful today that if there is a sin of omission in this area, that it is one of the owner and that the owner also recognizes that the fact that you appraised it does not mean necessarily that you identified all of the potential flaws in the property. And that's a legitimate hold harmless statement. I believe I have in your reading packets some materials also on the Super Fund relative to environmental matters. There are currently some 170 major sites identified or more -- maybe even up to 600 identified -- But a great many other potentially toxic industrial and commercial areas and a state may have a list of those in their local state EPA office and there may be an audit which already exists on that in which management is now moving forward. You might be dealing with the same office building built prior to 1973 or 1974; chances are really good that they have asbestos problems and you want to know, "What is the program and how are they going to go about removing it and how much has to be budgeted to carry that through as tenants move out and the fire coatings and pipe covers and all of that sort of thing are being removed and so forth." You particularly want to word that so you have to address the subject directly and somewhere in your typical description of the site indicate that the owner did not disclose any potential conditions which would be considered hazardous and as a result your appraisal assumes the site is marketable and not encumbered by a hazardous material. (In response to a question) By and large you want to stay out of (estimating cost to cure) that. The appraiser is not technically qualified to

be in that and if the building has already been identified as a problem area, all you need to indicate is that the marketability is encumbered by a significant liability and try to make some effort to estimate how that may depress the price. If it has been so discovered and the owner has estimates on what it will cost to cure, then that should be incorporated by the appraiser into his report. If he (the owner) doesn't, then his (the appraiser) letter of transmittal and his hold harmless clause says "We have this problem, the owner has not identified the cost to cure, and, therefore, the value must be adjusted by whatever that number works out to be." Any other questions? In organizing your analysis about the structure -- by the way, site improvements are specifically parking lots, retaining walls, roads, and graded spaces, dry storage basins, storm water retention, things of that sort. The position of those on the site can be very significant, particularly where you have a site in transition. For example, old foundations may determine the allowable building line for new construction. Something I like to use is the cannery in San Francisco was rebuilt within the old canning walls because that area had been significantly downzoned by the City of San Francisco to create more open space for the Fisherman's Wharf tourist area and that if they were to build a new shopping area there, they would have got a considerably less leasable area than if they simply pretended to be remodeling the existing building. So they poured a whole new concrete structure inside the brick walls and got a much higher GLA than they would have otherwise. In that case the existing brick wall is an asset to the property. If you can represent that you were renovating rather than building new, which may bring in the much more restrictive codes to determine the use of the property. On the other hand, the Fauerbach property here in Madison had an old side track on it, and the code relative to lots (end of side one of the cassette copy) lands on the lake. There can either be set back from the lake the average distance of the properties on either side for so many feet -- I forgot what it is, -- or the existing improvement line. Well,

there weren't any buildings on either side of it, and if you did use the Elks Club and so forth it was set back pretty deeply, but nevertheless the City ruled that the old side tracks, even though it had been abandoned, was the existing improvement line and that was like 150 ft. back from the water rather than the 75 ft. that would have been required by the state code. Therefore, that controlled the use of the site. Well, when you have gone to R6 and had to have a setback from Williamson Street, and you had a setback for the lake, you had a fairly skinny building envelope within which to work. It changed the value of the site significantly because at one time they were talking about doing a hotel on that site and building it right on the water. City said, "No way, can't do that. The rail line determines the setback line and there you are. So in that case the existing site improvements, as it were, was a very negative impact on the property. If you have a property with a well on it that was now serviced by water line, you would probably required to cap and fill the well and use the existing city water. On the other hand, in doing investment analysis in Anaheim, CA, a paper company had acquired initially 40 or 80 acres of what technically was strawberry land and built their company on it and then Disneyland (really Disneyland in California) came along 5 or 10 years later made Anaheim a household word and the property just mushroomed in value and they sold off some of it to others, but nobody wanted the well. They eventually ended up with a well which was buried in the back of some industrial park and a long pipeline over to their facility which still had 20 acres of strawberry land under lease to the strawberry grower who was irrigating and he announced he was going to terminate the lease at the same time the City announced that the pipeline was deteriorating and would have to be replaced. And they were going to cap the well. We analyzed what the water situation was there, and the fact that the Colorado allotment to California has been oversubscribed and was going back to Arizona and so forth, and we actually sold the well for a couple of million dollars to the City of Anaheim. And they fixed the pipe and added it to

municipal water system. So occasionally the wells can be an asset, in other cases it can be a very significant liability and you have to investigate that or have someone investigate what is the condition of the wells?, is the water still potable? is there perhaps percolation into in from the septic system?, or are there other toxic vapors being introduced into it and how do you limit your liability?--is a cap on it sufficient, or should we pull the cap, close it off, and seal the lower level water level or whatever. So the appraiser often has some major problems with those site improvements which seem fairly simple or innocuous or virtually nonexistent. In talking about urban renewal sites or redevelopment sites, vacant sites in cities which something was torn down at some point in the past. How did they tear it down? If they in fact followed code, they were responsible for knocking the foundation walls off at 3 ft. below grade and responsible for taking the big end ball and smashing up the footing of the floor so that the site would drain more naturally. If they didn't do that, the developer coming on has a major removal problem in that he has to take that all off, take all those foundations off, put footings down and start over again. And just the fact that it's flat and has cinders on top and people are parking cars, doesn't mean you may not have a history of previous structures on the building and the appraiser has an interesting problem of determining just what was done with those foundations and improvements. So much for site improvements. Now let's talk about improvements. Improvements -- you heard me talk about a lot and I'm simply going to give you a checklist. Most improvements can generally go into some tabular form, some items of which may require further discussion as to why it deviated from the norm or why that particular factor is significant in your appraisal as part of your narrative, but otherwise, simply incorporate these into a fairly elaborate table. The first, obviously is foundation structure. What kind of foundations do we have under the building? What were they designed to do? Is there any indication the foundations vary. One of the buildings I was thinking about having you do would

have been a real pain in the ass was another Anding property, the one down on Park Street across from the Kohls store where there's an Arby's, Ponderosa Steak House, a filling station on the corner and then there's an L shaped concrete block building which is a Firestone Recapping building. All of the land is owned by one of the Anding Corporations. That same corporation owns the filling station which is on a month to month lease for 22 years. The Firestone building, on the other hand, has been on a five year renewable kind of thing, built on concrete block. Well, you know Wingra Creek goes right by the southside of the property. The soils aren't too great. You look at that building; there's huge cracks on that concrete block. Okay? Either the appraiser has to say the foundations are not adequate for the soil surface, and when you read the soil book you'll understand why. It was obviously built for cheap and it isn't going to last too much longer before it really breaks up. Right away you have a foundation problem on that type of building. The other interesting part about it is that the other two elements are on ground leases - - Arby's and Ponderosa own their own buildings. It's been a wonderful appraisal problem, but this is only a semester course and we decided we'd stick to what we have. It was a fun thing to do; we did market value of the filling station, market comparison on the Firestone, income values on the two franchise leases, and then, because they were sometimes a little sloppy in the way they did things, the land lease terminates before the franchise lease is due by a couple of months and we had to figure out what to do about that. At any rate, the first thing you want to understand is foundation systems, particularly as they relate to the soil. If you're talking about a vacant site, you want to know what kind of system will work; if you've talking about a developed site, is it appropriate and adequate. You may, in many cases with institutional buildings, find that they were overbuilt. Gary Divall's building down on the Square was designed for 7 or 8 more stories and the Emporium building was designed for 6 more stories, the Penney building was designed for two more stories, and

therefore, there is a plus in the foundation system in that they can do forward and expand the space. So you need to find out something about foundation systems and the soils thereunder. The second element that you want to look at is the structural system, that characterizes the building. We can start out, obviously, with fire proof steel or we can have poured concrete. We might have brick mill. Brick mill was the common form of construction in which the outside walls are masonry and are bearing walls, and the inside walls are timber, typically, or framed. Some states call it ordinary construction, which what you'll see in some of the Wisconsin manuals, and the older manuals called it brick mill because it was really the way they designed commercial buildings in the old days. It was generally three or four layers of bricks side by side to create a masonry wall and then they created notches in the inside brick wall to pick up the end of the beam which then went over to additional beams running the other way and they either had a lally column holding up the wood beams, or all wood beams, as it were. Called brick mill. Many commercial buildings today are that type of construction. Gotta know a little bit about construction. And characterize the building. You also need to know the date built or the dates in which the project was built. In the case of our building you see some small change in the fire codes which required that they move from plywood decking to corrugated steel decking on the webbed steel joists. And our building would be ordinary construction essentially. The outside walls are load bearing, and then you have light steel beams lally columns picking up the rafters of the webbed steel joists. The structure tells you a whole lot about the building and also begins to define quite often the comparables. If you have a commercial building of poured concrete, industrial strength as they like to say, typically your comparables will have to be of the same character. That's not always easy to find. The Domino Pizza shop down here on University Avenue is such a building that was built originally as an industrial printing shop. It's got like 200 lbs. per sq. ft. floor load capacity. There aren't too many buildings in

downtown of that general size that we can define as comps. The structure becomes a significant element. Do we have simply pre-1900 industrial ordinary construction or do we have a current commercial equivalent? Once we have the structure, the next critical element will be the horizontal and vertical circulation system. What kind of stairs do you have, that's vertical circulation, what kind of elevators do you have, escalators --. They play such an important part in the efficiency of the building -- for potential layouts and future layouts. At the same time the horizontal circulation system has to do with lobbies, corridors. Are they conforming? Our horizontal circulation system out there in the shopping center is pretty easy; it's an outdoor veranda with sun shade on it and then you have a small corridor at the back of the card shop, as I recall, coming back to provide outdoor access to one of those shops in the back there. And that's it. Once you have those elements done the next thing you want to know is what's the HVAC system. The heating, ventilating, air conditioning. And there may be several subcategories under that. (End of original micro-cassette tape 5.1, side 1 -- therefore some of the lecture is missed.) Once you've got those basics down, the next thing you're interested in is the outside exterior wall structure and eave structure. If you have a steel and glass curtain wall building from the late 1960s, you may have a very significant recaulking problem on your hands and very high infiltration in terms of wind and heat loss and so on. The classic building here (in Madison) is that one next to Smokey's that has those white brick curved balconies on the front of it. That has been an industrial disaster since it was built because the architect used a sand brick that he had seen in Phoenix, AR or someplace. It absorbs water; it doesn't have a glaze on it to repel water, and as a result, it soaked up water and leaked throughout the building continually. They finally put a silicon seal on it which currently is gradually wearing off and you see these dark black streaks. It is very unsightly. The wall system is the whole failure of that project. So you need to know something about construction and

if not, you ask somebody who does. Is this something appropriate to the climate and the building type, and so on. The roof. Another major weakness and threat to the appraiser. Obviously flat built-up roofs have a tendency to leak and break down and on the major industrial buildings today you're probably will be remiss in your due diligence if you don't have an infrared photograph taken of the roof to identify its general condition and where in fact it is breaking down. Once the roof goes, the whole thing goes. It doesn't take very much of a hole or penetration in the roof to allow water to start driving, and water has a keen affinity for holes, no matter how small, it will get through. But once it gets through, and once the insulation is wet, it has lost all of its insulation capabilities, and once that tar starts to break up and get water under it, it begins to bubble and steam on hot days and contract and freeze on cold days, it ain't long for this world. And a good industrial roof will probably cost you \$3.5 to \$4 a sq. ft. to replace by the time you put down a new insulation layer and rebuild the thing. Now you just appraised a 100,000 sq. ft. building and you didn't check the roof and you now inherited a \$450,000 problem. Somebody is going to inquire about due diligence. Also they will ask the appraiser what he looked at when he was there? Does it have a history of leaks? When was the last time the roof was rebuilt? Was it rebuilt or patched? Sometimes it's useful to call the roofer and find out. It's also useful to talk to the tenant and also to observe the ceiling tile. You begin to see water stains here and there on the ceiling tile then that's a clue to the appraiser that it needs further investigation. Roof systems today also have to be designed 1. to carry equipment the tenants own HVAC units and compressors and other similar equipment, and 2. to provide one way in which the mechanic can get to the machine/equipment for servicing and repair without walking on the roof. And another good clue for the appraiser is when he is up on the roof, see how many amateur installations have been made. One of the fraternity houses down here, the red brick one right at the bend of Langdon Street -- I think it had a little



coop grocery in what used to be a garage in the basement -- one of their local hot-shot fraternity boys decided to put a bigger TV aerial up so he went up on the roof and he simply put the guide wires down and nailed a couple of nice strong nails into the roof, and they eventually had to replace two thirds of the roof from dry rot and so forth when the four little holes from the four little nails that held up the TV aerial. You see a lot of that kind of unwitting damage to roofs and at that point it's underway and dry rot is virtually assured. Once we've looked then at the basic roof system and outside wall system, now we need to begin to look at some of the other elements to the commercial construction. Obviously, one we need to look at is called finishes. Spaces are going to be subdivided between floor finish, wall finish, and ceiling finish. And how does the building ordinarily come, does it come with solid concrete and the tenant has to finish his own floor? Or does it come with an asbestos tile, or is it all carpeted, etc., etc., etc. Technically in Wisconsin, carpeting that is laid over asbestos tile or wood block tile, is personal property and can be removed by the tenant, but if the carpeting is laid over concrete, it is part of the permanent finish of the building and cannot be removed as part of the real estate. You might have that question on your brokerage exam. Wall finishes. Much of it may be dry-wall with sand finish, or some sort of vinyl paper, or whatever. It is also important to note that the interior walls might be dry-wall on steel stud or dry-wall on wood stud and, in the case of our property, of course, in the grocery store you have tenant improvements done with wood studs which today would be nonconforming. Ceiling finishes, of course, range everywhere from unfinished to different qualities of hung ceilings and lighting fixtures and so forth. The next couple of elements that you want to look at are one, the mechanicals other the HVAC. Mechanicals would encompass things such as water softeners, utility service/capacity and fuses or switches, bathrooms, hot water heater. In commercial buildings there may be other mechanicals such as freight trailer adjusters -- a kind of

elevators that either move the loading platform up and down to adjust to the trailer or that moves the trailer up and down. There may be pneumatic systems for moving communications throughout the building etc., etc. (Question regarding elevators.) Elevators are a separate category. When we talk about vertical circulation, elevators will be discussed under there as to type, capacity, general condition and so on. One of the elements under mechanicals today would be building control systems. You'll see in the hype for a building, "Johnson Controls-vacant and Free." LTC state of the art energy monitoring, life safety monitoring, equipment monitoring systems for optimal operations of equipment and current loads and all that sort of stuff. In other cases, buildings such as you have, have virtually no control systems and that makes it more simple, but whatever they have -- that becomes part of the mechanical system. Much of that, related to mechanical systems, would be life safety systems. More and more buildings are becoming technically obsolete and nonconforming as a result of life safety systems. In an apartment building today, you're going to have to have smoke alarms, you're going to have to have certain kinds of latches on the windows and doors, there may be sprinkler systems, there may be availability of fire hoses, extinguishers, etc., built into the units, commercial office buildings and other major types of structures, will have air pressure systems to control the air pressure in the stairwells so that they don't become flues for toxic elements. Major buildings like the First Wisconsin Building downtown will have a vault in which it has its own water pumps to maintain pressure of the sprinkler system and you'll even have a policy that the water pump have to run each week and meets the various requirements for that. You may have a variety of TV cameras and you have a central control point with a guard requiring access, identification, and that type of thing. You may have other forms of monitoring all of which are life safety not only from fire and mechanical failure, but from people and negative social behavior as well. In the case of elderly housing, that life safety

systems may go further in terms of alarm systems that are available in each room with a pull chain. More subtle type things in which a stove, for example, has a fuse cut off so if the lady continues to burn things on the stove, you simply disconnect it quietly so she cannot hurt herself or other residents. Life safety systems are becoming a much more sensitive area, like environmental quality. Let's see, what did I leave out. I think that pretty well covers it for the moment.

(Administrative matters regarding the gathering of data for the subject property; work

in teams so that the data sources are not overwhelmed by individual requests.

Also

re: Fran Larson's book "Techniques for Writing", and the Real Estate Club and recruiting

seminar.) We were talking about alternative uses with the objective, obviously, of filtering through the screens of the physical, political and linkage dynamic and environmental attributes down to, what you as the appraiser has reason to believe, the most probable use of the alternatives that you have reviewed. The step that follows immediately thereafter is, in its essence, who is the most probable buyer for that use. Again the appraiser probably has a set of at least three alternatives that he should consider; perhaps five if you want to think like a broker. Your first question is, "Is there a tenant or current occupant who would find it in their best interest to control the property by owning it rather than being a tenant?" The second question is, "Is there a contiguous property owner who by the nature of the situation would find it in their best interest to own the property?" The third most likely buyer group would be someone else on the block who is involved in an assemblage, or occasionally, in a spoilage. For example, when I first came out here in 1958, the University had just announced their South Campus expansion across University Avenue and Ratcliff and I were asked to advise on how they should go about

acquiring property. Well, it was obvious there were certain key parcels which had been assembled which were missing perhaps just one piece. Maybe somebody had 66 feet then they missed the 33 footer and now they had another 33 footer. Because of plottage value if they owned that 33 footer in the middle, they would now have a 132 foot square piece of property, and relative to the densities allowable under the campus housing rules, that would be a valuable piece of property. Therefore, the first thing that you go for as a buyer of property in that district is to spoil that plottage. Buy that 33 footer so that the other party doesn't get the advantage of it. Then chip away at it. Their 33 footer is worth considerably less because they're not going anywhere with it. There might be some other reasons for spoilage in terms of control of the property and so on. Two classic examples of that right now in downtown Madison is Wild having bought Brat house II even though it is vacant because if anybody was to do anything with the Civic Center they would have to deal with the him and Mullins, of course, taking the Kresge building would be right in the path of progress and the city can't do anything about a hotel unless they deal with him, and if he isn't part of it, he can put up one hell of a stink on a condemnation case on it and delay the project for years. So, as a result, that's a good example of the most probable buyer being a spoiler rather necessarily an assembler. And then following that, "Is there an investor group that would be interested?" Today obviously investor groups which start with institutional quality (property), the type pension funds would look at, there's probably nothing in Madison that has sufficient size other than the First Wisconsin Building, and a few shopping centers and so forth that are of institutional quality. And the next would be, in essence, a small local investor group, and lastly would be, of course, an investor for use. Not necessarily last in possibility, but last on our list at the moment. And there are subtle shifts in sizes. For example, if you're out on the west side, you're looking at 5,000 sq. ft. office building, the majority of them are owned by investors for use,

who leases the balance (of the space) to somebody else to help pay the bills until such time as they may expand into that (space). But as soon as you move beyond that, as soon as you get to the 10,000 to 12,000 sq. ft. size, you're probably talking about an investor or a small group of three to four investors owning it entirely for multiple tenant leasing purposes. And as you move up, obviously, in size, the character of the syndication or the group investor or the individual investor will change. Now you have to evaluate each set of buildings in its context and its situs pattern to decide which of those is the most likely possibility. Last year when we did 14 W. Mifflin, I perceived the most probable buyer was going to be an assembler, and there were two going on in the block. Gordy Rice assembling for Executive Management and Wild assembling in a spoiler fashion for the Concourse Hotel. And that became the motivation. The same was true when we did the Penney's building a year earlier. Again you had an assemblage going on in the block which in that case Mutual Benefit was putting together the back half of the block and Northwestern Mutual, owning the front half of the block, wanting to sell it essentially as a single unit. The only thing that they didn't have were Kresge and the men's shop, Rundell's. Otherwise everything else was Northwestern Mutual's. You really have to look at the context and decide who the most probable buyer is. Once you have the most probable buyer, then you really going to say something about its specification. Obviously (with) an assemblage going on, (the most probable buyer) is someone who is likely to pay a small premium because he is getting plottage value as he gets a larger more efficient piece or he breaks out to the corner which will give him visibility and flexibility of design and so forth. On the other hand, if we're talking about an investor group, they're probably going to try to buy low, sell high and if that's the case it's going to change the nature of what your comps are and what you think the investment logic is and so on. Most probable use suggests the most probable buyer. If you decide this property is something for a shopping center renovation, at the local level, what you're

really saying is, "Okay, who buys local strip shopping centers and what did they pay before?" As soon as you list that as the most probable use, we're going to put very significant constraint on what is a suitable comparable. And some of those constraints can be very subtle. When we're talking about 25 N. Pinckney, for example, the fact that users bought the 22 footers and once you got beyond that (size), investors bought the rest. But users bought on the basis of first floor space only, where investors bought on the basis of gross building area and the squeak in the floor and everything else. Assemblers trying to put together a new building, obviously may buy on ground area less cost to clear. Now, once we have the most probable buyer we are now into the Ratcliffian view of life that the best way to decide how people do that is by inference from the past transactions. Past transactions would be two tests. One, a set of physical attributes not unlike the subject property and not unlike is probably safer than saying similar to. Because quite often they'll be quite different. You have three comparable sales so far on the shopping centers, one of which was gutted and had to be completely rebuilt. One of which was virtually only four or five years old and the other which would stand in an intermediate position which continues forward simply by force of its location even though the physical design is aging and so forth. It's still a very strategically located neighborhood shopping center. So they're not unlike, but they certainly aren't greatly similar. You're going to have a little trouble adjusting between them. Second of all, a comparable must have been purchased by somebody of relatively similar motivation. Relatively similar motivation is in some cases a judgement call, but it can be very significant. For example, in the day when apartment houses 'first owner' 'second owner' has very significantly different tax advantages, a 'second owner' purchase of an apartment building could not emphasize the rapid accelerated appreciation, could not emphasize the write-off of construction costs and so forth, and as a result there was more emphasis upon cash flow. The cap rates were significantly higher for 'second owner' buildings

than for 'first owner' buildings. They were not buying for identically the same motivations. The first time buyer got 200% declining balance, he got the benefit of a write-off of many of the soft costs of construction etc., etc., etc., and the second time buyer was limited 125% declining balance and there were almost no write-offs in terms of soft costs and what's more, Uncle Sam was very likely to write-up your land value under that project and give it a smaller appreciation base. Whereas the first time buyer who bought the land, built the building would get the historical cost of the land. Those were two distinct markets based on the investment options or tax options available to the buyer. So you have to have similar motivations. Investor for use is always a somewhat different purchaser than an investor for income, and appreciation and so on. Where you have a building that is a candidate for intensive renovation and perhaps transition or transformation to another use, you almost always have to look at other buildings bought by professional rehabbers and remodelers because of the cap on which they pay to have enough margin to create that increment in value for renovation and so forth. You have to be careful not to confuse those kinds of buildings. 14 W. Mifflin was a good example of the fact that the comps shifted. When they bought that building it was a gutted-out department store. They then went through an intensive remodeling, putting in an atrium down the center and converting it to office use, etc.. At that point, then, it's really being sold as a Class C building without parking and you have to look at buildings that are complete and ready to go on that basis because the next investor, aside for some problems with the HVAC, would have found all of that in place. A different set of comps. Before and after the transformation. So much for most probable buyer for the moment. Wait a minute -- one more thing. You don't want to be too picky about the profile of that most probable buyer unless it is the current tenant or immediately available adjacent land owner. At that point you are talking about potentially a monopoly situation in which that perspective buyer really has only one choice, and then

you really need to know what's the value to him and what are his criteria. So, for example, the empty lot which is now behind the Mutual Benefit Building was originally owned by the City. It was a decaying old two story brick building that was the elderly center and it was an elderly center all right in every way of the terms. The City put it up for bid. Fair market value would have looked at comparable land in the general environs of the Square and come up with that or so called MAI market value. The contemporary approach which is ultimately is what Ratcliff and I used on that particular site was to say, "Hey, we got the Mutual Benefit Building next door; it's in a tough marketing position because they have no contiguous parking. What's the difference in value in the long run to the owners of that building with and without parking. If they can get \$5.50 per square foot on their space without parking and \$7.00 per square foot with parking, how high are they willing to go to outbid all others for the use of that site. Highest and best use at that point really becomes who can afford to pay the most for it, how much value added to that property is inherent in that. They're obviously going to have to outbid all of their alternative users. At that point you can get a little picky about the motivation and economic value, but otherwise we're talking about a class of buyers. We're talking about a profile of a typical buyer in the marketplace and you may emphasize the fact that he wants cash flow or he wants appreciation or is really concerned about how it will effect his business and why it's a good thing to be there for his business because of the adjacent businesses around and so on. A very broad field with maybe three or four criteria which you're going to ask. Ultimately, your final test is going to be, "Did I meet that criteria?" So if you take the presumption that one of the major criteria that's used is tax shelter, now you come up with a price and you assigned a value to the appreciable part the land and you test it you're final test of conclusion is there is no tax shelter. You gotta ask yourself, "Wait a minute, I've gone through this whole exercise, here's the price. It doesn't provide any tax shelter, but up front in my



profile I said that's what he wanted -- was shelter." You're out of sink. On the other hand, if you said you wanted cash on cash of at least 9% on his going-in equity, and now you can show on the test that the price you gave it with whatever official additional remodelings you have to do as a general allowance, will, in fact, produce something close to that 9% cash on cash and now the consistency between the investment criteria you presumed for your buyer group and how the numbers work at the price that you have set on the property.

[Jokingly Professor Graaskamp said, "Of course, what you usually do is you find one of the criteria doesn't work after you test it, you go back and erase the criteria. And say, "That's what Professor Graaskamp meant by being too picky."]

Okay now, given that, as I say our first solution is to use market inference and we need two types of criteria; Properties of not unlike character and second of all, motivation of buyers being compatible. Once you've identified some perspective sales, and you want to identify as many at least superficially plausible sales as possible, you may find you have a list of eight or nine if you're really lucky. Appraisers don't often have that many comps ultimately. And then you want to review those eight sales in an almost lexicographic method. You might determine, 1) my project is a two or three story ordinary mill construction built prior to 1930. And so you say cut number 1 on determining my subset out of plausible sales, is that I want at least a two to three story building that's ordinary mill construction and built prior to 1930, and see what falls out. How many of the 8 do you have left? Maybe if you're lucky, you'll have six left or five left. And generally when you're searching you have some idea of what the subset is going to look like. And then the second cut maybe that I want it with elevators. And if you make your cut all of a sudden you only have two or three left and you'd like four or five, suddenly you realize, gee elevators is one of the things that I'd like to compare this on. I don't have sufficient number of sales that I can have a subset in which all buildings have elevators, and for that matter, they may not

have the same number of elevators. One may have one. Another may have one and a freight (elevator). Another may have two and a freight. But at that point you say, "My subset gets too small if I apply that particular criteria." But you'll set up several screens when you shake down that list of probable sales from 8 to 5, or 16 to 4 on what you feel may be critical elements. Obviously structure type is one, location is another, possibly condition and of course, motivation of the buyer. You can say, "Gee, this is a nice looking building, it looks just like ours, but it was acquired under eminent domain." For a market value transaction you can't use that one, particularly if you are going into court. Whatever the condemner has purchased is not fair game as a comp. If it is an assemblage and the guy next door bought it who you feel is a captive buyer, you can't use it as a comp. Unless of course, you have also a situation in which there is a captive buyer, then it's perfect. Then you're looking at the premium that people pay because they have no choice. So you go through the list and you try to investigate each one. Sometimes they fall out of the list not because they are not good comparables, but because you can't get at least the same amount of data on those that you have on the others. It looks good, just the right kind of property, but the buyer and seller aren't talking. You don't know what is going on in the deal. Somehow it looks a little funny, or the pricing is either high or low, and they aren't talking and so forth, and you simply can't use this because the information is unreliable or unavailable. Question from a student--If a property that has good comparables that are similar as far as structure goes, but it's not a sale--it's a listing--is there a way to bring a listing into line so that you can use it as a comparable even though you don't have a buyer for the projects. Chief--sure you can look at listings, and many appraisers do and there's a number of ways of handling it. One, of course, is to look at how the property that you do have that's sold, as they listed it, what was the discount between the listing price and the actual sale price ultimately. You can find patterns like that. The

residential market may be showing a pattern of 5% to 7% off the asking price to the closing price, and occasionally on commercial properties, you'll have a listing history of the property and see what the shrinkage was in the negotiation process and so on. So that would be one way of doing it. Failing that and you still want to use it, you may of course, as an appraiser, ultimately although you can get yourself into deep trouble with that, stand on your 20 years with the Rotarians and say, "In my experience the shrinkage off the listing price is 6%." Now if you buy that, you'll buy my conclusion. If you don't buy that, you won't. Another way of handling that is to make that your initial assumption. O.K? But when you set up your scoring pattern or your adjustments, you will weight that differently, and say, "Okay, I have 3 good sales and one listing, 2 rumors, and 1 cocktail conversation and assign the weights to each of those properties differently. Okay? But it certainly provides a pattern and as Mr. Dilmore says you're looking for those random dots that eventually come out with a bright red estimate of the color point or whatever. So you'll have much more sympathy for the appraiser finding his data, but a listing would be legitimate in most areas. Now there are some judges in eminent domain proceedings that would not allow you to use a listing. One of the reasons for that is that it has not been unknown for those that suspect their property is about to be condemned to list it. And you can generate a friendly offer which they later rejected for some minor conditions and then try to submit that into court as evidence that, "Gee judge, I was just on the verge of making a deal with this offer and then the world fell apart because you were going to take my property." So there are certainly legal environments in which the listing would be held with a good deal of skepticism. And if all you had was listings you probably are better off to move on to a different approach to value. Okay, assuming then that we can begin then with a list of possible and plausible transactions that seem to have some relevance and we apply two or three screens that reflect the property type, the location, and the buyer

motivation and the availability of data or the nature of the transaction. Buyer motivation, of course, having a great deal to do with the nature (of the transaction) and seller motivation, for that matter. We may be down to four or five properties. The next step is probably one of the most critical steps of all. And the one that requires a fair amount of patience by the analyst to explore possibilities in most cases, and that is choosing a unit of comparison. \_Choosing the unit of comparison\_. There is certainly a great many conventional wisdoms in the field. You get people talking about their bay lot based on so many inches of water on the shoreline, or lots of people want to talk about gross building area or GLA or whatever, but you don't want to take those too much for granted. Most of the variation between one property and another in terms of their sales price can be explained by your selection of a unit of comparison. Anywhere from 50 to 75% of the difference in price between one comparable and another can be explained with a single unit of comparison. You tell me the total enclosed heated area of three or four or five different houses and I can explain 75% of the variance between one house and another. Everything you're doing after that in terms of adjustment is trying to explain the other 25% of the residual error in terms of the variance in price between somewhat similar, but nevertheless each distinctively unique properties. Therefore you want to choose that unit of comparison carefully. The unit of comparison will generally be related to what the buyer perceives as productivity in that property. If he's assembling land, the chances are good the price is going to be more correlated to the land area than anything else. If he's expecting to convert what is essentially a vacant building into usable area, he's probably going to relate it to usable area if you can, or gross building area if you can't. But quite often it has nothing to do with area. Doing appraisals of fraternity houses on Langdon Street, you'll find the prices much more correlated to the number of licensed beds. Each fraternity is licensed to have so many roomers whether it's 26 or 34 or whatever it is; the price people pay is going

to be the function of how many folks they can have that are paying customers for that fraternity. Certainly makes a lot of sense. And you may be able to explain 55 to 60% of what they paid for the fraternity houses on that basis. The next elements will have to do with whether it's fire proof or not fire proof, and how well it's been maintained, etc., etc., etc. But that first critical cut is what is the unit of comparison? Is it going to be related to what the buyer perceives as the productivity of that unit. My favorite is doing cranberry bogs. A couple of years ago I had something like 4 comps. One was 2,000 acres and which had like 55 acres of bogs on it, they bought the whole thing to get the 55 acres of bogs. Another one was like 50 acres on which they had 37 acres of bogs sitting in the middle of a swamp owned by the state so the water could flow through for free virtually and so forth. All different sizes. Now what are we going to use, price per acre, price per sq. ft. of finished bog area, etc. We found out we could explain the price of all four of those by the fact that all four of them produce so many barrels of cranberries per year, and they were priced at \$55 to \$57 per barrel of production. It didn't matter what the species of the vine was, didn't matter whether they sold some berries and some plants, didn't matter if it was two years old or ten years old, all of which effected production ultimately, obviously. But it sold by how many barrels of cranberries it had produced the previous year. And \$55 to \$57 could explain the price of all four comps regardless of their size. Which if you think about it makes sense. If people bought it for the production of cranberries, they bought it on how many cranberries it would produce. So sometimes you have to look around a little bit to figure out what is the productive character, what is the measure of comparison by which people are relating to that particular kind of property. In the old days, of course, you use to value farm land or grazing land by the number of animals unit months which was appropriate. How many cattle for how many months could you put on their grazing land? Certainly corn land today is still valued in terms of how

many bushels of corn it will produce and today, of course, farm leases even go a little further. They vary the rent, given the price of corn. So you may have a base rent of \$75/acre assuming corn is at \$220 to \$239 a bushel and then as corn prices go up and the crop price goes up, let's say in stages of \$.20/bushel, the rent gets another kicker as well. So you want to look at units of productivity. Now in most cases it's going to be gross building area or gross leasing area. Certainly in a building in which you know the gross leasable area of a rental property, it makes a lot of sense that would be the appropriate unit of productivity. Anything that I can collect rent for, but be very careful, particularly in major cities today, as in many cases the gross leasable area exceeds the gross building area. You add up all of the leases in place, you'll find that the way they leased it was initially said, "Okay, we're going to give you this enclosed area 2,000 sq. ft. of office space plus a 20% load for your share of the common area and, therefore, we're going to hit you for 2,400 sq. ft. of leasable area." If the building is 85% efficient, you just got charged 20% of common area for a building that only has 15% of common area for the rest of it and virtually they will have leased 105% of the building. Very, very common. In many cases the property management cannot add very well, they certainly don't allow all 100% in the building to share the number of what they perceive to be the leasable area. In fact it doesn't quite add up right is just an unfortunate coincidence. You have to be careful on that score. If you talk about GLA, make sure you know how the GLA was, in fact, defined. And one of the problems that you may have in using GLA even though it is the more desirable unit of comparison, if you may not be able to get it on all of your comparables. In which case you have fall back to the next one that you can find out which is gross building area. There you can get the footprint of the building and figure out what the gross building area is, including the walls and so forth, and so on. And sometimes you get gross building area on one building in which nobody will tell you what the GLA is and you simply adjust it arbitrarily, and you say

it's 85% efficient, or it's 90% efficient and you convert what you know to what you think probably is the case. Use a little asterisk on your table and say that is was estimated by the appraiser rather than stated by the owner. So step one is to find a common unit of comparison. We urge you (and in you packet I think you have), to simply use a linear regression formula on sales price against some alternative units of comparison. Don't make it a multiple regression, keep it linear, but create different facts, start out with gross building area and gross leasable area if that's the kind of property you're into. Obviously if you're into motels you probably be per rooms, if you're into resort cottages in northern Wisconsin you're probably be per bedroom, because septic tank permits are granted on a per bedroom basis as a proxy for allowable density on that site and so on. Then invent some. If we're taking gross building area and we say, "This building has much more exposure because it's on a corner relative to the other one," and say, "Okay I'll put two thirds of the weight on gross building area and one third of the weight on frontage on a public street, and create a new number which is called a transformation. And run it against your transformation. Maybe you'll decide that the first floor which is really the ideal space and rest of it is kind of slocky and deteriorated and not too accessible and so forth, I'll put  $\frac{2}{3}$  of the weight on the first floor area and  $\frac{1}{3}$  on all the rest of the building area. And try that for size. But run through 5 or 6 plausible scenarios of what people perceive they are buying when they buy that property and see which ones come out with the highest  $R^2$  coefficient and that becomes your unit of comparison. Now on income properties and certainly on shopping centers like what you have now, instinct is going to tell you it's in GLA and gross building area are virtually identical in this case because there is almost nothing that isn't rented except for the one little corner in back, where for all we know they didn't measure the space right in the first place and it is included in the GLA. But go through the exercise anyway. Once you have the unit of comparison, the next problem is, of

course, to relate that to the price of property. Now the price that we are talking about is the adjusted price of the property, not necessarily the nominal price of the property. The traditional hierarchy of adjusting prices is 1) terms of sale. Do we need to adjust the price to reflect the fact that seller provided financing? Or for that matter today that the property came with a mortgage at a rate of interest that is too high for the market, but there's no prepayment privileges so it sold at a discount. If it hadn't sold subject to the mortgage, it would have sold for more. And the appraiser has to figure out what the difference of the present value of the payment that has to be made before the prepayment date is reached and what the interest rate would have been at the current market. And that would be an adjustment then to the price. By the same token if the seller gave it away with a wrap around at 6% interest when the market rate was 9%, you've had to compute the present value of that one to bring that down to cash equivalency. Now, not all deals, just because the seller provides the financing, have to be adjusted. If the seller required 20 or 25% down, with 9% interest instead of  $9\frac{3}{8}\%$ , to hell with it. The market is not that sensitive. He was perhaps almost as rugged as the lenders, and you have to realize in many cases there would have been no transaction at all if the seller hadn't been willing to do that. So that, in effect, it was some give on both sides. The seller provided the financing with reasonable down payment terms and reasonable interest and repayment terms in order to facilitate the transaction, it doesn't necessarily raise the price, it just means there was a transaction that would never have been otherwise. In fact you will find in many cases, and in fact I would say in most cases, that where you have seller financing and the need to adjust to cash equivalency, the adjustment is not the present value of the interest differential for the term of the loan, but probably is half the present value of the interest differential for the first five years. That both parties are expecting that within that term there will be a refinancing and second of all, both parties benefited from the concessions by



the seller. You might not otherwise be able to sell the property at all, or at least to achieve the nominal price that met his other objectives. So some of the articles that you read on cash equivalency which take on very mechanistic view: compute the interest in one case, and the market rate of interest, and take the present value of the difference over the term of the loan,-- lead to excesses adjustments. And while it may serve their purpose and advocates a tax deduction or a real estate tax deduction or whatever, it's baloney. We have found that typically its somewhere in the middle. Now there may be other terms that you'll have to pick up. For example, we talked about some earlier that sale prices may be engineered, may be the general partner got bought off with a \$200,000 payment so that he would recommend dissolution of the partnership, etc., etc., to the limiteds, and that was recorded over the miscellaneous document signed with the deal, then the real price is the recorded price plus the payment to general (partner). If there is a prepayment penalty that has to be paid by the buyer, that would have to be added back in. If you're comparing land, and the guy bought the land and paid \$50,000 to tear the building down, then the real value of the land is the price of the land plus demolition costs. It would be determined to be his responsibility under the terms of the sale rather than the seller. Now given our tax laws in many cases once the buyer and seller get together, the seller will actually implement that because in not all cases would he be allowed to write off the cost of tearing down the building and so forth, that might be capitalized with the land. So you may want to structure it one way or the other, but at least you have to be aware that the motivation was to buy a piece of land prepared for construction and the seller did this, this and this in order to accomplish this. A good example of that would be the sale of the Madison Inn, which they wanted to sell very badly. Not only did they sell the building, but the seller arranged a line of credit for some \$200,000 worth of remodeling on the building, therefore, the selling price reflects the value remodeled rather than the condition at the time of sale. So

obviously a real obligation on the appraiser is to investigate the sale. Talk to the grantor and grantee and find out what the special features were, and what the terms of sale were, and were those terms of sale affecting the land and building, or was there payment for licenses and permits and interior (end of cassette copy of original tape, but can fill in from original micro-cassette tape) (side 2 of 5.2 of copy) furnishings and a variety of other things that weren't real estate that would have to be factored in. Second category. Yes?

Question: Does the buyer pay the prepayment penalty? Chief: No that would be added to the total cost of the acquisition to the buyer is what he paid the seller plus those other funds in order to get the free and clear title.

Question: I was asking the other day about the assessments. You were saying that we would want to take that into account. Wouldn't that fall under the special conditions? Chief: Probably not, because in order to deliver clear title, the seller is going to have to pay off any outstanding liens on the property. Question: Couldn't some of those be assumed or pro rated? Chief: Pro rated typically is that which will occur during the ownership tenure of the buyer. If you buy in the seventh month of the year, the pro ration will be a credit of seven months of taxes that were really due by the seller, but won't be paid until the end of the year by the buyer. In which case he gets a credit for that. That would not change the reported price of the property. Now it would be on the closing statement, but the closing price is not the sales price reported costs paid by either party are added or subtracted, closing pro-rations are treated as a miscellaneous element of the sale. You would have to evaluate it--is it something extra that he paid for or is it simply internal accounting so that the operating pro formas of the two parties match over a twelve month period. Question: Would you see what was common in the industry? Chief: You can make any deal you want to make, especially with commercial property. You have to investigate the transaction. Life is as we find it. There is probably very little norm. This is the age of the engineered sales price. You need to

find out as much about that engineering as you can, and it's what makes the market comparison method, which is otherwise the preferred method, in many cases unworkable and it become more unworkable as the property gets bigger. It seems those who can afford the biggest properties are often the ones that like to 'complexify' the most or have the most expensive accountants who feel it necessary to justify their fees by screwing up the deal. It may in fact cause you total frustration of breaking down and saying, "I've only got one sale and it's very hard to draw a straight line with one point. Here is the most comparable deal I've got, it sold for \$22 sq. ft. and so forth, but I've got to really test that by looking at the income approach and seeing whether that makes sense from an investment/income stand point. I can't rely on that single point, but I'm sorry that's the way it is. The rest of the market just isn't there." We had to do that. We had a number of tax appeals in downtown Madison in which we had three or four office buildings sales and the assessor used all four of them and we went into court and knocked out every one of them. They didn't meet the test as being a market transaction. If he would have figured out what was going on, he would have never used them. For example, the land sale which allowed Anchor to expand by putting a wing on the North side of the building -- that was the first sale on the Square. It came in at \$44/sq. ft. for the land, which is what the Internal Revenue Service then used and in another case in which we represented the building owner, because he was getting slammed \$44/sq. ft. for the land which meant there was almost no depreciable value left in his building at all, which is what the IRS wanted to accomplish. They looked a little silly when we pointed out that with the \$44/sq. ft. they got the air rights all the way over to the Bank of Madison, not only the Parker Building and the Chocolate House, and whatever else is in there, they got all of the air rights so that nobody can block the view of the window on that side of the Anchor Building. Now if they want to figure out how much is for the land, and how much is for the air rights, go right ahead, but it wasn't \$44/sq. ft.

for the land. And therefore, the transaction drops out. Not available at the time. They simply didn't do their homework, or if they did do their homework they were going to fast ball it and see if they got it through. If they got it through, they won their case. If somebody didn't get called on it, great, they stuck the taxpayer. The IRS are not the most honest folks to work against, I'll tell you. They'll put the information forward as suits their purposes, and if you catch them at it, why hohohoho, big deal. I came against this one appraiser over at the IRS. The IRS decided they didn't want to use outside appraisers, they tended to be more honest with the inside IRS appraisers so they hired their own crew most of which were transferred from other government agencies and they ended up with a couple of guys from the FHA who had done nothing but apartment houses. And as a result they look at every piece of property as though an apartment house is the highest and best use. So we went over the whole song and dance on this is an FHA development property and it's really fun. You can shoot them up so badly so quickly. But by the same token when you're in court you have to do your homework or it will come home to roost and you're in trouble and your client isn't exactly enamored. So this investigation of the sale grantor/grantee interview as well as talking to the broker, and possibly finding the attorney, or whoever they closed it with, and see if they can recollect what the parties were about and how the deal got structured as it did and so forth. More and more today, you can't rely on reported sales price. There may be all kinds of reasons for that, many of which are related to the income tax, some of which are related to the real estate tax, another is simply related to the financial statement of the seller and the buyer. For example Gordy Rice bought the Gisholt-Johnson plant at what everybody suspected was a pretty phenomenally high price. The problem was Gisholt-Johnson was in the process of dissolution and merger into - (what are the other machine tool companies up in Oshkosh?) and didn't want to take any more capital losses. Capital losses, as you know have a limited application

with this income tax law. They needed ordinary income tax losses against any profits from the future rather than the capital losses against which they had no capital gains. So Gordy Rice bought the whole complex at a price which represented existing book value of the asset and Gisholt-Johnson immediately leased it back for three years which gave him immediate cash flow on a vacant building. They continued to store, presumably, machinery and supplies and so forth, in the building and then as Gordy Rice leased it up, they were forgiven the rent that was due on the space that was leased. Gordy Rice was no dummy. What he did was he gave away six months free rent every tenant that came in because they didn't get off their lease until the rent started flowing from Gordy's new lease. But if you look at the transaction on its face, you had a price of about \$15/sq. ft. for a munitions building that was built in 1916 to build naval cannons or something or other. It was a real dog. You really had to go back and look at the whole and how it fit together. And there is a classic case of an engineered sales price in which the financial statements of Giddings and Lewis which were the acquirers on the record, looked good. At that point they were taking the write down on plant and equipment off the books and applying it to future income, rather than taking a capital loss. And there are a lot of those kinds of transactions. Just a heck of a lot of them. Pan American when they sold their building in New York for \$200/sq. ft. John White will talk more about that transaction. The building was owned by Pan American. They needed cash because of their losses that they were taking in their airline operations. They were the major tenant of the building and so what they did is they rewrote their own lease to take it from whatever the contract rent was of let's say \$12 or \$15/sq. ft. to market rent at \$35/sq. ft., extended the lease, and you get a whole new value for the building. And as a result they could then sell the building because it was no longer encumbered by their lease at a non-market rate. So clearly an engineered transaction. Quite often when industrial buildings and department store type buildings or retail buildings

sell, particularly when they sell from one operator to another, it is customary to load the inventory with a large part of the value of the transaction because that can be released against sales immediately, understating the real estate so that the real estate can be written off more quickly and so forth. Or because it was written off more slowly, you don't want to have to wait as long for the depreciation. Industrial buildings the same way. Overstate the value of the machinery, understate the value of the real estate, and you get a faster write-off. Certainly the tax laws favor that today. Put as much into the 3, 5, and 7 year categories as opposed to the 31.5 or whatever it is category. So that's the way the deal is structured. You push it as far as you can go and let the IRS try to guess whether you can support that. Both accountants and sales people in real estate work on what's called the 'holler theory'. You take everything you can get under the law until the IRS hollers and then you negotiate from that point. If they don't holler, you got it. The second element that you need look at in terms of sales is time. When did the sale occur? If you feel that there has been a significant advancement in value for real estate in general of that type and in that particular part of town, from let's say a year and a half ago when the deal transpired, you're going to have to compute some sort of appreciation factor that says if that property were to sell as of the date of my appraisal, it would have sold for 6% more or 2% more or whatever. At the very least you'll probably adjust it with what we will call an deflator, a deflation index from the Federal Reserve Board which is slightly different from the CPI Index. CPI Index is more interested in the cost of goods and the deflation index is more interested in the devaluation of money. And the devaluation of money would be a safer measure for the appraiser to do. Now there may be other factors that have gone on. Maybe they've just announced that the convention center is going next door, as a result the parcel had been hiked up in value when it was in the doldrums before. Or there may be reverse elements, and some of these are cataclysms which mean you really can't use those

sales from that prior period. For example, we're presently doing a white paper for the Chicago tax assessor because he's under pressure by the school board that says, "How come you're not using some of the 1985 or 1986 sales to syndicators of the financial institution buildings in the downtown loop." The school board says, "If you use those as comparables your values per sq. ft. on the loop would be \$20 or \$25 sq. ft. higher and the school board would get more money. Obviously your in collusion with the property owners downtown." We have to come back and say, "Hey wait a minute, as of December 31, 1986, the rules of the game changed. The financial institutions not only no longer get the advantage of a sell-off and lease-back with a highly structured step-lease payment which allows them to put those monies back into their loan reserve elements and so forth, but in addition the FDIC has changed the rules and doesn't allow them to do that, etc., etc., etc. The accountants are changing the rules by which lease-backs have to appear on the balance sheets as assets and liabilities and so forth and so on and so 1986 really represents a watershed year in which you can't project that sale from '85 or '86 when those rules were in place to '87, '88 when there is a whole new set of rules in place with a different game plan. Therefore, those are no longer comparable because what you have is this watershed really in a context within which was transactions made. And that may occur at a point in which mortgage rates suddenly when zoom from 9% to 12, 13, 14, and 17%, a different ball game. By the same token you may have to anticipate that. In a case that we had in which the appraisers were deliberately low-balling the numbers, they were appraising apartment buildings in July and August of 1981, based on transactions which had occurred in '79 and '80 and paying no attention to the fact that Congress did pass 15 yr. depreciation on apartment buildings which made them el primo as far as tax shelter was concerned and probably put a premium often to a point where you could sell the equity for 35% of the depreciable value of the building. So you need to anticipate a change in the market context. (End of original micro-

cassette tape) But this goes back to who is your most probable buyer. How far can he look for his options? For an institutional investor then it doesn't really matter. What will I pay for a building in Wisconsin is probably as equally valid as well as what I paid for one in north Kansas. So you have to understand the market area within which the buyer perceives himself having options and occasionally have information. Extrapolations across that area but you would prefer not to, you would prefer to be able to establish that the market for this type of building let's say is on the Square and C2 zoning, and all comps meet that locational qualification. I don't have to adjust between something that is C2 in one case and C3R in another case. O.K. I have to break now; I have a meeting.

Wisconsin Realtor scholarships were discussed. Real Estate Club assembling a one page resume for jobs for use at the Alumni bash was discussed. Arthur Anderson tomorrow night at the Memorial Union announced and if they want to be interviewed. We were talking about the market comparison and hopefully you'll reach

the same conclusion we did in the previous lecture and the first problem was selecting a

unit of comparison and reflective if accounting for productivity of the property and second of all we have to clean up such prices as we might have relative to comparable properties so that they are adjusted for terms of sale, time, and possible location differences if we were reaching over a fairly broad range because we were short on comparables. Obviously it would be nice to set up a subset of comparables that let's say are all C4 capital zoning, none of them required parking, etc. we are not always allowed to have kind of opportunity and you will have to decide for yourself how you might have handled the locational differences of the various shopping centers that we have comparables. By the way did you get in your packet the three CACI compilation analyses? You should have that. I will get that for you. Once you settle



for terms and possible timing of the sale, whether we want to make further adjustments than that, for location and other elements, or whether we want to incorporate that in our definitional element is a matter of judgement. It really depends on how sensitive it is to location. For example, in studies of sales in wilderness area what is critical is whether it was in the Grand Teton Valley Park, or whether it was up in the North Cascade, or whether it was out in Montana, and eventually we found that a statistic that indicated the intensity of use in general area which represented camper days of folks in the woods, which allowed us to come up with a way of categorizing Montana, versus the N. Cascades, versus Teton Valley and from that we have to come up with sort of proxy that says hey, this is the way we have to classify them relative to location and so on. Now, once we're down then to a price per unit by dividing our adjusted sales price by our chosen unit of comparison we obviously have to define what the sameness elements are about these properties, how do we then make adjustments for the unique attributes of those properties abiding by Mr. Dilmore's suggestion that while we may select our comparables on a somewhat subjective basis, our adjustments between them should be reasonably automatic once the rules of the game are set up. None of this 5% better than that one, - 10% of this one which is the traditional appraisal process. We're going to look at several ways of doing that as the week progresses, Mike Robbins will be here next Monday to talk about the market comp system in general and Jean Davis and I will take Maple Bluff apart a week from Wednesday but today we want to look at one that grew out of Ratcliff and then re-implemented with a little more finesse and finally Dilmore automated by going back to his mathematics background, and if you will look at the very first one, in a some what arbitrary fashion and then work back and talk about some of the problems. The first property that he appraised in this set of examples is a steel industrial building that was built in two phases. We're looking at essentially industrial buildings as our comparable and preferably steel prefab industrial building more or less clear

spans, or semi clear spans and so forth. Having looked at enough of them we're going to come up with a set of factors which we think explain differences other than size in these facilities and the first one is gross building area. The basic principle of the price declined as the project gets bigger, in terms of more space with proportionately less wall and so forth. Not efficient in terms of size, so we set up a category called gross building area and then we wrote our own rules. We said a five was a building of less than 15,000 sq. ft. the correlation of the size to that factor is we're assuming prices are higher for smaller buildings, there's less, there's more wall area, less floor area, etc. It may or may not be true as it turns out, but that was our initial assumption. We gave a 3 to buildings between 15,000 and 40,000 and we gave a one to the larger buildings that exceeded gross building area by 40,000. Where did we get those numbers? Purely arbitrarily by looking at the comps that we had that tended to distribute the comps into three categories. Why 5,3 and one? We simply want to use three as typical and characteristic, five is something better, one is something less desirable. Purely arbitrary but we wanted a system which is one, once we determine what the rules are anybody could replicate and they would arrive at the same number for that property. So if we went into a jury, the jury would have agree with us that the 15,000 square feet and we properly gave it a five. If its bigger than that we probably gave it some other number and so forth. We want to be able to replicate the score, 5, 3, or 1. We'll come back to that later. Dillmore had some other ideas on that. The second element relevant to differences in the property was location. And we thus spent enough time in the Madison industrial market to know that the south side of Madison, south of the Beltline, is a preferred location and can obviously provide a more balanced distribution distance for people banning around the city on the beltline and so forth that the second most desirable was where they were visible to highway 51 or 151 or 113 and the least desirable was out in the suburban fringes without that visibility, without being on the south

side. Again, 5 is just better than, 3 is typical, and 1 is worse than typical.

The next thing we know about our real estate is that the ratio of land to gross building area certainly tells us something about flexibility that if the building covers virtually all of the site we have problems with parking, we have problems with backing the semi on and getting it off the street, etc. and we certainly don't have much opportunity for expansion or modification of the property, so we took the so called ratio of land to gross building area and we said 4 to 1 or better, between 4 to 1, 2.5 to 1 is typical, and less than 2.5 to 1 is getting a little tight. That by the way typically will hold; at a 40% ratio which is a 2.5 to 1 and in most industrial parks that would be less than norm. The next category was efficiency of the building design for storage and distribution uses, and here we set up a category that said efficient layout for accessibility and stored goods, adequate number of overhead doors, truck height, loading dock, simply adequate to the layout with limited number of overhead doors and number 1 was deep space with inadequate number of overhead doors, 5, 3, 1, and they could pretty well define that. If you wanted to be fancier, you could have said one door per 10,000 sq. ft. or set some other objective criteria if you felt uncomfortable about saying adequate or inadequate or appropriate.

And then finally the quality and extensiveness of the quality HVAC system: fully insulated with heat in the warehouse and office area. Partially heated warehouse space using heated office space and finally minimal heat or, as we call it, a cold warehouse. A cold warehouse is not a warehouse that is refrigerated. Its simply one that is not heated. And again 5, 3, 1. Now, all of those numbers are ordinal numbers. There is no relationship between the 5 category of gross building area, and the 5 that we gave the HVAC system. It may be internally consistent within the attribute, but there's nothing about 5 that's magical as to the relative significance or importance of those elements. They are ordinal numbers. We need a way to convert that to a common denominator to make it a cardinal ranking so we know which of these attributes is more

important than the other, if any of them are. We choose arbitrarily use 100% as our base for a ruler, if you will, of converting a ordinal number to a cardinal number. So we need to apply some weights to each of these categories to define the relative significance of each one. Typically what we would do is initially assume all of them were equally important and assign a weight of 20%. And as is do all the calculations and see what that does. That probably won't give us as fine tuned an answer as you want and in the old days we would simply look at it and say gee, we considerably under estimate the price of this comparable relative to the others, I wonder why that is? And it turns out gee, they've got a lot more land than somebody else has, or they have a better aluminum CD system that's insulated or something, what would happen if we increased the weight on that variable and subtracted it from another variable which almost everybody agrees is low. And so by simply eye balling it you can begin to adjust the weights. You never know whether you quite got the optimal method that way, but you would be able to see in a moment to get into the price per point per unit mean pretty carefully that way. Pretty reliably. And often we reveal the fact that your logic and the market's logic is just backwards. For example, we did corporate headquarters in Madison, and we assumed initially that the soils and the buildability of the site was really important and accessibility was really important, etc., and we tried that and we couldn't predict a single sale at our comparability thing. In fact we began to look at our data and we said gee, the worse the site at better than the price. And so we looked at another again, and said gee, what they really wanted was visibility for the corporate headquarter it didn't matter if they had to buy land with lousy soils, quick sand on it or whatever, it didn't matter how much earth they had to move, they wanted visibility, they wanted perhaps access to residential area where the execs live, etc., and we just turned them all around and found out the weights were just backwards. If you were a commercial developer, you would have looked for soils, ease of getting a permit, accessibility to the busline, and so forth, the

corporate people could have cared less. So suddenly the Verex site which didn't make any sense at all on a what would you do if you were a commercial developer to minimize your risk sort of thing, suddenly it falls right into place. It's not near a busline, and you've got political problems, etc., etc., etc., but was highly visible, and it falls into place. The weights become a for consumer behavior and you may find that in interviewing people who lease or broker this type of space-that they will tell you hey, one thing you really got to have is insulated today or its gotta have 20 truck doors with levelers, etc., and that becomes the clue as to what kind of points you want to put on that particular category. What Dilmore did to the whole system was simply create a computer algorithm that will go back and in effect compute all the permutations and combinations of ways that you can place on this set of attributes and find that set of weights which produces the tightest mean price per unit per point with the lowest standard error. On the next page what you've got is first of all your comparable sales and each of the comparable sales has been scored using this particular scoring system that we set up. Notice the scoring system is the work of the appraiser, it's his scoring system, it's simply applied consistently once he has created that system. That gives us then a price per unit as the first couple lines, excuse me, this is a point score at the first couple lines, and then we go on and we look at the price in this case the square footage and gross building area with industrial buildings, gross building area and the leasable area are pretty close to the same number and so forth and then we divide that by the number of points. Now look what happens. We get down to price per sq. ft. of gross building area, even after the price has been adjusted for terms of sale and so forth, and we have a pretty bouncy around number there. I can't read all the fine print from here, but its going 14, 16, etc., etc., okay? A great deal of dispersion. Now we divide that by the point score and we come up with a very tight number. \$4 and something per sq. ft. per point. That's the whole objective of market comparison, is to converge on a common

denominator for value once you have explained the differences. If you go through a whole market comparison system and you have as much dispersion in your price per unit after you've gone through your adjustments that you had before, your adjustments aren't explaining any of the differences. Something else has to be going on there, which you haven't accounted for. In the ideal world if you had accounted for all of your differences the price per point per unit would all come out to the same number, which isn't going to happen obviously. The next concern for the appraiser is on page 3, it says all right, if I have computed a number, page 4, here's the computation by hand, we have a price per sq. ft. of gross building area, we have a weighted point score for each of the buildings, we then come up with a price per point per unit and take the mean of that and it comes out to be \$4.18 plus or minus a nickel, right? Now, programs that we have, that you'll be able to use is Q point or version 2.5, will do that calculation for you but I want you to see how its done. Anybody can turn that out on their HP12 with a minimum of effort. So we're really coming down to saying hey, our basic price formula here is going to be \$4.18 per point per sq. ft. Now let's see if that makes any sense relative to our comparables, turn back to page 3. The ultimate test here is to look at each of the comps and come up with a so called estimated price per sq. ft, compare it to the actual price, see how many variance we have in terms of pennies per sq. ft. or dollars per sq. ft. and then what is that as a percentage of the total price. In this case fairly minimal net vary. Each of our prices is fairly well predicted by this algorithm. Market comparison methods generally don't give you the power of going back and saying gee, how well did the appraiser predict the estimated price of those that have been sold? If he can't do that using a system then they don't have much chance of predicting the next one either. So our leaping assumption is that if these properties are similar in character to the subject property, and we score the subject property in the same way that we scored these comparable sales, we should be able to make the leaping assumption that the

pricing system that worked for the comparables should work for the subject. So far so good? And that's on page 5. In this case our subject property has a point score of 3.00, we take our basic score of \$4.18 multiple by .05 and come up with a price per point per sq. ft. and we turn that crank on the side of this property and come up with a pretty tight number as to what it should sell for using a market comparison approach. Granted there's always error, there's nothing wrong with that as Dilmore points out. The guys studying the black holes in the heavens and they use much less data than that in their sciences, why aren't we? So far so good? There are a number of problems with this system. Its dangerous first of all when you first get started. One problem of course is that if you have too many comps and too many attributes that you want to compare, the matrix goes on and on for ever and it personally has no leverage. If you had 20 different attributes, no one attribute would appear to be all that significant. Or what might happen, is that after its gone through of thousands of permutations and combinations, only three or four attributes would show up to be significant. That it get just as good as results using four as it did 20. As a matter of fact that's generally the case. Most appraisers use too many attributes for comparison. The second element is the scoring system, 5, 3, 1. Dilmore always felt that like in regression if you code with a number like 5, 3, 1, you are in fact making an implicit weighting of the factor or attribute and that you may be distorting it that way. So he created his own point scoring system which simply has 7 numbers in it rather than 3 and goes something like 35 down to 17 so that that is only 2 times as great as worse and its a little curvilinear so that you drop quickly to 35, 30, to 27 and so forth so that you get a tentative curvilinear wave as it gets worse it doesn't get worse expedientially, it gets worse at a decreasing rate. And El Primo very much stands out from the rest of the puzzle. So I asked Gene, where did you get that? He said, well I was appraising government housing in Panama and found that the government housing on the west coast of Panama have related to east

coast of Panama by that curve and later when I came home it turned out to be the same curve that Mark ? was using on his cost system where he went from excellent to poor. I said wonderful Gene, I am in Wausau, Wisconsin and I'm going to explain to the jury where I got my weighting system and I'm going to say it really worked for Gene Dillmore in Panama on government housing which was on the East and West coasts. They're not going to buy that. Why don't we just go back to basic 5, 3, 1 so we have a replicable kind of system and we don't get into all the degrees of difference. It would be very hard to make up 7 degrees of difference relative to HVAC system and be able to categorize it very well on industrial buildings with what we know, because if we only have 7 sales to begin with, how are we going to make all those nifty little distinctions, how many are we going to have in a category. So Gene has now come around to my way of thinking that its better to keep it's very simplistic and score on the system, but it would be possible to modify the point score to be curvilinear as you wanted it to be, and you need to go 5.2! if you want it to, \_or\_ 5, 4, 2, if you didn't want quite as much emphasis on the lowest score point and so forth. We do use zero if the particular property in question doesn't have the attribute at all. So if the issue was elevators and you have 5 points for 2 elevators and a freight elevator, 3 points for one elevator or two elevators and then one point for one elevators, you could also have the zero for no elevator an then the nonpresence of elevators would be backed into the score. In those cases you might add a zero. The important point is for the appraiser to one, understand the economics of the property and try to represent in 4 or 5 variables what he perceives as the critical element of economics. And its probably appropriate to look at something in terms of the land characteristics, something in terms of location, which obviously doesn't have to do with the land, land has something to do with shape and soils and physical characteristics of the site. Location may be in terms of the feasibility or accessibility to traffic. You want to look at something in terms of building quality probably. You want to look at



something in terms of mechanics of the building where that is important, elevators perhaps being a very significant element in the renovation process as to whether they have any and if so, are they any good. And you may then want to look at simply the flexibility of the layout for accepting renovation and so forth. Maybe the floor loadings aren't high enough, or maybe the piling or the post system is such that its going to chop up the building. And I think we have another one here where we can show you that. Another way of looking at it, here is a computerized way of doing the same thing that we saw here. The first thing that you want to know is okay what attributes are we going to have here, and these match right up with the one we had set up earlier, gross building, location, ratio of land vs. the building design and so forth. Everything that is in capital letters, we typed in. And the second thing you need to know is how much weight did we assign. Initially we don't know how much weight to assign so we assume they were all equal and we gave them each 20% weight, so far so good? Now the computer comes back and says okay, now we gotta know about each comp and we gotta know their sales, gotta have a score for each comparable, and the program is going to say, what's observation number one, and we have type in the address and in this case we give it the raw price per sq. ft. after adjusting the sales price for terms and time. And now we give it the scores for each of those categories and it by the way typed out the gross building area at this point, all we had to type in 5 if you can handle that you can handle anything and we go through our 6 observations. Then it comes back and it says fine, what's the test matrix and in this case down at the very bottom we know that we want to test 20% on each of them plus or minus five, plus or minus ten and it therefore sets up the matrix that says at 20 plus or minus 10 is 10 or 30, and plus or minus 5 is 15 or 25 and its going to test all the permutations and combinations of those weights on each characteristic to find out what is the better way to do this. And it comes back on the first path and it says great the median is 4.56, the mean 4.528 and the standard deviation is .44 using

our initial weights and that there were 3,125 combinations of which 381 added up to 100%, in other words it only looks at those having a constraint on it, it only looks at that set of weights which always add up to 100%. In other words, 381 permutations and combinations that add up to 100%. It then goes back and does it again and says instead of computing, 20, 20, 20 and 20, etc., you'd do a lot better if you did 30, 30, 10, 10, and 20 and at that point you get a 4.15 median, a 4.17 and a standard deviation of a nickel. Any one have a problem with that. The next one is a little upgrading of the same model. One thing on 2.5 what you want to do is once you've got that new set of weights, run it again with that set of weights. Its possible that there is an optimal set of weights outside those parameters. Remember we want 20 plus or minus 5, plus or minus 10, its conceivable that if you want plus or minus 20 that one of the weights would drop out, the zero weight on one of those categories might produce even better means, so what you want to do is take that last set of weights that you got, at the same plus or minus 10 plus or minus 20, etc., and it will test to see if they are a bit more stable result. You have to do that with 2.5 it won't do it for itself, some of the more recent models will do that for itself. So that's where the weights come up. Its based on what is called a powers rule in sets. Since we are talking about a set of comps, in which set of comps in this case is the universe, we have in fact solved for that set of weights which optimizes the mean price per point per unit with the lowest standard deviation around that unit. Somewhat more recent model is on the next page. It is now organized with program menus indicating what you want to do. One of the real problems in all of Gene's models is they don't purge their old data very well, you almost always have to go back and into base one to make sure you killed the data. A quirk in the programming every once in a while you end up with stray data wandering in. Particularly if you got 6 comps in the last set, you got 5 comps in this set, what happens is all of a sudden you have 5 within 10 and one is coming in from right field, very disconcerting, Gene is very frustrated with

that whole process. Okay, this goes through the same model we just talked about with just a little more pizzazz in terms of the operating characteristics. This particular system will deal with a gross building price or the square footage element or some other unit that you choose. And then print out a variety of intermediate tables as you go along. Final point score again and then the final conclusions on page 16, turns out to be the same as we did by hand. Notice on page 18 of that you still get the predicted price, the actual price and the error. In this case he has computed the percent of error as deviation. You would have adjusted your price for terms, and time if necessary. (end of side one) (side two 6.1) I think if you look in your reading packet you'll also find material on the Woolworth building, go through a similar set of scores and categories, you can do this with single family homes, you can do this with virtually any kind of property in which you have four or five sales and with a little thought in terms of which factors are important. Here the Woolworth building which was down on the Square was appraised a couple of years ago, we had location as one of our attributes, and in this case it stood for visibility, if you were on a corner with a wide avenue adjacent to the property, you had high visibility. If you were on the corner that had a narrow, street along side of it, corner visibility was limited and it had an inside lot. So we had three sales--the Emporium Building, which was a limited visibility, because it had a narrow street at Carroll Street. We had the Woolworth building and we had high visibility because of the wide Wisconsin Avenue right of way together with Mifflin Street and then you had 14 W. Mifflin, the old part of the store got converted to office building, on an inside lot with minimum visibility and relate that to the way traffic goes around the Square, you drive at certain sites you can see them well, other sites you barely see at all because if you are steering you might hit somebody. The second thing we looked at was the expansion potential because all of the buildings were bought for renovation, none of those were bought for use in their present status and so we wanted to

know whether they had any capacity for increased floor space and number of them had foundation systems and front load systems, such as Penney's, which would permit you to add a number of floors on the top of the building. Did they have a flexible layout due to bay spacing, and the elevator position. Third of all you had to look at storage. The elevators at the back buried in the corner is not a very efficient corridor system and you have some real problems converting the buildings. On the other hand, with elevators up front like at Woolworths you can lay out the first floor space and you're not tearing it all up for internal circulation. And finally we have flexibility of layout, on 14 W. Mifflin there's really three old buildings that have been remodeled from time to time that have masonry walls going through there that won't let you do anything with it. They're holding the building up and you're not about to take them out. It makes for much less flexibility in terms of renovation, as opposed to the Tenney Building which has a very interesting structural system and more flexibility in terms of alternatives. Next question was condition at time of purchase; and we can say it was fully renovated leased or they had a long term retail lease for the entire space, or it was vacant and needed a total rehab, 5 to 1, again. Elevators at time of purchase, we talked about that once before. And finally fenestration on the upper level and as you know the department store of the sixties typically had blank brick walls with their merchandise around the inside of the exterior wall and no windows above the first floor area where as a couple of the older buildings such as 14 W. Mifflin had very nice fenestration looking out over the Capitol as did 57 N. Pinckney, and of course that's made the renovation considerably easier because it wasn't necessary to strip the entire exterior of the building to go forward with the renovation and so on. So those are the five factors that we took into consideration there. And the scoring system that we move forward on for the department store. Obviously the appraiser has to make up his own scoring systems, but in such a way that it is reasonably tight and not subjective and someone else can follow

through and agree on whether or not that was the appropriate score or not. You may also want to test with simple linear regression three or four different measures of units of comparison. Gross buildings, net leasable, maybe weighting the amount of floor space on the first floor relative to the upper floors, may be using the gross building area including basements in some cases, other cases simply using a first floor area as 25 N. Pinckney. The final chapter shows you on the tall building, people bought the first floor and they didn't care what you did with the other floors, if anything. This so called bill board system on computers the discs are available on QP2.5, you can play with it. But I urge you to initially crank it out by hand once and get some feel for the numbers, get some sense of what's going on. Any questions up to this point? What's the minimum number of comps you can use? 3, 5--obviously the more the merrier, but what happens is of course if you use fewer comps your dispersion is going to be considerably greater and the  $n-1$  factor the standard error will go up considerably. Quite often your quite lucky if you've got three comps. Chief, how do you get down to the affluent weights, is that just a guestamet, just plugging it in? No, the computer will do that for you. It will solve out the permutations and combinations. Initially, if you have 5 variables, give them all equal weights and let the computer run through the first time and it will come back and say okay here's what you get if they are all equal, but you can do better solving it if you adjusted the weights for you. Generally it will ask you for what interval of adjustments that you want to make, 20% for each of the variables, at some point say what interval do you want to make your adjustments and say plus or minus five, plus or minus ten, okay at that point it will fly 15, 25, 10, 30. All right? Now, there's no assurance that that's the optimal set if there's possibilities that one of the variables could have been zero and you wanted to let it run on that. Chief, you talk about adjusting price for time or terms, what process would you use for that? Well, for terms you're obviously going to be looking at the present value of the advantage. For

example, let's assume that you have a building which sold and the buyer was required to assume the 12% mortgage that could not be prepaid for another 4 years. The price is going to be understated because he was better off if he refinanced it let's say at the current market rate of 10. All right? What's the present value of the difference given equity discount rate of the debt service on the mortgage and to assume and the mortgage he could have gotten had he gone into the market. For the four years remaining before the prepayment comes into play. The property will have sold at a discount because it has to carry that burden for those 4 years. At that point the terms can be converted mathematically to an adjustment representing terms of that undesirable loan. By the same token, let's assume that the best deal that he could have gotten in the market was 25% down, at 14% interest and the seller says I'll tell you what I'm going to do--I'm going to give it to you for 10% down at say 12% interest, at that point you have to compute the present value of the advantage of the financing which has been provided for that period of time by computing the difference in debt service between the market rate and the rate that the seller provided. Okay? And for how long a term would he enjoy that? If there was a five year balloon on the seller financing, you have to take the present value of that advantage for 5 years and subtract that from the sales price. That would give you the cash equivalent value that the seller had accepted. Now, some of the articles which you have debate that as to whether there should be any one per one adjustment for the present value of the difference, where the seller is providing financing. The argument is--and its not a bad argument--that the seller wanted to sell and get out from under the management and so forth the market rate of interest was such that nobody could cut a deal unless he helped and so in effect he was willing to provide financing just to get out from the ownership of the project and therefore, the cash equivalent adjustment, shouldn't be 100% of the present value of the difference, it should be closer to 50% because the seller got some advantage and the buyer got some advantage, the

seller's advantages were not financial, the buyers advantages were financial and you assume relatively an arms length kind of negotiation and presumably somewhere in the middle. And there is considerable evidence that essentially is what happens. The full value of the cash equivalency is not paid for in the sales price. Yes? Question--The scenario where you talked about where the buyer put down 25% would you just look at the amount of equity or would you just look at the amount that would have been financed for one scenario to find the present value? Well, we first have to establish the 15% and what's the cost of equity, which is an additional advantage. We would have had to come up with \$100,000 more of equity, and equity went 15% a year on its money, they avoided that as well. Savings on the equity side as well as the contract rate from the seller versus the market rate of interest at that time. Question--How do you account for holding period when it can be up to 25 years? Chief--Well, typically those seller-financed deals are not forever, there is typically a balloon factor. Second of all, the cyclical character of the interest rate is such that sooner or later it will fall and the buyer will be better off to refinance anyway. So even when interest rates were 15% or 16%, the seller thought he was doing him a favor as well. So typically you don't extrapolate the length of the contract, you take a 5 or 10 year forecast, 5 year would probably be a better estimate. All things change. Now, a lot of appraisers, of course, if they were instructed to come in with a lower value, will often doctor their comps by just extrapolating the cash equivalent value out to the bitter end. You get a larger discount and as the result the adjusted price is lower than it should be and lower than the seller would ever have accepted on terms of sale price but it allows him to have what appears to be a very rational and objective way of understanding the sales price of the subject property. So the very sophisticated cheater tends to jump on cash equivalency and extrapolate it to the nth degree. Question--How do you account for the situation where the buyer doesn't want to get refinancing because maybe the points were high but the

interest rate wasn't? Chief--Well that's one of the advantages. What's the value of the points? That's one of the financial advantages. If he saves \$20,000 in points, what's the present value of that over a 5 year span. It becomes part of your adjustment. Now, as interest rate goes down, the amount of creative financing goes down as well. If you're dealing with sales that are relatively current, there's less of a chance of a sale with very heavy seller financing. Once you're in a market where interest rates are abnormally high, virtually every deal is a dash equivalent kind of thing. That would be one type of term. Another type of term might be in a property that was, say, owned by a limited partnership and this was the time to sell so they sell the building off. Well, one of the problems is the general partner may have had a vested interest in maintaining the management, the insurance control and the other goodies that went with being a general partner. Quite often you'll find the buyer makes a separate deal with him so the general partner doesn't get in the way of the deal. And over on the miscellaneous side, you'll see the general partner being bought out for \$50,000. That's another term of the deal and you would then have to take the sales price as reported in the public document and add the \$50,000 that was paid for whatever perceived interest the general partner might have had in the property. Therefore you raise the price of the property. If you were doing vacant land sales and the people bought the land with a building on it and then spent \$20,000 to tear down the building.....(end of tape) That would be another adjustment for terms as opposed to just simply financing. Another element of terms of the deal may be the fact that personal property was included in the deal. Home sales quite often include snow blowers, the curtains, carpeting, maybe the dining room table which the lady fell in love with and as a condition of the deal, unless they would sell her the dining room table and the piano, they wouldn't buy the house and so forth. You really have to know the sales. You really have to talk to the grantor and grantee and find out how they perceive the transaction, what was included and why and what really



transpired. It would be nice to use the market comparison approach as your primary source, as was indicated before, more and more particularly the commercial properties is an engineered price in which the attorneys and the accountants have allocated various elements of it to best serve the proforma balance sheets of the parties and the ultimate price recorded in public may not truly represent what was paid for with that particular property. Usually they have a trade. If we both get to equally overvalue our property we can always make a deal.

Handouts for project and newspaper history of the location. Today we would like to

continue talking a little bit about the market comparison method both QP and Marketcomp

which we're going to be looking at shortly. And in some ways the origin of those methods--

there was a surge in the 60's and early 70's toward multiple regression analysis and the ultimate objective methodology for market comparison. Interestingly enough, I believe it began in Nebraska where the state assessor's department developed some regression formula for appraising farm land based on three or four criteria--soil type, productivity characteristics, accessibility to paved roads with four or five variables tied to soil maps and productivity elements they came up with some very reasonable and consistent formulas for valuation of farm land. At that particular point in time it was necessary to do regression formulas virtually by hand and therefore, to do three or four variables on a significant number of comparables steeped with information was a tremendously time consuming job, the kind that was suitable for a state agency which had a number of gnomes cranking on that for three months to arrive at the algorithm for the state of Nebraska farm assessors and so on. The advent of the computer of course, made computing power necessary for successful use of the regression approach economically feasible and a number of academics plugged in to it and

the leading proponent of it was the state of California and the state of California had a gentleman by the name of Robert Gustafson who was attempting to one, provide for a more equalized, consistent, treatment of single family home prices in various counties in California and two, overcome long years of corruption in some of the major jurisdictions, like San Francisco, San Mateo county and so forth in which the assessments were totally out of whack and they had to find some way quickly and cheaply to come up with order of magnitude, number that would kind of make everybody kind of on the same basis. And Gustafson began to explore multiple regression. As you know basically multiple regression formula starts out with the old straight line formula what ever you're predicting you're projecting  $p=a+bx$ , where  $a$  is the point at which crosses the vertical axis and  $b$  is the slope factor that should be applied to  $x$ . If you were to simply graph the mean of something all you would have is " $a$ ", let's say you had 20 sales and you took the mean of those sales, and essentially you got a line running parallel with the base line which was the value of a particular property and you got a straight line paralleling the base axis and that would be  $a$ . The premise is that essentially you doing a weighted average mean that says that you introduce variable number two essentially saying other than just price per square foot, but now we use the number of bedrooms that indicates that the mean value will begin to rise, the number of bed rises or the size of the lot gets bigger, and then we just string out a long formula that  $a + bx + ty + dz$ , etc. is going to equal the price of the home. And at the very end of that little formula as you know is a big  $R$  for residual error, the unexplained portion of price that doesn't fall into the least squares computation of the coefficients on each of the attributes. Predicted price is  $p=a+bx+by+gx$  and so forth plus  $R$  for residual error. And initially applied to single family homes. It was generally capable in at least two thirds of the cases of coming up with the predicted price that was quite representative of the actual sales price of the property with a fairly small residual error.

Certainly a lot better than the error characterized by corrupt set of formulas. The system was first applied in Orange County, California and interestingly enough initially the home owners were so delighted with it that the assessor who introduced it and presumably therefore, established objective equity among the home owners, ran for Congress and won. He and his assistant repeated to sell the system, such as it was essentially somebody's multiple regression formula and a coding system which the state had worked out to a variety of other folks. Only they forgot to put the money in the public till and as a result they both went to jail. In the mean time it was only a prototype system, Gustafson never got credit for it but he tried again in San Mateo County where it worked out quite well and in San Francisco where it at least provided a bridge from relatively corrupt system to an appropriate system and it generated a great deal of academic excitement and now multiple regression providing a way of, really for the first time, weighting the factors that buyers, presumably, evaluated in the process of pricing what ever home they purchased. And so regression suddenly became the fair haired darling of academia as the ultimate market comparison approach. In that process both of the appraisal organizations, but particularly the Society of Real Estate Appraisers, said obviously it only works well where you have a large number of observations, and so if have you have regression statistics--you know, you need at least 30 more observations than variables that you want to look at so if you wanted to look at 30 variables from size down to quality and number of bedrooms and so forth, it has to have at least 60 observations to have sufficient degrees of freedom that a statement about the standard error, and deviations and means and so forth were reasonably reliable and stable. That presumed obviously a large number of sales and there were very few situations in which you had that number of sales other than single family residential. So the Society of Real Estate Appraisers in a number of areas, but particularly southern California, set up private data bases in which the banks making mortgage loans contributed the data from their

underwriting forms which were regarded as perhaps the most reliable. They ran tests on the multiple listing stuff and found out it was totally unreliable, every broker had a ruler of a different length and one would say it had 2,000 sq. ft. the next one would say it had 1,800 sq. ft. and one would put down four bedrooms and a den, and another would put down three bedrooms, a den and a sewing room. It was just no sufficient data quality if you used multiple listing. The mortgage lenders seemed to do better and so they had a vested interest in finding out what the overall market was so major banks and lenders started putting their data in the pool and creating a data base of sufficient size and currency that you really didn't have to worry about time adjustments, you had essentially the last three month's sales in S. California you had a one hell of a lot of data points, and therefore, you presumably had a data base which you could then apply multiple regression and they did, with vigor. Now there are a number of problems that came out of that experience which have pretty effectively destroyed multiple regression as a complete pricing system. Now I don't think it destroyed multiple regression as a complete pricing system. It becomes a very useful and analytical device to identify critical variables that should be in your comparative analysis. Its very useful collectively at estimating this whole acquisition price of multiple properties if you're doing a highway right-of-way, its offsetting error begins to operate to neutralize the central distortion. It operates very well in identifying certain non-comparable sales. If you take 100 sales and you establish a multiple regression formula for them, and you run it through again and you have six sales that fall three standard errors off the mean as to where they should be, there's the estimated versus the actual price, if you investigate those you will find they are not comparable sales. Something went looney there, Father sold it to his son, General Motors dumped because their executive moves away and they want to get rid of the property, and cut the price 5% a month, there are all kinds of variables. So, from that stand point it still works. We're talking about a

total system in which we simply turn the crank, supply the algorithms, and cut so you have the price. It can be faulted on a number of bases. Let's look first at the theoretical base. Multiple regression first of complies one, that all the relationships are linear and yet we know in real estate there are all kinds of curvilinear relationships. Decreasing utility in size. For example if you had a coefficient that said you got \$500 in value for every fireplace and now you're doing a mansion in Maple Bluff that has 12 fireplaces, you don't extrapolate that incremental value. With all the heat loss from the fireplace, it would be a negative. First one is really romantic and desirable, the second one in the master bedroom ehh well, after you get to a certain point its a pain. So obviously there's there are a lot factors which are not linear which is a critical assumption of linear regression. The second element, of course, is that each variable is independent of the other--that almost never happens in real estate, everything is co-linear with something else. Larger lots tend to have larger houses, larger houses tend to have more room, larger houses tend to have better quality of woodwork and more features in the kitchen and on and on and on. So you violate immediately the statistical premise that each element is independent of another. The next element that you violate is that the residual errors are random. If you use a scatter diagram of the error between the predicted site and the actual site they would end up fairly evenly distributed blobs. But because of one, the co-linearity and two, the fact that its curvilinear, and three, the fact that there may be a variable that you should have considered but didn't, that was in common to the greater majority of the properties that you looked at, almost invariably your residual error is highly biased, in fact you spend most of your time analyzing the residual error to find out why it is biased so that you can understand the regression better. And finally, if any of the standard deviations and dispersions around the mean and so forth, are to be believed, you have to have sufficient degrees of freedom that the computations will in fact provide for theory of large numbers and

offsetting error being evenly distributed around that particular set of data. Now none of those things are true when we are talking about the single family home. So if you were to go into court and some lawyer that understood the theory of regression got a hold of you, before you ever got the chance to present your conclusions he would have pointed out that statistically your experiment was invalid even if from some sort of pragmatic standpoint, your answer looked pretty good. And this has always been one of the enigmas of regression. That two thirds of the time it works extremely well, but you have to be a Dewey pragmatist to accept the results. You could not defend it on theoretical grounds. As a result appraisers and academicians have a wonderful time trying to decide what they could do to perhaps overcome some of these liabilities. The first thing that they did and it was relatively clever was decide that they could introduce into their coding patterns curvilinear relationships. For example, if you had four different types of heating systems, a hot water baseboard, hot air, in-the-wall heat exchangers, whatever else you want and if you knew the buyers preferred the hot air system to baseboard, but they preferred baseboard considerably more than they did in-a-wall type units, you might put a 5 on the hot air air conditioning system, and 1.5 on the baseboard and a -1 on the in-a-wall. And you would have stated a curvilinear relationship. Then when those values got, in effect, worked into the least squared method of determining the coefficients, they would in effect adjust for the curvilinear relationship. So far so good? Like drawing logarithmic paper and ending up with a straight line it really implies a curvilinear relationship. And on the side appraisers spent a lot of time, a lot of research coming up with a coding system that would allow them to build in decreasing or increasing rates of utility and so forth. The second way of handling it was to go to what they call transformations. After all, regression analysis is nothing more than a mathematical coincidence that arrives at that combination of coefficients which provides the least squared deviation. The weight applied to any variable is not

related to anybody's behavior at all, but it is simply that number which moves the predicted price closest to the estimated price, reduces the residual error to the desired degree. It doesn't really matter if we say its got 5 bedrooms or 2 bedrooms or whatever, what we may want is something that we can call the spaciousness index and we can simply take the square footage of the house, divide it by the number of rooms, and that would give us the average size of a room and then we would multiply that by a quality index as to how desirable that space was and we would come up with a number was a spacial quality factor and the transformation of that sort could become then a legitimate variable which would help arrive at the price. A little hard to explain that when the jury comes back because what you are really saying is this number helps us make our prediction more accurate, we don't know if anybody thinks like that but at least there is a plausible theory that people like larger rooms rather than smaller rooms on the average so the bigger the number of dividing the square foot by the number of rooms the bigger the number we get the more spaciousness we have and then we lump that with something else wonderful. So there is a lot of experiment in transformations. The third element that they got into was the fact that while it was desirable in some cases to effect coding number indicate a predetermined preference for something that defies rerun better than or worse than like our heating system in which the hot air got a 5 and baseboard got a 1.5. There was a real danger in that if you simply coded too many things in the same category, said okay a three car garage is a 6 and a two car garage plus one carport was a 5 and so forth, you're really implying a relative desirability that may not be true. So what you're really meaning to do is first of all reduce it to a subset so you had a dichotomy. You got a one or zero if you were a three car garage and you got one or zero if you were a two car garage plus a carport. And of course anything that had a zero on it would never get figured into the computation of least squared coefficients for that variable. And so a lot of the purists said gee we can't take the categories garage and then have 9

different categories under it with coding numbers from zero to 9 because that implies a weighting about that that ain't true. We really have to have 9 variables rather than 1 variable. But notice when we start to get 9 variables and we start adding those up and we still gotta have 30 more observations in terms of total property that we have variables, we're getting a pretty large number of homes. And we are really not looking at one subdivision, we're looking at all of the subdivisions in west Los Angeles and its pretty hard to begin to delineate between one and the other as we attempt to maintain the integrity of our statistics such as it may be. So they had some real problems in terms of coming up with coding the system. There are a good number of mechanical problems like how do we close the data without having to infinitely expand the number of sales observations that we have. And how do make them maintain some sensitivity to how reliable our statistical computations are. All these struggles with that the Federal Home Loan Bank began to see residential single family appraisals done entirely by regression. The SREA system was really unique and its in your reading packet and it goes through a demonstration establishing the general parameters of the area and so forth. Provided general coordinates and then you could choose within that and then choose within the size range and price range and then we come back and say okay we've got 52 sales in there and they are set and here are the critical coefficients to that and therefore, find such and such do you want to add another control on your subset and so forth. The Federal Home loan bank began to think about that and began to see that the numbers could be very quickly distorted by a joint selection of the subset and they determined that regression analysis was not an appraisal for the following reasons: one, you were no longer comparing the subject property to specific comparables. In regression you were comparing them to the mean of all of the sales in the set. It was an abstraction, it was a property that didn't exist. And the appraisal tradition required you to identify three, four, five properties most like the subject property, not generally like. Problem number



two, they hired an appraiser for his judgement in determining what adjustments should be made between the subject property and the comparables. And in regression the adjustments were purely mechanical, purely arithmetic and totally unrelated to what the consumer might have been thinking. For example, in doing single family homes almost invariably regression would pick out total heated living space for the home as the first correlation. Probably the second one would almost always be the characteristics of the lot or location, but at that point regression had moved into the second variable is no longer relating each of the attributes that it might select for the price. In multiple regression at that point it is relating to the residual error so as you move away you claim 70% let's say of the residual error with your first choice of living area and then you get another 5 or 10% explained by the choice of the location, the next variable it chooses is the one which moves at the same rate and in the same direction relative to residual error, not to the front. By the time you get to the 6th or 5th variable the correlation is in the coefficients that's being selected has nothing to do with the original price, it is the residual error which is moving and as we pointed out the residual error was not out of control because it was no longer random because of the co-linearity for one thing and secondly, because of the nonlinearity of many of the variables. So that's problem number two. The other factor was that when it did pick a variable, there might be a hidden correlation. For example in doing regression analysis in Bayside many years ago, came out that wood shingle roof was worth \$15,000. Since it only cost a couple in those days to put a wood shingle roof on, a clear indication was anybody who had a wood shingle roof on their house to pick up the added value. That fact was wood shingle roofs were highly correlated with a variety of other features particularly in Bayside in which there had been a building called Balman and Shrine that built really shmuly houses with really luxurious exteriors and almost nothing on the inside, complete with dove coves, and the gables and little wishing wells and sweeping flying buttresses coming of

the garage and the whole nine yards, really artsy crafts pieces. In fact if I recall Balman was an AIA architect and Shrine was the builder and there was a big scandal because AIA said that you couldn't have an architect and be a builder, that that was a violation of professional standards and they yanked his AIA standard on that premise, an old rule, but now that's different--but in those days I think basically they were really mad about this architecture being so hokey that it looked like early Cinderella. But it was a very popular product and they all had wood shingle roofs and they all sold for too much money. And as a result it destroyed the whole affair. Here in Madison when Chuck Clettenberg was doing his, we got a correlation that new kitchens minus \$6,000, that's very hard to explain to somebody if you want to follow the logic of the market and it causes you to realize that this is a mathematical equation. But the fact was that the Nakoma area all of the big homes were built in the 30s and the little homes were built in the late 50s and they were little houses but they were the ones that had the newer kitchens. So first of all new kitchens was highly correlated to little houses and therefore, the regression came up with the fact that gee, have a new kitchen and it sells for less. So as a result regression ends up with a whole series of kinky things going on in which there may be cross correlations that don't really appear. If you didn't have all those other attributes, all you had was wood shingles, wood shingles comes up plus \$15,000, you wouldn't have the foggiest of what that cost correlated to is unless you decide on your data base. So you would end up with a whole series of coefficients that produced desirable results but if you looked at the weight attached to any one of the attributes, it defies what is presumed to be a common sense of the market. So you can ease up your tax assessments if you can handle the kind of static that you're going to get from the local tax payers becomes then becomes then an offing of accounts, maybe \$15,000 for a wood shingle roof and on and on and on. Obviously very difficult to explain the system for one thing and you got highly unpredictable results. At any rate the Home Loan Bank

says the adjustments that you make have to be those that people would make in the market, not statistician in at a given arithmetic algorithm. So you had violated requirement number two of an appraisal. And number three they said wait a minute, the appraiser is supposed to have inspected those comparables. The fact that your computer is just getting you a list of 67 sales in Western Los Angeles, the chances are remote that you've seen all of the 67 properties and have been able to put them in the right context. A number of appraisers have attempted over the years, those wanting to use regression, to actually look at each property as its listed or inspected, and just hold it aside until such time as it's pulled and then they could argue that each sales in the data base had in fact be specifically inspected by themselves and so forth. And that may be relevant to some of the other systems, but in any event the Home Loan Bank came down hard and said hold it, regression analysis violates your responsibilities as an appraiser. It violates the theory of regression and it has a specious kind of plausibility because if you understand it you can plan in terms of how you define your subset of data from which you're going to generate your correlation and so on. Regression has its place in budding variables to find out which ones seem to be highly correlated with them as its place in the weeding out nonmarket sales as it's played in budgeting acquisition of highway right of way through a series of properties, but it ? properties all by itself no way. Now, the assessors continued to use it to assess initial assessments but ironically they cannot defend it in court, you have to go back to form and do a conventional appraisal on the property and select more comparables or whatever and defend it on that basis. Madison, I believe, still uses some combination really of regression to measure economic obsolescence or market premiums and laid that on top of a pseudo cost approach so that hopefully regression will identify tangible market factors going on that are not related to the size, and the utility and cost to replace characteristics of the property--and to some degree it works very well. For example, in Chuck

Clettenberg's Ph.D dissertation, we could measure the influence of traffic by predicting from a regression standpoint what the price of the home on Monroe Street should have been for example, relative to what it was. We might find that the predicted price is always three standard errors above what it actually sold for along Monroe St. We got back half a block into it and the next house facing the next side street, we might miss only consistently by one standard error, by the time we got into the second block there was no further influence from the traffic and noise on Monroe Street, but at that point we could measure the positives lets say of Vilas Park to show up as a desirable amenity for a class or category of property. Regression would allow you to measure for example the swath of adverse influence of planes landing at Morey field coming across the west side. We can clearly map that band of the depressed property values by predicting the price of each house based on objective standards, size, quality, etc. and then say gee, look at the comparison of the predicted price relative to the asking price and the pattern will be, underneath the approach routes, consistently lower prices than the predicted price--since you should have otherwise at random you should have 50% higher and 50% lower you can begin to say oops, wait a minute, what's going on here and again this little beam of depressed going right down to the end of the runway which is reasonable to incur from your cause and effect relationships of that runway. In a number of cases, Ohio being one, we were able to measure the adverse influence of a new runway in which a subdivision went directly under a runway which first had to be built, and we could begin to measure the sales before the runway was operational and as it became more operational, we had the number of takeoffs that were starting to accumulate off that runway and we compared the prices that we were predicting for that subdivision relative to two control subdivisions that were similar but not under the runway and you could measure the consistent decline in value that could be attributed to the number of takeoffs and landings, collectively. An individual home might have varied more or less and so forth, but collectively it

was the whole subdivision. Regression analysis would be a very good method in measuring that phenomenon and allowing class action suit against the airport for encroachment of the airspace and diminution of the property values. So for those kinds of things it works very well. As a result, the appraiser starting looking for systems that would in fact would meet first of all the Home Loan Bank standards, that the appraiser was responsible for the adjustment, that he had inspected the property and that there was some relationship between the subject and the comp. The QP system that we looked at Monday is the outgrowth of that search and the market comp system that you're going to look at next Monday in some detail with Mike Robbins, is another method attempting to salvage what we can out of the least squared standard error opportunities at the same time meet the behavioral limitations on what comps do to the appraiser's, responsibilities and functions. Somebody go to the board and draw us a graph. Let's label that first horizontal line square footage. And let's measure the vertical line and call it quality score. Let's assume that the intersection of the two lines right at the middle is our comparable and it has a square footage of 2,000 sq. ft. and quality score of four in an index which goes up to 6 in steps of 2, that's 4,5,6 at the top of the vertical line. Then coming down the other way you're going to end up with a two and a zero, 4,2,0. Now let's assume that our horizontal field starts out as a 1,200 sq. ft. and 1,800 and in the middle 1,500 to make life simple, and then we have 2,500 and 3,000. So far so good? Now the whole basis of market comp is a very simple minded idea. Let's assume we have two comparable properties--remember the subject property is where those two lines intercept. Let's assume for a moment that we have a 1,500 sq. ft. house with a quality of 5 and now draw on a dotted line to intersect the vertical white line. And let's assume further that we have a second comp which is a little bigger than our subject property 1,750 ft. and has a quality factor of 3. So far so good? Now if you have to question which property is more similar to the subject property, the one with more space and less quality or the

one which has more quality and less space. What missing element do we need to resolve that issue? Our basic problem is that we have two different scales here don't we? We have quality scale which is ordinal ranking for which we don't have any idea of how the appraiser did that but let's assume he's right, at the moment. And we have square footage which is kind of a continuous variable, right? We really have to come up with a common denominator. So what kind of common denominator would we have in appraisal? It would be dollars, right? Right. If we said that each square foot was worth \$20, and one quality point equals 5% of the sales price, we could have a way of converting each of these to some common denominator, right? So far so good? At that point then we can start to measure the length of those dotted lines coming down from the one on the right, we have what 1750 sq. ft. coming down to the 3.5, we have essentially a 2.5% adjustment to make in the price right? And let's assume the price of the comparable was \$100,000, we would have a \$2,500 adjustment along that line, right? What's the adjustment on the sq. footage? We have a 250 sq. ft. difference. 250 times 20 is what, \$5,000. Now if we did that on the other side, what kind of adjustment would we get? Let's assume the house comparable on the other side sold for \$80,000 it has a little higher quality right? So the quality adjustment would be \$4,000 and the side adjustment would be \$10,000 with 500 sq. ft. Now knowing that, which one of those two comps is most like the subject property? Use the hypotenuse, draw a slanted line right through the middle of the "X". (end of side one) This one is more like the subject than the next one and that it is really the old sum of the squares coming into play. Take the sum of the squares, take the sq. root of the sum of the squares, and presto we have both comparables. Now there's no reason why we have to be limited to two variables. We can have 30 variables and as long as the appraiser wanted to establish a dollar equivalency for each unit of difference in each variable even though each scale was different, we could have square footage number of bedrooms, quality and square footage of land and so forth, but as long

as a unit of one of those elements had a dollar equivalent, we can convert it do dollars, square it, take the sum of the squares of all of the variables, and come up with a very large sum of squares number now for maybe 30 factors, take the square root of that and that property that has the lowest square root of the sum of the squares, may be the one most like the subject property. We can look at 300 sales and rank as to most like and least like. That's an extremely powerful tool because now we can say fine, we want the 5 most like, and looking at our data base automatically pull out of it those 5 properties whose differences are the least, in terms of the sums of the squares, relative to our subject and therefore we would now have a subset of comparables. And instead of in regression having to deal with a long curve that covers 60 or 80 or 100 variables, now we only have to deal with a very short segment of that curve which represents the 5 out of that whole set most like the subject property. Once we're dealing with a very short segment of the curve we can now deal with the linear relationships. Furthermore we can deal simply with averages and say fine, we'll take the adjusted prices of those 5 comps, take the mean price, and that's our subject property. Or we wouldn't be very far off. An alternative would be to say gee, if we got 4 comps, and we weight the best comp 40% the second best 30, the next one 20 and last one 10, we'll take a weighted mean. We're dealing with a very simple minded mean of the four or five most like comparable properties. And you say gee, that's really neat, but where the devil did you come up with those dollar equivalencies to the scores? Well there are several different ways to do that. One is regression, you can do some basic linear regression and identify a couple of those critical variables and use the coefficients. If the coefficient came up and the very first variable in the regression said sq. ft. of the living area is worth \$25 a sq. ft., why not use \$25 a sq. ft.? And you may even come up with a couple of others before it wandered off. The second alternative is what is the cost to replace. Fireplaces with a metal chimney cost \$1,500 a piece, so we can use \$1,500 bucks.

Now we also know that a great deal of detail can occur in a property that by itself doesn't represent anything, the fact if you have a china hutch in the dining room it doesn't contribute anything significant to the price of the home or even a dishwasher or disposal--but certainly accumulate presence of a great many built-ins may. So we just set up a scoring system for built-ins and see built-ins are worth \$100 a point and create some kind of way of converging into a single variable the fact that the property was overly improved or under improved or whatever. And you'll see that on Wednesday when we talk about Maple Bluff. Now you say that's really neat but how do we know that those dollar values are really important, turns out they are not. That you will get virtually the same answer whether you put \$25 sq. ft. on the living space, or \$30 sq. ft. on the living space or \$40 sq. ft. on the living space, because when you start taking 5 comps the chances are they are going to be on both sides of the subject property you're bracketing. And if you have to adjust down \$40 a sq. ft. you're going to overadjust one way and if you adjust up \$40 sq. ft. you're going to overadjust from the other way and the mean isn't going to move very far if at all. This is a very stable system as long as the general order of the magnitude of the adjustments is about the same, and if you're talking about attributes which virtually all of the properties have in common, there is almost no distortion because they're not defined on the way, as long as you're bracketing. If you're dealing with the largest property in town and its way out on the far end of the distribution, you're going to have problems because you're not bracketing you're going to be reaching making all of your adjustments upward for that large a property. Its not going to work, but its not going to work with regression either. But as long as the property has two sales on one side and three on the other or three on each side of it, the fact that your adjustments are approximate won't change the conclusion. It probably won't change the conclusion on selecting what is most comparable in the first place, and second of all it won't change the final answer in terms of what your



adjusted mean price is. It's only when they ask you to get out beyond the first 10 or 12 properties, that you start to see the ranking in terms of what's most comparable and least comparable starting to move around. At that point significant differences in size when multiplied by an overstated adjustment per square foot starts to square out as significant numbers and will change the ranking. But generally you're only interested in the first 5. And they are generally pretty close to the subject property in size or right around there. Now the other benefit of this type of system is it can be a two stage system and you can force your own subsets. Remember any adjustments that you square the bigger that adjustment, the higher the sum of the squares is going to be and the less likely that its going to be in the top five. So I've got one data base and I've got lake front and nonlake front properties. Do I have to keep scores separately, no I simply say I want an adjustment on lake frontage of \$25,000 a running foot. The minute I do that all properties that have lake frontage have astronomical least squared totals and never figure in the top 5 so I know that immediately all the properties that are comps are off the lake. So far so good? On the other hand, what if I just want to feather my set a little bit as Gene Dillmore says fuzzy sets. Let's say I have my community like Maple Bluff divided up into 18 neighborhoods and regression has told me that my factor between neighborhoods is about \$1,500 so if I have a 14 neighborhood or a 16 neighborhood I have to make an adjustment of \$3,000 for the lot value. Now I would much prefer to have all of my comps in one neighborhood. My subject property is in neighborhood 14, I would certainly like all of my other properties to be in neighborhood 14. But its quite possible with the photographic reproductions of my subject properties over there in neighborhood 10 someplace, right? If I were to double my initial weight and my collection process say from 1,500 to 3,000 or to 6,000 I will create a tendency for the system to always find houses in neighborhood 14 and if I start squaring 6,000 for difference in neighborhood score, pretty soon it knocked it out of

contention as being the best five. But if the only adjustment is location because the house is otherwise a photographic reproduction it will still show up in comparable 4 or 5. The preference would be units within the neighborhood without foreclosing the possibility that I will abstract a comparable out of some other neighborhood which is otherwise identical to the property, except for its location. So my search procedure does not mean a closed system unless I want it to be a closed system. It doesn't mean that I have to adjust the sales prices once I have selected my 5 comps with the variables by which I selected the 5 comps. I would then go back and make a second task and say adjusting for neighborhood, etc., and whatever the other attributes selected to be and it would come up with an adjusted sales price for each of the comps, and then take a mean and a rate whatever others sales you wanted on that basis. So task number one, select the comparables. Task number two, would in fact adjust the comparables. Notice the presumption is one, we are comparing the subject property to the comparables as the Home Loan Bank wanted. The adjustments are in fact those of the appraiser. And yet we had a system that is not overly sensitive to those adjustments. And three the appraiser is literally responsible for having selected the comparable data, inspected the properties and so forth. It meets all of those criteria. Compare that to QP. In QP the appraiser is responsible for ranking the difference between properties, but the weights per category is established by the sum of least squares method of first pricing the comparables and then the subject property. Both the subject property and the comparables are being held up to a common denominator which is the scoring system which he has established and in his judgement reflects the differences in productivity among the properties. The score is the appraiser's integration of those scores through a pricing algorithm which determines the weight attached to them that is automatic. But otherwise it also meets the test of the Home Loan Bank and still allows you to take advantage of data processing systems which allows you to merge and nonmerge the information that you have

without getting yourself into the other problems sifting in terms of sample size and so forth. Both QP and market comp are essentially acceptable. They go about defining their sets differently. Market comp is more comprehensive and it allows the client a new set for each subject property. QP you define the sets subjectively and say these are my 5 industrial buildings, or shopping centers and then proceed from there. You could in fact use both methods. You could in fact if you had sufficient sales comps choose what was going to be your set of comparables using market comp and then your analysis relative to differences among the sameness property could be done with QP. And we'll see that Robbins, in addition to his other work, has done just that--combined the two, one for selection, one for adjustment. In the process of readjusting 556 and 856 we're moving single family appraisal using contemporary techniques of regression, QP, and market comp back into the 556 course and therefore, we have not discussed regression in the readings of this course. I wanted you to see where it fits historically and as I recall you do have the Dilmore article to read where he experimented with regression versus traditional methods versus the market comp approach, and the market comp out performs the other methods. It has been our experience that that still is true--that market comp will provide generally consistently better appraisals if the data is right--and that's a big if. And when Jean is here next Wednesday talking about Maple Bluff she'll go through several iterations of that and ultimately where the real problem was the data and two different people had coded her information. They coded it slightly differently, and the result was, suddenly a misfire on her types of property because of the data discrepancy, she cleaned up the data. Ultimately it was necessary for her to inspect every home in Maple Bluff, and be responsible for all of the data and at that point the system simply cooked along beautifully. Local real estate brokers who over priced the property and after a year and a half on the market, they came down and sold within \$1,000 of the assessed value. Okay so Monday Mike Robbins is going to be here to talk about

market comp.

Michael Robbins lecturing--introduction. Today I'm going to talk to you about one

approach in the market data methodology for pricing property starting with the concept of trying to estimate value, when you have a number of different parameters

various methodologies, traditional appraisal would say market approach, cost approach,

income approach and contemporary appraisal would use a whole variety of different types of verbiage to structure the valuation process. In many cases evaluation methodology comes down to beginning to look at what have other people paid for similar properties. Generally that falls into the market data approach to value. That brings into effect two general structures, one of them we can categorize the market data approach to valuation that falls into two specific categories. One category references in the area of valuation using market inference which you have a relatively limited number of transactions of similar properties. And I have listed here as few comps and its small. This is your problem in your shopping center case right now. A relatively few number of comps none of them similar to the subject property. Under this approach we have two computer procedures, one of them is called point score and we generically refer to it as a RatGraam approach and that term was coined by Terry Grissom on night on Memorial Union Terrace as he was pissing and moaning about his 856 appraisal course. Point score is a Ratcliff-Graaskamp approach to dealing with the issues before Graaskamp had this thing out. Then he refined the few comp ideas with Dilmore came up with a mathematical program called QP2 that's the program you are going to be using and its my understanding that is the program that Jean Davis will be talking to you about on Wednesday. This is a mathematical approach and dealing with the issue of pricing the subject using a market data approach in which there are relatively few comparables. Because you

have relatively few comparables you have no statistical inference that you can employ to make any guesstimate as to what attributes are more important, what their weights are, what their contributions are, and so forth, The difference between a point score approach and a QP2 approach is not in application for a series but in process. The point score follows the classical Ratcliff-Graaskamp approach where you identify attributes, you identify the weights, you crank through the numbers, you evaluate the results and you go tinkering back and forth. The QP2 program has built in simultaneous solutions to a variety of different slopes which stand for different proxies, if you will, for the market. And what the QP2 program does and why it takes so long to go through and iterate through all of the solutions it is looking for the best solutions in which all the comparables may fall on one of these on this curves, a mathematical surface. And then depending upon on how you have set up the process to begin with it will go through here and find which mathematical surface the selection of comps that fit and then give you some sense of fit, some sense of error and some suggestion as to what the subject property's value may in fact be. One of the things that nobody tells you to do but is absolutely critical in getting these things to work is before you start running the program sit down and set up, you are going to have to identify what are the attributes that the people would be purchasing who would buy this kind of property. Access, location, a number of things that describe the characteristics, types of construction, efficiency in the design, the space layout for the center, those of you who had 555 last semester go back to part II in the 555 problem. Start there, that's a good review for this process. Lay down some rules as to what location, design, spacial layout, efficiency, ingress egress, traffic volume, what do those things mean? And then systematically and consistently apply those rules against all the comparables you are dealing with. If you start setting down very soft rules it will become very easy to tweak the dial, in effect enforce a solution in a given direction. One of the worst

mistakes you can make in this course is making the mistake that Graaskamp is looking for a value. That he has in the back of his mind what the value is, even though he has just recently finished the appraisal, and you have to reproduce reasonably closely the number that Graaskamp has already derived for that center. If you follow that methodology the week after Thanksgiving vacation when you come back when you hand your appraisal back, the critique will be one sentence long, that's the worst possible critique you could get--it says: this isn't worth a damn, start over. He is not interested one tiny bit in the value you come up with. He's concerned with the process that you go through, the way in which you make and document the necessary trade-offs to get from one point to the other. Don't be lulled into the trap that all you've got to do is reproduce Graaskamp's number and you are home free. This is one of the places where you start with the QP2 program for each type of valuation in which you have a limited number of comparables so you cannot rely on the use of statistical inference to give you a starting point. You have to come back with what would the market be doing. What are the attributes of the submarket that would be competing with your type of property. The QP2 program will cross correlate, it will find the best mathematical surface for you and all of that sort of thing. You have to control the valuation process by controlling the assignment of the ordinal score which would stand in place of these individual items like location, design efficiency, spacial layout, ingress and traffic volume--all of these kinds of things mean something and they must mean the same thing on every comparable whether its three or ten. Because if it means one thing in one comparable and something else in another comparable you can't come up with a supportable conclusion of value. And that's what he's going to be hunting for. A systematic supportable conclusion of value, not the number itself. So Jean will be talking more about this kind of thing--these two programs are pretty much dissimilar--this ones written in Basic, this ones written in Lotus and this point score is in the back here There are several

different versions of that. You will be using this one which will enhance this process, but be very careful because if you start fiddling around with your weights, we will have, in fact it is really quite funny, one of the students who graduated from here and is now over in Norway is coming back for the Alumni conference. When she was where you were, but the day before the appraisal was due, she called me up on the telephone, not hysterical but really surprised, she had the value--they were doing someplace out on East Washington Avenue then--she was \$7.35 sq. ft. plus or minus one cent. And she said Michael the market is not that systematic, to suggest the standard deviation is one penny. And yet that is what the model is saying. The model is saying that because according to the way you rank the comparables and forcing them to fit along a linear pattern that's exactly what happened. We do not have a perfectly knowledgeable, a perfectly informed market place. One of the things as an appraiser you have to do is deal with the variation and uncertainty in the market place. The fact that the seller and the buyer are not on equal terms, even though in the appraisal under the highest and best use and the definition of fair market value we don't apply it we absolutely state it. Knowledgeable buyer, knowledgeable seller both operating, etc. And to say that's absolutely true you can put together a mathematical model that comes up with perfect correlation, 100% predictability. And that's going to get you in all kinds of problems very very quickly. So as you're going through the digestion process that you're struggling with right now, one of the things you should be targeting and setting up a series of consistent rules that can be set up across the board for all of the comps and we'll see right into the QP2 program at the appropriate time. Don't simply run around and collect data in a randomized hap hazard sort of way, figuring somewhere in that mountain of paper the answer exists. Not the case. It's the format, it's the procedure that extracts out of that data a systematic approach that can be used to evolve an answer. So this is where the 856 operates on with the primary focus being the QP2 program. Now, there's another

whole collection of market data approach that generally falls under these categories of do we have to be hamstrung with the limitations of this attribute weighting point score kind of thing that we have here, when we have a larger number of comparables. And the answer is absolutely not. There are a whole array of techniques which we can begin to employ when we have a number of comps. How many is enough? Well two more observations than you have attributes that you are measuring. I have used the market comp very effectively with as few as 13 or 14 comparables. I've also used it very very effectively when we've had several hundred or several thousand comparables. You could never use this thing if you had more than 15 comparables, it would simply drive you crazy. Technically I don't think you could. When we have a collection of transactions of similar properties we then can fall down into two general valuation approaches and they divide themselves out as the attribute weighting approach or attribute matching approach. Attribute weighting approach would then subdivide into two classic categories, and you have all seen the wag category. You see it in about every appraisal you have ever reviewed or in many cases appraisals you yourselves have generated have been built on the WAG(wild ass guess) method. Failing to want to replace a guesstimate with some estimate of reality we would then go into an inferential statistical approach. An inferential statistical approach would then give us some justification for applying specific weights on specific attributes. It could be something as simple as a simple linear regression of living area or for price for single family homes. It could be traffic volume, against net rentable area for a shopping center. And in both cases these two important attributes explain some component of the value. But generally not all of it. After we have taken for the shopping center the traffic volume we may want to look at the spacial layout or maybe the net rentable area or something such as that. We want to add incrementally these different attributes into the equation so we move out of the simple linear regression and we go for the multiple linear regression. Means we can use more



than one attribute, 2, 3, 4, or whatever. And accept the premise for the moment that the multiple linear regression begins to go through and assist us in at least trying to describe what the market is doing. Then we can begin to go to a different regression approach called step wise. The advantage of a step wise regression approach is that the step wise regression approach would take our dependent variable, say selling price, look at the pool of comparables and ask the question collectively, which attribute does the best job of estimating what the sales price of these things are. It sorts through all the attributes, identified with lines that implies the greatest amount of variation, creates a new model that incorporates the first variable then they subtract the explained variance from the sales price, take what's left over and looks for the net attribute in order to go through attribute by attribute by attribute always looking to explain the remaining amount of unknown variation in selling price and when it reaches some minimal statistical level it stops. And if we do the step wise regression approach and we throw a data base at it that has 28 transactions in it, and it finds four significant attributes in the following order bang, bang, bang, bang, you then as appraisers have a reason for justifying those attributes. You didn't choose them, the market identified them to you. And it came out in this order--this was the first most important, second important, third important and so on. So the purpose for using the inferential stats is to help answer the question what is the market saying about these type of properties. And that's one of the critical questions in the appraisal process is when you're using the market data approach you have to come up with a reason for deciding on using certain attributes. When you look at the subject property you are looking at right now, traffic volume is important, right? How do you know that? You can go to all kinds of literature which suggest that generally traffic volume is an important attribute for shopping center and shopping center valuation, but is that absolutely true for this site? You don't know that. And your problem with dealing with few comps is you cannot

prove it or disprove it. Therefore, you have to set up a series of consistent rules, and when your set flows through them, you recognize the fact that this attribute you are looking at may or may not be important relative to the pool of transactions you are trying to price the subject with. The literature can say all it wants about the importance of traffic volume, but there's always the exception. You've all had enough statistics to realize that you have can have co-linear relationships that nothing's going on that what you think ought to happen, doesn't happen because something else is going on its place. And if you had added two or three more comparables or if you had dropped one or two comparables the pattern you were expecting to find would come out. So the point is don't simply sit there blindly, hypothecate a list of attributes and set up a scoring routine and then tell yourself somehow I'm going to get all of those things that be important in the pricing process. If you have a data base you can test it, you can find out whether or not certain attributes support themselves from a statistical standpoint. Failing that you have to use secondary sources like reading and reference and all this kind of stuff, but in the final analysis the test is how well does it work with and taken out of the pricing model. There's lots of things going on in this case. This also brings up a whole array of statistical models which you are going to encounter when you get out there in the real world. Multiple linear regression we talked about, step wise regression we have talked about. We're starting to see factor analysis coming up in the appraisal literature, Jerry Grissom just finished doing an article on sort of a factor analysis approach. The rage right now is ridge regression. You don't worry about predicting the middle part you worry about the worry edges of the population distribution and all of that kind of stuff. But then some are using cluster analysis all this kind of thing. Points are made when you use all of these methods is that when we have a collection of data, what we have is, let's say we're looking at our dependent variable in most cases is selling price. Selling price of the net rentable area by sq. ft.

basis, or on a retail pad basis or something such as that. Then we have a list of attributes and somehow we boil all that stuff down into different types of mathematical processes that we use into some kind of linear model. And yes there are nonlinear valuation approaches, QP2 has a couple of them there. My only word on using a nonlinear valuation would be don't. Because if you do it and you have to testify according to how accurate it is you probably have left yourself wide open for classic hatchet job. In this model we have a whole series of comparables that are scattered all over the multi dimensional space. The space is generally defined as such and the least squared, that's the method we're using, the line goes right through the middle of it. We extract this regression equation and it says starting with this constant and all of these different factors you go through this process this way you come up with a price test estimate. You're going to see, as the requirements for appraisers become tougher and tougher of going back into the market and using justification for their \$700 adjustment for differences in location and bathrooms, all this kind of stuff, you're going to see more and more emphasis on statistical techniques employed in real estate valuation, in the feasibility part, the whole process. Whenever you see a regression in any of its forms: ridge regression, of step wise, multi linear, all of them--keep in mind one important point--all of these inferential valuation techniques are biased to the extremes. These comparables that fell here and fell there have a much greater impact than the comparable themselves right there. Do you want to go before the judge and jury and God and everybody else and testify to the validity of the valuation model you have used that is biased to the extreme? Doesn't appraisal suggest that we can use the market data approach, those transactions that are most similar to the subject property ought to be given the greatest amount of emphasis? And if you use a regression approach you're doing the exact opposite. You're giving the greatest emphasis to those that are on the edges, and only if the comparable falls on the edge, and if it falls on the edge one would have to ask the question--Is it

valid to use this statistical process at all? So normally you would argue that the subject property would fall somewhere along that line because when you use the regression equation, the price is, that's where it puts it. So, inferential statistical valuation across the board applies to the edges, which means they are absolutely contradictory to traditional and contemporary appraisal. Contemporary appraisal as you're driving through it right here, you are looking for those transactions which are most like the similar process, the subject property. First in physical attributes, then in legal status, then environment and all of the other dynamic and locational sorts of attributes. You are not looking for comparables most different than the subject. You're looking for the ones that are most like the subject and again say that the rule here helps you tremendously in recognizing those differences here. So now we have this statistical model, regardless of how we have derived it, and we apply it against the subject property and we come up with a value. And the value gets biased toward the extreme, there's all kinds of verity checks so the net result is, from a valuation standpoint, inferential statistical approaches for a time value to not be supported in any case whatsoever. I have seen Graaskamp absolutely destroy statisticians in cross examination and you all know when it comes to numbers, you must sometimes ask yourself whether or not the old man got anything alive between his ears. Graaskamp cannot deal with math. Part of it because of his handicap, part of it is because he simply cannot deal with the absolutes of mathematical precision. He just shies away--he doesn't understand computer--he doesn't understand mathematics--but his strength is in logic. Does the model make sense? And is the model consistent with what the appraiser is supposed to be doing? Any idiot can sit down to a black box and generate a bunch of numbers, do we have the wherewithal to take those numbers out and look at them and say, are they reasonable? That's the essence of true appraisal work. You can take any of these mathematical models and look at -- is it supportable? What is the logic behind the methodology and this kind of thing. None of these

things, even if they have Rsquares of 98% and you have a data base of several hundred transactions, being measured over 15 attributes, this kind of thing--are not nearly as precise as other methods we are going to get at. You need to carry that message home with you. You get out of school and you start working, inferential statistics is an enormous analytical tool to give you insights into what the market is doing. It is absolutely unsupportable methodology to estimate value. Now there's a big difference between trying to create a data base to abstract from that insights into what the market is doing. And then make the miracle leap into inferring that that's what this property is worth. Putting your arms around all of the implicit assumptions within the mathematical process, you have chosen to use. If this doesn't work, from a valuation standpoint, we're left with this and in the market data approach this is the method that is used most frequently. But unfortunately this is the implementation end. There us a WAG component on this one, on the attribute matching process just like the critical WAG on the attribute waves method. Whenever a market data approach is utilized, more often than not its under the attribute matching process and more often than not its under the WAG method. I can prove it to you. How many people in here have read a real appraisal? How many of you have seen the market data approach? And you have the selection grids in there, here's the subject, there's the comparable, here is the difference--all that kind of stuff? How often did you find a reason for why did they choose that attribute other than the fact that it was printed on the form? How often have you seen things under location. The comparable is superiorly located than the subject property therefore a negative \$500 is called for. Where did the \$500 come from? Any support given to that at all? Mr.Appraiser, if you were to change that to \$1,000 would that influence your value? Yeah, probably. How much? Where did that \$500 come from? In most cases the reason for the \$500 is because the appraiser has three valuation models going on. He's already done the income approach. And now we're just trying to make the

comparable approach "correlate" and if we adjust this comparable by \$500 it sort of fits the pattern. That's how it's generally done, the wild ass guess method. Can't have that. The new appraisal regulations require you, the appraiser, to provide substantial market evidence for the attributes you are using and the weights that you are applying. In your shopping center cases absolutely appropriate to take your 5, 6, 8, 9 comparables, whatever you have, do a statistical analysis on it, come right out in the appraisal and say this model cannot be used with any statistical confidence at all because of the variation and uncertainty, but at least the model is there. You have demonstrated that fact that it has a  $r^2$  of 2%. You don't have interval data. The ordinal data you got can't really be measured or even referred to in an ordinal standpoint but state it right up front. Then go to the next bet--to simulate the economic logic. That's the game that you are playing. The attributes with many comps over here is not the simulation of economic logic, its the application of the pricing model that fits the market's use. Here we don't know what the model is, we're trying to get that, we're trying to derive what that model naturally is.

So now under the attribute matching process I put down the word data. And that's kind of a catch all category because that opens up a whole array of procedures. (Question on QP2) One of the things you have to do is employ this technique but always with a certain amount of caution. You don't have one of these critical necessary ingredients to perform a lot of these appraisals, in that you don't have a good instinct as to what this local market is really doing--you don't have that market experience. So we're trying to supplement that with some scientific application--a scientific approach. The scientific approach after we have got the hypothesis structure--doesn't provide us with enough information to statistically or with great confidence prove or disprove our hypothesis concerning value because the appraisal is a set theory application, its not a statistical application. If you only got 9 comps, that's all you've got. You can't sit around for 4 years because you want 15 and then

do the actual appraisal. But whether or not one methodology is better or worse than another depends upon the context in which its being used. And as you tinker around with any of these things far enough, you can force out of them just about any answer you want. And because of that it's not whether or not you reproduce Graaskamp's appraised value for the center, but how did you go through the process. What were the analysis techniques which you employed and so forth. Does that answer the question? And also Jean will be talking on that program specifically on Wednesday, we'll give you more of the operational context, but you gotta make that rather creative balance between running the program and trying to solve a problem and standing back and looking at the program and ask yourself, does it fit the context in what I am actually trying to get at. And it would be interesting to go up to the lab and copy out a couple of these point score models and balance one against the other. They each have different strengths and weaknesses and so forth. Okay, now as we go into this attribute matching process we go back to the requirements of the new appraisal. You are many times lead to believe when you read appraisals, that for the market data approach, what the appraiser did was open up the file and pull out the first three comps which were right in front and then cornered the valuation process to fit those three comparables. But when you look at the definition, and I have chosen the 7th edition of the appraisal of real estate, the 8th edition has a goofy kind of definition, hopefully the 9th version which is now out will have a better one. But in the 7th edition we have a beautiful statement 5 steps that need to be gone through in order to implement the market data approach to value. Step number one, research the market to identify similar properties for which pertinent sales, listings, or retail data is available. That's what you're doing now, right? Of course, some of you aren't quite sure what it is you are doing. Trying to dig out of the market certain transactions and all that sort of thing. Second point, qualify the prices as to terms, motivational forces and bonafide nature. Knowledgeable buyer, knowledgeable seller equals both

operating without duress and so on and so forth. That is what the issue is here. Number three, and this is where things start getting really interesting. Compare each of the comparable properties' important attributes to the corresponding ones of the property being appraised under the general categories of time, location, physical characteristics and condition of sale. Let me go back and read it. Each comparable properties' important attribute to the corresponding one of the property being appraised--what they're really saying is: How did you, the appraiser, determine that one attribute was more or less important than another one? Now that we have identified attributes that are important, we want to be able to assess a level of similarity to what extent is the comparable and the subject similar. And that issue of similarity is very important. Point number four, consider all dissimilarities and their probable effect on the price of each sales property to derive individual market value indications for the property being appraised. Repeat, consider all dissimilarities and their probable effects on the price of each sale property to derive individual market value indication for the property being appraised. First we discovered how similar they are, then extract a measure of difference, and then we make some adjustment for that difference and that's what a selection or an adjustment grid is basically doing. Subject comparable difference adjustment factors, so forth. And then number five, from the pattern developed, formulate an opinion of market value for the property being appraised. The key word is pattern developed. Repeat--from the pattern developed, formulate an opinion of market value for the properties being appraised. The market comparison program or the market comp program that we developed here back in the early 1970's does exactly this in this order. That program was made available, generally, to the appraisal industry in 1972. Have any of you have seen it? Have you seen any papers published on it? Why not? In part, computers had to be used in order to do it. Now we've got computers all over the place. But more importantly you had to have the training and the intelligence to implement



something such as this. So the market comp and the market comparison approach is absolutely nothing new, it comes right out of the traditional appraisal bible that are recited day in and day out in every court case that God has ever put down on the face of this earth relative to valuation. It's just in implementing these procedures the appraisal profession has become incredibly sloppy and now they are being called to task for it and so are you. (side two of tape) Now let's take this handout--This is a new version of the market comp program, well maybe not new be just a different one. Now this program is the first programming assignment in 652 this semester. So those of you who have got 652 under your belt consider yourself lucky. The original logic to this process was laid out by an appraiser from Detroit and Texas by the name of Ron Brown, 1970's and it's part of the educational network computer system called Educare. Graaskamp, myself and a guy by the name of Bob Knitter, who used to be the director of the data processing department here, we developed this program and we added on to the time sharing program the biggest user was the federal government. The big cypress preserve down in Florida is being driven by this thing. The border waters area up in Minnesota, the Andorandacs(sic) acquisition is being driven by this thing--so the federal government is probably a very extensive user of this thing. Appraisers have kind of forgotten about the whole thing, that's part of the reason why I've decided to resurrect the model again and also because from a time stand point, from an industry in time and an industry in change stand point, it gives all of us a very good chance to explore alternative valuation tools because when you get out of school the industry is going to be scrambling like mad to find better tools in which to do appraisals and this kind of thing and this is without a doubt, not this program but this logic. Anybody, any of you can sit down and replicate this mathematically, there's no big deal, but its the logic process going on behind it which is the thing that is important to understand. What this program does--it starts out with a data base of transactions of similar properties. The kind of thing that

you want to collect on the market information. Then as an appraiser, you make the same determination that you are making in your subject property appraisal right now. What in your opinion are the important attributes that the submarkets are bidding for which are part and parcel of the subject property. If we're talking about a single family home, we're talking about lot size, living area, bedrooms, bathrooms, condition, quality, neighborhood, location, schools, and all those kinds of things. If we're talking about shopping centers, we're talking about traffic volume, location, spacial layout, design efficiency, age, condition, construction--there are a whole array of attributes. Now we don't establish how important these attributes are, we simply set up a set of rules and systematically collect all the data. Then we put this data into a data base under the market data approach because we may have a collection of comparables. And in the 652 class we have two data bases going--one, of 207 sales, and another one of 84 sales. You've got maybe 12 or less. Because I have a larger number of observations, I can do different things. Of the single most important thing is I can use inferential statistics to interrogate this data base and let the market speak to me. My assumption is, if I'm a reasonably good appraiser, if I have identified the collection of attributes that I think buyers are buying and if I have coded those attributes correctly, I should be able to develop a mathematical model that somewhat, on average, describe the importance of the different attributes. I should be able to do that. I don't anticipate being able to describe the market perfectly--I'm not that naive. But I would expect to get better than 50% but I would expect something less than 90. Be willing to accept in many cases something less than 80% of the total variation. So that thing in statistics that you kind of rattle around with called  $r^2$ --you say, well, I know how to do it, I know what a factor mean--I know what it's suppose to do. All of a sudden the  $r^2$  model becomes a screening process for us to start looking at. By starting to develop the statistical analysis, let's say using a step wise regression process, and I come up with a

model that explains 85% of all the variation in my 207 sales, I do not say I now a valuation model, but I can say at least, now I have a handle on the attributes that the market is trading on. Because the step wise regression in places identified attributes that are most important. So it answers the first question--what are the attributes. You then answer the equation--how important are they, because of the coefficients that the step wide process assigns to them. So we have an importance measure and we have an identification measure. Here's the one that came in first, second, third, fifth and so forth. Seldom if ever will we get a regression equation that has more than eight attributes. You have 23 to chose from, here are the best 8 resulting in  $r^2$  of 85%, that's great. Now we need a method that can implement that best average model. Apply it against the comparables and the subject property and use it as a sorting or screening mechanism. And just to illustrate let's suppose we have a really simple model, lot area and living area. We have a subject that has a 13,000 sq. ft. lot and 1,300 sq. ft. living area--comp one 12,000 lot area, 1500 living area comp 2 is 14,500 and 1200. If our regression equation was to say, take \$30,000, that's your constant, plus the lot area times 1.25 plus the living area times 12, that would result in an estimate for the subject property of \$61,050 for this comparable of \$53,000 and of this comparable \$62,500. When you do a regression approach where you hang yourself out for exposure, it's the adjustment factor. If you have developed a mathematical process that is sensitive to the extremes, you are in a court room testifying as to the value and this comparable is picked out, what will that do to the regression equation--it will drastically alter the regression equation which more than likely would drastically alter the adjustment factor which would drastically alter the price, because the adjustment factor is applied against the total base. What is the total living area of the subject property and multiply times this adjustment factor. So that any error in the statistical model is spread across the entire attribute of the subject. So the point to challenge the regression approach is

to demonstrate how sensitive this model is to these extremes and then simply ask the question, would the model with a price then differ. And the answer is absolutely correct, it will. The market comp process as you will see you can say I can't tell but more than likely no, it will have very little if any impact at all. What makes the market comparison process different is that it looks just like a typical adjustment grid. Here's our subject, 13,000, 1,300, comp #1, is 12,000 and 1500. If I subtract the Y area of the comparable from the Y area of the subject I end up with a difference of \$1,000. If I subtract the 1500 sq. ft. of living area from the 1300 sq. ft. I get a minus 200 sq. ft. difference. Notice that step number three in the traditional appraisal texts will say to define the extent to which the comparables are similar. This comparable and this subject are similar for 12,000 sq. ft. of lot. And they are different on 1,000 sq. ft of lot. So by defining the level of difference I have automatically defined the reciprocal which is the extent that they are the same. Now, if I then take and multiply this times \$1.25 and this one times 12 I would end up with \$1,250 for the difference in Y area, and minus \$2,400 as the difference in the living area resulting in a net difference of \$1,150. I have taken the indication of difference, I have adjusted it, and remember what it said about determining the adjustments, consider all dissimilarities and their probable effects. What does the word probability mean? A level of uncertainty, right? Where did you get come up with that \$1.25 per sq. ft. I came up with \$1.25 per sq. ft. by interrogating 207 transactions of similar properties which have occurred over the last three years. (fades out) but it is a very good average estimate. You'd be hard pressed to find a better average. Now I take this probable adjustment for difference and convert my difference in sq. ft. in lot area to difference in dollar. My difference in living area to a difference in dollars. Now I have a net adjustment and if I then take this net adjustment and add it to the selling price, it is possible that I will come up with an adjusted sales price for that comparable. Now suppose instead of doing that

with two attributes, it is for n number of attributes. And instead of doing it for three comparables I went through and did it through all the comparables in the data base. The very same data base from which the statistical interrogation occurred. Would it be possible given what you see on the board to hypothesize a number that may be used to measure difference or similarity. Look right here, we have the net adjustment. But once it says that, the comparable that had the smallest number of adjustments would be the comparable that is most like the subject property measured in dollars. Similarities being converted not in location or bathroom or bedroom, but all of those combinations, those contributing attributes, are all converted to a common basis, dollars, and their measure of difference is then matched one against the other in dollars. Right now one could hypothesize that this measure of difference can be used to identify the comparable that is most similar to the subject property. The next question goes beyond where I am, what do you do when comparable one has a minus 1,000 and a plus 5,000 and another plus 5,000 and comparable two has a zero because its the subject. Let's suppose the subject sold six months ago and in the data base it's exactly like the subject, it is the subject, therefore, no adjust has to be made, the net adjustment for that one is zero, and the net adjustment for that one is zero. And yet this one is clearly superior to that one. So we cannot take the net value. We need to have some other types of valuation. Scott Miller said how about absolute value. Perfectly acceptable, until you start using this for a while and then what absolute value takes you into--is let's suppose we end up with a situation where comparable number one we have a single adjustment for minus 1,000. Comparable number two, we have a minus 200, a minus 300 and a minus 500. Both have the same net. The adjustments for those are the same. Yet we would like to develop a process that would select one over the other. In the 556 class, we go back to the worlds second greatest appraiser, Pythagoras. Pythagoras came up with a model for the hypotenuse of a right triangle. And the world's best appraiser took one look at

that, who happened to be Pythagoras' son, Euclid. Euclid said Dad that's a neat model but the world does not revolve around two axis. The world has more going on at any one particular time, its multi-dimensional, and Euclid came up with the mathematics to take this thing out into multi-dimensional space. And he coined a phrase Euclidian distance. To derive the Euclidian distance which is the basis for many of the mathematics that we get involved with, all we would do we would take these measures of difference and square it. That would give use the sum of the  $x^2$ . Then we would take the sq. root. So sq. root of the sum of squares of the differences can be used as a measure of similarity. Turn over to the second side of the handout. You've got the prices of the comparable going across the top, you have the attributes, down at the bottom you'll see adjustment fill in prices, then you got a thing called the T ratio and the C index. And the C index is sorted. The C index is in fact the Euclidian distance measure. We could not use the terminology Euclidian distance and expect appraisers to actually operationalize that. We had to cobble the name up a little bit so people could understand what is so we called it the T index. Its nothing more than the square root of the sum of the squares of the differences measured in dollars. Then because we can sort on that, we now have the selection index of 622 is the measure of similarity between the subject the best comparable. The next best comparable is 849, 906, 917, 1041. That is the systematic measure of similarities. So we can go through all 207 comparables and from a Euclidean standpoint I can certainly say find the best spot and it finds the 5 comps in order that has the smallest selection indexes which are the 5 comparables which are most similar to the subject property, measured in dollars where the adjustments are driven by the best average model which pulls together the attributes and importance of those attributes not by me the appraiser, but by the market. So I have laid off from the appraiser standpoint, I have laid off, the identification of what the important attributes are, I have laid off the identification of how important those attributes are, I have laid

off the identification of the most important comparable. I have automated it. When I say I laid off that doesn't mean it's a black box type of thing, and I turned it on and drew some numbers. But I don't have to worry about all the number crunching. All I have to do is worry about the issue of: are the attributes the correct attributes? Are the comparables good comparables? Is the model responding correctly? Now we come down to the last half of the page and that brings us into some very interesting kinds of things. The three values at the bottom of the page--the adjusted sales price for the subject property will be \$64,374 plus or minus \$4,500. Across the entire data base the average selling price was \$60,255 if I adjusted all of the comparables to the subject property just like we were going through here, if I did that for all of the comps the average price would be \$60,255 plus or minus \$5,320. When I said find the best five, the price went up \$64,374 but the standard deviation went down to 4504. Then I have a thing called the weighted selling price which pushes the price up to \$65,717. Now you go back to your Ratcliff readings and the Graaskamp readings, it says those comparables that are most like the subject property should contribute most to the property value. So now we gotta come up with a weighting process. And the model that is the weighting process that is built into this and all of the other of our market comp models is  $n$  over  $n$ , times  $n$  plus  $y$ , divided by 2. Have you ever seen that before? Sum of digits appreciation. The advantage of this model from a computer stand point is the same weighting function can be turned on if I use two comps, 5 comps, 20 comps or 200 comps, it all works the same. And this type of weighting process for the best buy will put the greatest emphasis on number one, and then the next one, and then the next one, such that if we look at the order of the comps, the adjusted sales price of the best comp is \$70,500, then we use number four, is \$50,017 and then it jumps up to \$63,600 but each has a different emphasis of contribution relative to its contribution to the pricing of the subject property. Then we get in after we go through this weighting, now we have so far

on the page three estimates of value. The first estimate is the average price, if we looked at the entire data base, adjusted it this way with this model, the average price of the subject property would be \$60,255 plus or minus \$5300. If we find the best five we get \$64,374 plus or minus \$4500. If we weight them relative to best, we get \$65,700 and then we come down to the next one where it says selling price \$64,374 then there's some comparables between such and such. There's another step going on right there that is very important in this process. And I've sort of set you up for it. Let's suppose that the subject property, the property that you're appraising today was sold six months ago. Would you be inclined to use the subject and its previous sale in the evaluation? One of the most highly sought after things in the appraisal industry, two comps, a comp that has sold twice over a relatively short period of time, so there is a tremendous bias toward selecting that comparable as being very similar to the subject property. Maybe to the extent of giving it the most emphasis of all. If the statistic says that there was no need to make any adjustments for time, then the sale six months ago of the subject property would be the strongest indication of what the value is right now right? Wrong! Notice what part number five says in the comparable in the steps to the market data approach. From the pattern developed formulate an opinion of market value. Let's suppose we take our n best comps, let's say its 5, and we hypothesize that these 5 fall along a normally distributed distribution. We would expect a curve like that. Now we take and we calculate the mean, now we need to have a test around the mean, and its the T ratio, and if we set the T ratio at one, plus or minus one standard deviation around the sample. As we set it at two it's right here, and it has the same characteristics of a standard deviation around a normal distribution, 67% of the observations will fall in here, 97% will fall in there. Suppose one of our best was to fall here or here. All the valuation up to this point has been based on the premise that similarity is really important. How similar is the subject and the comparable; all that adjusting and the



weighting--price was based upon similarity in "x" to be converted to dollars. Now you stand back and look at that pattern. And we ask ourselves, is it possible that a transaction could occur in which the emphasis was significantly different on the attributes or maybe there was something going on that I haven't adequately measured yet. If a property was to fall more than two standard deviations above the mean, what would you call it? An outlier. And if you chose to pull the outlier out, be it on the low end or the high end, you might get some sense as to what impact would that have on the price. Not necessarily that you would choose to exclude it or include it, but at least you want to know what impact this outlier is having on my price. That's what the T test is doing. This could be the subject six months ago. It does not fit the pattern being formulated, therefore it ought to be tossed out. Rather than saying it is most important to have a pair of sales and to build everything else off of the pair of sales. You go through market data and reading in version eight of the appraisal and they make a great big deal out of all of the analysis that you can derive with paired sales, but they are always predicated on the assumption that: all of the data to the parent sales is in fact there, but more importantly that that parent sale fits the pattern of all the other transactions that you're finding. That's the fourth value that rolls out of this process. And then you can decide which one if any that you want to use. Things that we're doing with the market comp program right now, is that at this point if you go back into the rule section if you look back to the first page there are some really interesting new rules coming out. Like rule 12 and 13 allow us to use the ratio and match the number we want to get all the time. Look at option number 9, change the factors. We can look at going to the data base and you know that \$12 sq. ft. adjusted rate for living area, the \$1.25 adjusted rate for lot area--I could choose to simply go through and tinker with that factor if I wanted to. Where I can replace the scientific application with the art form of appraisal, so as an appraiser I can test the robustness of the model. I can also take and

activate option number 6 where there are some selection rules. Then I can take and I can abstract a subset from the data base and do the pricing only with that subset. For example, choose only certain neighborhoods, choose within certain living area sizes, all of these kinds of things--there's all kinds of choices that way. And then let's look back to one of these other points that I made relative to the part that pops out. That is the point if you drop one of the comparables out of the data pool and if that was one of the comparables that fell on the edge of the limits, then we have a tremendous impact on the regression equation which in turn would have a significant impact on the indicated value for the subject property. You go right to the market comp program and you were to take and change the adjustment for living area from \$12 to \$200. The price for the subject property would change a very little bit. Why? Number one, that shift in emphasis is being applied only against differences, not against the total base space number. Therefore, those comparables that are most similar to the subject property and that attribute are the ones that are going to be picked. The selection process itself is going to minimize the impact of that difference, secondly because of offsetting error, you're going to be looking at the cumulative measurement of difference not the individual difference and the cumulative difference is such that it is choosing comparables in which several small adjustments are made rather than one big one. So by running the model with depth 5, going and changing the living area factor from \$12 to \$200 and running the model over again, you know what happens? One comp drops out and another comp comes in in its place. And the price goes up \$28 but the standard deviation goes down. In a regression equation you could not possibly do that. You change the adjustment from \$12 to \$200, the price would go right off the wall. The model is an incredibly low budget model. It can absorb a tremendous amount of variance, so as appraisers you don't have to be overly concerned with the mathematical elegance of whether or not we have an absolutely correctly specified mathematical mold. Because the selection process

overcomes and averages out any of those errors. You're probably going to see more of this type of a modeling process around. And as the industry stands right now this is the most supportable valuation model you can possibly take on. We have used this model right here is the guts of the stuff that we're using in doing the wilderness evaluation and all that kind of stuff. Instead of looking for things like bedrooms, living area, this kind of stuff, we're looking distance, quality, physiographic features and all that kind of stuff then we're converting the whole thing into dollars using the attributes matching process as the driving force. And its kind of a highbred kind of thing, but from an application stand point it's the same technique and the same technology that is sitting there and you have to contest or challenge in another appraisal that was bent on the wag method where the appraiser provided you no guesstimate as to where that \$500 adjustment for access came from. If you got the comps, this thing will beat that person hands down. If somebody has presented you with a regression approach, please do the market comp attack on it, chances are you can dismantle that process step by step with very little threat at all. This is a very superior model. There's probably going to be a lot more of this kind of a model.

Graaskamp announces some part time job openings for students. And other interviews in the state and Madison. A number of you had questions on the real estate that you are appraising I will answer those at this time. Question--How do you define the interest you are appraising? Chief--Initially you're going to have to appraise it in fee simple title. Then subtract out of it the value attributable to the underlying land contract and value attributable for what you perceive to be non market

rent leasehold interest attributable to the tenant. The leases will say which space

they occupy. Question--What fixtures should be included? Chief--None, I assume by the very definition that the fixtures are those of the tenant, there is no shelving and so forth, lockers and frozen food things are all removable.

Obviously the building has to have mechanicals and if they have leases its obvious the tenants don't own them, right? They always go with the property.

And chances are they go with the property if the tenants did own them because when most tenants move out, they don't take the roof tops with them, its more expensive than to leave it. Question--Do we have the legals? What about

parking? Chief--I'm xeroxing a page on parking ratio requirements and landscaping requirements. You have several alternative legal descriptions available to you on the property. I would not trust that as the assessor.

You're going to have to search in the materials which you are referring.

Question--What are your alternatives? Chief--Several different places in there where you can read the legal description, have you been over to the library, the land contract, several of the leases. Any other questions? You should be into the writing of that report by now. You have enough information to rough it out. The best thing to do is to start at the beginning. "The purpose of this appraisal is," and then write it. And then go to the next item on the outline, write it and go to the next item on the outline, write it and you'd be surprised, sooner or later you'll get to the end. It even surprises me some days when I'm doing three at a time and I do a piece of this and a piece of that, sooner or later I get to the end. Jokes around. Okay what I'd like to do today is pick up again on market comps and realizing that I had not asked you to bring your readings books I decided the better part of it was to xerox so of the critical elements and bring them along with me. In any event, starting on page 397 of your readings is a complete set of the documentation of the Maple Bluff application of the market comp model and I had hoped Jean Davis who was

the guiding camp behind this would be with us today but family emergency is requiring her attention, so you'll have to depend on me. The program developed initially as the market comp model here was introduced in Maple Bluff with the idea that we could teach the existing assessor how to use it and he was enthusiastic about that. The President of the Maple Bluff board of Trustees was Bill Chatterton at the time who was in charge of the American Bar Association's Committee on Computerization, he was very enthusiastic about it. And their equalization rate was disastrous. They were down around 33 or 34% with tremendous variations between the folks that were on the lake and the folks that live along Sherman Avenue. There was a definite bias in favor of the lake front property and they were afraid they were going to get sued or the State was going to come in and take away responsibility for that so we're looking for something that works relatively quickly, so the first pass through was essentially working on the existing data bases and bringing it up on the land and then on the buildings. We then realized there was an awful lot we didn't know about the buildings because people had been improving them regularly without reporting those to the assessor and so on. We discovered that of course in the appeal and we've seen beautiful public relations job, you can imagine how people who are all lawyers and experts on any given subject feel when their assessment bounces from 35% of market value where they thought they were really getting away with something today closer to 90% of market value in a year. And the fact that the mill rate went down maybe the taxes didn't change much was irrelevant, their assessment went up. So they all came storming in, but they were never talking about their own property. It was always did you know so and so next door to you has put on a whole new room on the back of his house, and a new kitchen and etc., etc., etc., and he's not assessed any more than I am. Jean Davis inspected all but about 75 properties in Maple Bluff, the other 75 were inspected by a graduate assistant who we found moved on to other things, as their consistency, and sincerity, and originality, plus the fact that they were

what we were looking for. Those 75 properties indicate a fifth of the data base. Once we went back and did those over again, the system was really tight and we could bring the City to 99.5% of market value over night literally, and have 4 comparables for every property and have all the adjustments on umpteen variables as we'll see in a moment and hold up year after year. Well that infuriated the good doctors and lawyers the fact that their assessments were in fact within 10% of the market value, when they would allege that of course they're probably worth considerably less than we said it was. And they then would list it considerably more than we said it would, and then it would sell for what we had it assessed at. So they decided that we were too expensive. We were charging them about \$20 a house per year to come up with a full market value on every one of their houses, they decided that was far too much money so they hired somebody for \$6,000 who never showed up to look, and fired him. So currently they're save a lot of money and they're advertising for an assessor. They decided the computer is too advanced and gone back to the finagle system where they squint over their thumb, and Charlie the pain in the ass assessment is serving on the board, but anyway. It's not an unusual occurrence All of California Proposition 13 was really the result of the fact that the local assessors became very good at what they did. California had a county wide assessment system. It was supervised by the California Board of Equalization, which audited the performance of each county at least once every 5 years and then upon completion of the audit and then list a series of weaknesses in the system, as well as good points in the system. And suggest what had to be corrected before they showed up for the next audit and if they didn't correct them the assessor was out, simple as that. And they went to automatization and they became very good at it and major counties, particularly those with high rates of growth, high rates of appreciation in tracking right along with the value of the home as it appreciated and as you know there were points in time in California and in some areas in which properties were appreciating one to two

percent a month and the assessor tracked right along with it. Not doing as well in commercial properties, so that eventually there was an incident of shifting the taxation away from the commercial properties where they were not done as well and lagged on the rate of appreciation, and the single families which were right on target. And so the single family home owner finally said my God, I can't afford the real estate taxes on the real value of this property. The

last thing we want is a data management system which allows the assessor to be right. And so they passed Proposition 13 which says which whatever I pay for is the market value of the property. Historically, and I think it appreciates at what, 3% a year, or 2%, and that's it. So the computer model worked and it does out perform in many ways what you can do as an individual. In the book, one of the important things about any data base is you're ability to zero in on the property, in a variety of ways. The first four items for example, tax parcel number of property owners, street number and street name. Street number and name are on different lines is so we can come right in and say okay we want to weigh on Lake Street comparables because that street has its own ambiance and it's different from the next street over and we could specify that all comps be from that street. Or we not only want that street, we want the street numbers from 1600 to 3500 and you can define the set. So one of the things that you want to look at in terms of the data base is the number of different ways it was designed so that you can create a subset of the total data base. And market comp allows you to do that. Market comp will allow you to either create a subset from which you will choose your market comp, or it will allow you to pick them from all of the properties in this particular data base. So its a very very flexible tool in terms of expost facto definition of the set and expanding the definition of the set. The land data not only has previous lot sale price and previous lot sale date, which is the most recent sale and so forth. It has an x, y, coordinate, if there's another way of identifying the property if we want to simply say fine we want all our comps to be within 1,000 feet of such

and such an x y coordinate, we have defined what we determined to be the so called neighborhood proximity for 7, we have one more way of creating an alternative subset. We have neighborhood numbers in this case from 1 to 18 which we're done by the original assessor who turned out to be quite right in terms of how he began to define that on the map and therefore each lot was defined as being in a specific neighborhood. The basis for that essentially was the average price of the lot and the neighborhood the price range was \$7,000 difference, \$50,000 and that's for the mean price. And there are several ways of doing it. One is visually on a map, which is what he did. Statistically you could have done that by identifying lots of certain characteristics and grading clusters which internally were most like each other and each cluster most unlike the other clusters. You can do the automatically, as the City of Madison does, for determining its 118 neighborhood categories. The degree of sameness is very high within the cluster and the characteristics of the cluster are distinctly different than the characteristics of any other cluster. Then we have lot square feet rounded to the nearest 500. Lot front to the nearest foot, lot depth to the nearest foot, and so forth. One of the things that you get in appraisal is overpumping us with precision on variables that don't matter. People buy a home site they don't buy a sq. ft. As a result it doesn't really matter if the lot is 10,000 or 11,000 sq. ft. They'll probably pay the same price for it. And you may not be able to anticipate as an appraiser what they are going to pay for differently. When we did our subdivision in Applewood Hill initially we priced each lot very carefully--its view and its shape and its size and its topography, and boy it was a really classic academic system. And then people would come in and they would always buy the wrong lot--we never figured it out. We changed everything to \$25,000 a lot. Covered everything from a half acre to two acres. And they all sold at \$25,000 a lot. They all had their own particular tastes and what they were looking for and a great deal of sensitivity to things that buyers themselves were relatively subjective and really didn't



serve any purpose. So you have to be careful that the variables that you are looking at are truly significant variables in the buyers mind and not just in your mind. Appraisers are too used to saying what would they do if they were as smart as me? And fortunately most buyers aren't. There are a number of what we would call site improvements and there's the opportunity to create site improvements. And you'll see that later on there's a very arbitrary whimsical way of handling those, we just said swimming pools are worth \$5,000, sea walls are worth so much a foot, and so forth, we didn't have to be very exact about it. Thank God for the law of offsetting error, all that stuff washes out ultimately anyway, so we treated everybody the same. And then we could create special structures, and we usually used or somebody of that sort to create a number for a gazebo or a boat house or green house, or whatever. On the driveway, simply is a matter of indicating to you a way of coding and creating scores, because point scores are very useful ways of delineating with some sensitivity between one comparable and another. And in this case we created a style, for example linear to the garage, back into the street. And then we had four types of materials--gravel, asphalt, concrete and brick. What you did was you took the style type and you multiplied by the material type and that gave you a score. So a circular driveway with parking space, which is by far the most elegant if it was concrete all the way you use  $5 \times 4$  was 20, compared to a linear back out of the garage concrete which would have been a four. If there had been a gravel it would have been a 2. So by simply creating the little coding system, created a score which was sensitive to the relative cost and desirability and elegance of the alternative solutions. And we did the same thing with a variety of other variables creating a very simple minded little point score. Then we get the improvement data we start talking about the house. One of the things that we found was year built was a very sensitive factor but obviously when it was built in 1953 or 1954 wasn't a big deal, but the era, we began to look at style as though pre-1910 of which there were some that was a

big deal. 1910 to 1929 was one era of building expansion in Maple Bluff area. 1930 to 1949 represented another era of style characteristics. 1950 to 1969, and then 1970 to present allowed us to give it a time organization which Dilmore would call a fuzzy set. There's not a great deal of style differential between a 1947 and a 1949 home. The mill work and the detailing and the characteristics were pretty much the same unless they had been renovated. So what you really needed was a fuzzy set rather than a very precise number although people tend to be rather overly precise about the age of the building. Then the critical variable of square feet of living space which was that which was heated and enclosed. We had number of stories, we had different styles, different roof styles and score equals style times materials. So you could have a gable roof that was tile or metal or slate or wood or asphalt for relatively arbitrary ranges. And then we looked at interior materials, garage types, building style, basement types. One of the things that we had a really interesting problem was basement condition. Maple Bluff ironically is set largely in low areas and if you set the basement into the ground the full depth in the low areas, it's below the level of Lake Mendota. Lake Mendota varies about 18 inches per year under the U.S. Core of Engineered Management, and if you have a high water period 18 inches of Lake Mendota there are certain basements which have 6 inches of water automatically. It's filled with sand and levelled it right across all the way over to East Washington Street as a matter of fact. So we have problem basements. So what represented problem basements? Well, we had fire department calls relative to who had to be pumped out. So rather than getting into a big rhubarb as to whether their basement wall was damp or not at a certain period of time, they never called the assessor when it was damp, kind of like a bad back or bad neck from an accident. That was what we used. We had a mild probable procedure, so we had fourth addition and no basement and so forth. We had a couple of critical variables that we garnered from the real estate brokers. Real estate brokers are no dummies despite what you hear me say and they have a

pretty good idea of what people are sensitive to in looking at a house and one of them obviously is the nature of the heating system. So we had one code item for heating fuel, heating type and so forth, and then we had total score for the heating system. And the fuel element, times the type of heating system gave you the score so if you had oil, which is a 2, and you had an old hot water radiator, you had a score of 2. If you had an old low pressure steam with radiators you might of gotten a 4. On the other hand if you had multiple forced air hot air units that were gas fired you got a 20 for it, etc. Most furnaces are designed to run at constant speed at one point of optimal production and therefore, to alter the heat in the home depending on how cold it is outside, you run it longer or shorter but it still runs at the same speed. You are much better off in a large home to have multiple furnaces, maybe as many as five, relatively small so the temperature drops to 16, run one unit at optimal speed, its all computer controlled so that the optimal heating system today would be a series of what they call p furnaces, little ones, and they may not all be located in the same wing. Two in one wing of the house, and three in another wing of the house and not have the heat loss and so forth as you would have moving the hot air from one end to the other and so forth. That would be one type of point score to which they might be relatively sensitive. Then we have what we call our special features category. Again special features came out of considerable discussion with those that sell upper class homes, and what we knew about home building, having been a home builder in the Cadillac field for some time. And we knew for example, the front and the exterior entrances were very important. Talking about special features, for example, the front exterior entry is the major marketing tool. The front entry we had zero as a single door. A one was a double door. Was it protected or unprotected--is it under a sheltered roof, is it in the corner of the building with a roof over the top so your guests aren't standing in the rain waiting for you to answer the door. If its unprotected it has a minus one, so if you had a double door and no

sheltering of it, one minus one gave you a zero you weren't any better than having a single door and so forth. Front interior entry--whether there was a direct entrance to the living room was a negative score. A desk if you will but no entry or door was a zero. If you had a foyer with an enclosed entry it was a one. Spacious vestibule was a two, spacious foyer which has a door on both sides was a three and so on. Master bedroom suite, living room extras, dining room extras, did you have deluxe built ins in the den or the library or whatever. Kitchen extras--you can get a really high score on a whole matter of kitchen extras, or family rooms, special spaces and so forth. All that ultimately then comes down to what you have on the first page of your handout in somewhat abbreviated form, are the features that we actually used to compare selected comparables and on which we selected comparables. The summary of the score for each property is here. And the abbreviation for the various terms and so forth are there. Notice we can talk about as many as 88 items, minus a few items which are price and date and identify as the best sort. Now if you look at page 412 we have market comps factor file. The market comp has essentially three basic bias. One of course is the identification of factors that you wish to compare on the various property. The second is the file of comparable sales that you wish to use. And the third is a file of subjects. In this case the file of subjects includes all the single family homes and vacant lots in Maple Bluff. The file of comparables included all of the sales in the past 5 years because there weren't always that many sales. The average is 30-35 sales a year out there, which is about 5-8% of the available inventory. And finally we're at the factor file, factors which we thought were one of three types. About 10 of the factors are critical in determining relative values of properties. Living area, lot characteristics, is it on the lake or not, and so forth, so they do in fact help improve your forecast of what the property will sell for. The second type of variable are those which are simply useful to indicate to the tax payer that you have some sensitivity to the differences between one property and

another. But typically the adjustments you make for those variables tend to wash out. There may be some small residual set of adjustments which makes it better than average or worse than average, but overall they're there for credibility. The tax payer who comes in and says did you consider this -- you can say yes. My house isn't as good as his house because he has all those built-ins because he has a wood shop down in the basement and he's constantly making cabinets. At some point cabinets have a decreasing return. The third type of variable is simply that which we need to sort on but we wouldn't necessarily want a value on it. It's a way of creating an immediate subclass because we really can't measure the difference, at least very effectively. For example, suppose to go from neighborhood 18 to look for a comparable in neighborhood 7, it will probably slide into a different context and environment. There's all other things going on there that our system wasn't capable of picking up. And in Maple Bluff that was really true. Lakewood Blvd. is different than Farwell Avenue even if the two houses were mirror images of each other certainly the way buyers would perceive them would be significantly different in their mind set as to social status, who the neighbors are and etc., etc. So as a result it is much more useful to sort by neighborhood, perhaps not absolutely, but statistically, than it is to compare and make a dollar adjustment for the difference. So three kinds of variables. Those that really make a difference in your value estimate. Those which people think make a difference and therefore, you need to be creditable on those which are useful to sort on and create subsets so that you don't inadvertently move into a different basket of goods all together in which a linear comparison is really invalid.

Now what you have on this page is two sets of adjustment values. The first one for the first pass is called the selection factor, it's on the far right. And the selection factor, are relatively limited in number and there are three types of selection factors under type that says one, two, three or zero. Obviously the sales price, is not a selection factor, its just a factor, that's

a zero there. Sales date is a 2. On the other hand, neighborhood is a one. A one typically is a planned adjustment, in this case you'll note this neighborhood has a \$5,000 adjustment. And initially we're overstating that. Our regression analysis came up with a factor that said \$1,500 was the coefficient for neighborhoods was very reliable, no matter how we ran it, it bounced around from \$1,400 to \$1,650 and so finally we plucked 1500 out of the air as a reasonable adjustment to make as between neighborhood 18 and neighborhood 17, or neighborhood 14 and neighborhood 13. And on the other hand we wanted not to slide into other neighborhoods if we didn't want to. So by using the selection factor of \$5,000 in market comp what happens? If you start adjusting for house sales which are in other neighborhoods and you have to adjust them \$5,000 for each difference in neighborhood numbers say from 18 down to 13 that's a difference of 5, and you multiply 5 times \$5,000, that's \$25,000 right? and now your square \$25,000, you have a big number going into your sum of squares, right? And it probably will knock it out of selection as one of the best buys to come. So what you created with that \$5,000 is a fuzzy set--its possible that if there were a whole reproduction of this house in another neighborhood, that we could reach down and pull that into the top 5 or top 7 comps, but otherwise if there's differences its not likely, because by the time we have squared that number by the number of other differences in the neighborhood, its a big number. So far so good? So from our selection standpoint we're saying we want to hang tight on having houses in the same neighborhood or at least not more than one neighborhood away. On the other hand, a factor number 2 which is either sales date 5% is really 5% per annum of sales price is being attributed to difference in the period in which it sold. Again, 5% is a pretty heavy hit during most of this time real estate prices were relatively flat in Maple Bluff. What we're really saying is we would prefer to have sales within the year which we're assessing or within two years, even though our data base has sales going back 5 years, in case we get to a mansion

or some other unique property in which the comparables are limited and we may have to go back a ways to find other properties that are appropriate. So again the selection factor is loaded to favor or bias the selection of comparables for the current year of assessment. And another circular one down there is effective lakefront 8 and 9, one is lake front footage, and the other is effective lake front footage. Here's a classic case in which we have a linear variable being converted to a curvilinear variable. We found for example, that it doesn't matter whether they had 50 sq. ft. or 80 sq. running ft. of lake shore, price was the same, you wanted to be on the lake and they got on the lake however they could and weren't very sensitive to that. As you began to move over 80 or 85 feet of lake shore, additional lake shore began to count less and less. So we created an algorithm which essentially was a log rhythmic curve that said once you got to a thousand running feet of lake shore, who wanted another one? that sort of thing. And there were a number of properties out there which were on little harbor points which had a significant amount of lake frontage technically, but much of it was on the inside on a little bayou where it really didn't count too much, really didn't add much to property value. And so we would convert our factual lake front footage to an effective lake front footage and then we would compare on that. So far so good? Hence the two numbers, a way again of making a linear variable if you will, into a curvilinear variable which reflect diminishing utility. And in this case we knew the price of lake front footage out there was about \$350 a running foot when we were talking about parcels that were some where in the 50 to 80 to maybe 120 feet and that after that it was different. We wanted to make sure that every comparable we choose was a lake front lot. And so initially we said \$3,000 a running foot. Now that has two factors to it--one, the model's never going to choose a nonlake lot for comparison to a lake lot. By the time you had squared zero front feet of effective frontage, times 3,000 times the number of feet in the subject property that has lake frontage, and you square that, that number is so big that

it's knocked out that comparable from any further consideration. And secondly we didn't want to have to compare a 250 foot front lake lot with a 50 foot front lake lot. We wanted a great deal of pressure to compress as close to the size of the lake lot as we could. Their 50's got compared to their 70's and 80's and not with 150 footers, so the selection factor had that result of dropping out an overwhelming amount of other factors that might have been considered. Effective age today is another number 18 with that category that we saw and again we wanted to stay kind of close to that. Number 20 effective square footage--again another curvilinear factor there. We knew the average size home was somewhere in the 2700-2800 sq. ft., so that if you got over 4,000 sq. ft. the value adding more footage, went to hell in a basket. And one home I think had 13,000 sq. ft in it. And not a lot of folks wanted to heat that baby. So again, we created an algorithm which created a desired curve so that while the last front foot was worth something, it wasn't worth much and we converted the actual living space to effective sq. footage. Stories was important. Then you get down to bedrooms, baths, kitchen score was a critical element, because it really told us a lot about whether the house was remodeled. I think the house was built early on but had undergone considerable remodeling, generally the kitchen is the first thing to get a real heavy dose of money and some of that money was heavy money. Some of the houses we saw had \$40-50,000 kitchen remodeling jobs. Finally we have various heating scores (end of side one). (side two) Special features score is the last item, number 40. For every special feature point, you got \$350. Any way, the selection factor with the "X's" were the ones we chose the initial set of comparables on. The second step then was to take that set of comparables and adjust each one relative to the subject property according to the dollar amount in the adjustment factor file. And again we can do that on a per unit basis, we can do that on a flat basis, or we can do that on a percentage basis. For example, the internal circulation score number 39 is on a percentage basis, and one percent of sales price for each difference in the



quality point. Okay, on the next page you have xerox copies of output on a single property. First of all if you look at the left hand side, the subject property that we are appraising is identified here by tax parcel number 45 Cambridge Road and then it goes to adjustment factors, type, etc., average and the standard error of the deviation. It looked at the sales price initially and it says the average sales price of all the comps is \$207,000 plus or minus a little bit, and the standard deviation, my Lord, is \$18,040. If we took the actual sales prices of the comparables by no adjustment, simply average them, the standard deviation of the mean, we're at \$18,000. Now if you look to the bottom circle it says, wait a minute, oops, the adjusted price of this baby is a straight mean of adjusted prices is \$231,000, and now the standard error of the mean is \$8,000, etc. Now the whole objective of the market comparison approach is see whether we can make adjustments for differences which cause all of the adjusted prices to converge on a mean price. Now if we had said ideally there would be \$1.00 standard deviation in the mean price, obviously there are other things going on here, our factors may not be quite right, maybe factors we didn't know about and left out, and part of it is just that fact that when you're talking home prices, you're talking about, in part, an irrational element. There is no way that you can have a rational system that predicts an irrational transaction--because people get emotional about what it will sell for, what we paid for it, etc., etc., and so you're going to have variance in home prices, there's no way around it in fact home prices are much tougher to do than commercial properties in terms of the degree of irrationality that is controlling the outcome. So in this case we had moved down from \$18,000 to an \$8,000 standard error, we have to be able to say that the market comparison factors are in fact contributing to the reliability of our outcome. So far so good? We have two prices, one is the average adjusted amount, which says now that we've adjusted each sales price with each comp, the average price that we should predict for this subject property at 45 Cambridge, is \$231,000. But, if

we believe in comparability then we really want to weight that property most like the subject property more than the one which is least like the subject property. So in this case we have four comps if we weight the first one 40%, the second one 30, the third one 20, and the last one 10 and we go for a weighted average, we get a price of \$233,000. And that would have been our assessed price--\$233,000 on a weighted average. Now look at the right hand side of the paper. The first thing that you get at the top are the four comps which have been selected. And they are identified by address and the first comp that we did is the subject property itself. From an assessment standpoint that's an important thing. The assessor says hey, the house just sold, did it sell for market price, or more or less than, but it certainly is our best comp. And then we got another one on Cambridge, another one on Farwell, another one on Farwell, Cambridge and Farwell are the ones that run right along the lake. And the specs that we have on the subject property are provided in that column there, right after the factors and then if we look at each one of the comps you'll see that we have made an adjustment for that and in the first case notice not very many adjustments, except where? Effective square footage. The quality factor was changed because the property has been up graded since the time that it was sold. And in this case obviously the kitchen has been significantly remodeled. So virtually everything else is a zero until we get down to that. So the comparable is frozen in the condition in terms of the scoring as where it was when it was purchased. The data on it currently may be different and therefore there may be adjustments--they may have added a room, they may have fixed up, painted up, you know whatever. So the comparable sales data about this property is frozen in time as to the condition at the time that it sold. And one of the things that we really had to be quick on was as the property sold make sure that we inspected it at that point so that it remained a good comparable sale. And then we had to inspect it again as of January 1, from the following time to find out what the new buyer had done to upgrade it, modify it, and so forth and

whether that affected the assessment. Comparable number two you have a number of adjustments that are made to it and so on down the line. Notice down on the bottom then that the top first column you have the actual sales price as of a certain date, next to the last number on the bottom is the adjusted sales price having made each of those particular adjustments to price and then below that we have something called the selection index. The selection index is the square root of the sum of the squares of all of the adjustments that were made in that column. So each dollar of value adjustment has been squared, which neutralizes the sine--Add them all up you get the sum of the squares of all adjustments made to that property and you take the square root of that and that becomes the selection index. And the selection rule is to choose the number one comparable, the one with the lowest selection index--the lowest square root. That's why comparable one has \$16,000, comparable two has 38, comparable three I think 61, and comparable four 63,000--the square root of the sum of the squares. Now, in this particular model, the computer has looked at all of the comparable sales in the data base and these four have the lowest selection indexes and are ranked accordingly. Any other property would have had a higher square root of adjustment. One, it has picked the comparables. Two, it has ranked them in degree of comparability and then the evaluation process. Everybody has a grasp on it? Now it says, that's really neat, how do we know what adjustment factors to use. The fact is that--effective square footage is \$20.00 per sq. ft. dollar adjustment. If we had used \$25.00 or \$30.00 or \$15.00 we would have picked the same comps. You would have adjusted up for those comps that were smaller than the subject property and down for those that were larger than the subject property. But the mean would have fallen just a few points. There would be slight movement, but we did the first four and five comps with almost no movement at all. Maybe by the time you got down to the sixth or seventh comp using an array--property six would have moved up to seven or down. For example, if six was particularly smaller than the rest and you were using \$30 per sq. ft.

the adjustments would have been larger and you might have switched places with properties number seven or eight. Other than that, it is extremely rigorous and stable system as long as you're dealing with the top end of the scale with the top five to seven comps out of an array of maybe 200-250 sales. You'll still get the same choice even if you are wrong on your selection process. On the fine tuning, ultimately that becomes very much Dewey at work, the pragmatist.

What you do, is you know the sales price of several of the properties that sold, you hold them out of the sample initially, and you see gee, can I predict this? Son of a gun, I missed by a mile, I wonder what I did wrong. Gee, the adjustment here for this attribute, or that attribute seems to be a little heavy relative to price--what would happen if I just moved that back from \$22/ft. to \$20/ft. and run it again? Son of a gun, I start to predict those sales with a much better degree of accuracy, than I could before. If you fine tune on five or six sales that represent some of the alternative sites and properties that you have, how well did it work? And if you start to explain those sales, you say gee, I'm getting close enough for government to work. Those are the selection factors I'll use. Now initially the first 5 to 10 factors are selected by regression and after a long experience we know sq. ft. of living area is going to explain 30% to 70% of the difference between houses in a given category. We know the different scores and those are certain other features are going to be very common in the buyer's mind as he begin to trade off between one property and another. But once you get past, anywhere from 6 to 10 variables, after that its a combination of what brokers are telling the people to look at and variables that buyers tend to use to rationalize their purchase after the fact. I bought it because all of the built-ins were there. When they're moving in they say look at all these closets--I didn't realize they had. And so forth. Again the appraiser has to have some experience, it's not something that can just be run somebody that runs amuck and has no sensitivity for his data. But once you plunge into this and if you have some sense of property and what it is

doing and so on you can count on a fairly reasonable set of adjustment factors which do not have to be super precise as you might think as the influence of the overall tends to be off set as the (tape fades out) And ultimately the product is that final price. What's the most probable price we can sell at. And in this case we can say \$231,000 plus or minus \$8,000, and you give them a pretty good negotiation range as well as starting price. If I list that baby at \$240,000 or \$245,000--He'd be very happy to get a \$230,000 offer on it. The next item on 414 is what we give the taxpayer. You take that compact coding sheet with a whole series of numbers stacked in the computer and it converts it to English and says here's how we described your property--do you agree or disagree. We would send that out to the property owner and they would decide whether to do that or not. One of the features down on the lot is, is the lot wooded? And we had various categories like one to three major trees, and 4 to 7 major trees, and so on and more or less defined it as 6 inch diameter at 5 feet off the ground. It appeared to be an objective standard. Its amazing how quickly people were in on it. I had to cut down an old oak tree and now I only got three trees. They wanted that adjustment immediately. It didn't have a great deal to do with value. The first thing that they would do when they came into appeal was go down this list of attributes and say--Is this true, is this true and is this true and so forth and if not, correct it for them and run it again. The whole process takes about 2 minutes. You have to change the variables and run it again. So you can do the whole Village in a relatively short number of hours. The big bottleneck of doing it it would the speed of your printer. So at any rate, this is a good classic example of market comp at work. It is a very flexible tool--we use it in a variety of situations in Maple Bluff. One for mortgage loans, two for dividing the space to report the data before. And a very interesting case dealing with the Internal Revenue Service. And in this case, one of the mansions out there, the gentleman's wife had arthritis and it was recommended by his physician that she swim and they built a

very nice swimming pool attached to the mansion and attempted to deduct it as a medical deduction. Well the IRS rejected the total deduction, but when he went to court the court said no, what you really have to do is measure the difference between a purely utilitarian medical pool and the value added by having one which has a broad area around it and the barbecue fireplace, and obviously it's going to be used for recreational purposes and so forth. And this case went all the way back into the 1970's when that event occurred and it's still being argued in 80 or 81. By happy coincidence our data base went all the way back there. So the IRS with the client stipulated, and what we did is initially the IRS said all right this is what a utilitarian swimming pool would look like and so forth. So the first thing we did we said fine, using market comp as the house was in 1975, or 76, what was the value without the pool? Bang, I came up with benchmark number one. Second of all, given the house with the elaborate swimming pool, that could be used for both recreational and medical purposes and so forth, what's the value of the house at that point? And how does something gain 100% per dollar spent on a swimming pool. So there's value number two. Now if we put this utilitarian cheese tank in and let somebody swim 25 yards each direction in a stainless steel tank and a small steel utilitarian building sticking out of this beautiful English Tudor house. So obviously there was a difference. And what we could do is we could say okay, the price of the home with the super pool went up \$75,000, with the medical pool given our variance requirements it only went up \$18,000. Therefore the difference between what it cost him to build the pool and \$18,000 isn't deductible. \$18,000 was deductible for medical purposes. And the IRS liked the system. So there was a way of moving backward and forward over a time period and changing the definition of comp. My definition is the three years from 1975 to 1978 and we already had the data base, we simply don't use them any more for the assessment purpose and can simply move forward from that point. It's a very flexible tool and in addition it produces a report which meets all the requirements of the Home Loan Bank

which we talked about the first day. They want to specifically the address of the comps that you use. Specifically the adjustments that were made between the comps and the subject property, what did you do with those, and how did they in fact produce the value conclusion that you arrived at. Was it in fact sensitive to the various attributes of the property, and did you in fact visit all of the properties? So it would be perfectly legitimate to use this for a home loan bank, R41C meets all of their requirements from that stand point. And now you read them the conclusion, and that would meet all of their requirements. Some where there are examples and I urge you to look those over.

First of all we handed back prematurely I got two of your three essays that I graded.

I wanted to comment a little on them. You either got to have an S plus, or an S, or a S

minus and why so. The first one was market value versus most probable price, many of you have still not figured that out. The essential distinctions of course, are whether there is a competitive market, or given the most probable buyer, you can have a noncompetitive potentially monopolistic market so the presumption that everybody has. The second element of course, is that today's competitive market--the prudent man versus the presumed customer. And obviously the prudent man is a very highly stylistic individual who presumably operating for only the economic benefit within the parcel lines of the product who has a considerable portfolio intact and may not be considering a business strategy. Or the other element that the most probable buyer may have his mind. Most probable buyer may have subjective elements in mind which are perfectly legitimate in the contemporary sense, but with the factored out of the prudent man concept presumably is objective, unemotional and perceives himself as having a variety of choices. A third element is, of course, that market value is required for legal purposes such as eminent domain, real estate tax purposes and so forth. Whereas most probable price is more typically for a business

purpose--how much did I pay, what can I sell it for, how much should I lend on it, that is obviously more transactional. The definition of interest is not critical. An MAI appraiser can appraise an encumbered partial interest just like anybody else can. You can appraise any defined interest that you want. The complaint with the traditional appraiser is that he's not careful enough about defining what the interest may be. But it doesn't mean it's not his responsibility. The appraisal ethics are the same. Someone implied that the appraisal ethics were different that the contemporary appraisal was more concerned with the client and so forth. I don't think that's true. You have to distinguish I think between the business service that you're providing and the ethical framework that you're working on, and certainly the ethical framework for the contemporary appraiser is the same. At any rate, read your responses to those matter. You lost points. Competitive market model versus a potential monopolistic, noncompetitive market and a buyer who has subjective or unique purposes which can be observed by the appraiser. The second essay that you did was on the architectural description where you got an unsatisfactory is typically because you wallowed around telling me where it was or telling me who it was, rather than what it was. And the exercise was to describe the architectural character and materials of the building. And if you only have a paragraph to do that in then you couldn't fill it up with garbage, you should go to the essence of the matter and in several cases I had the feeling that you were simply filling up the paragraph and not really defining the exercise describing in technical terms or in architectural terms what it was you were looking at. So you might have gotten an unsatisfactory on that. The third one I have not quite finished yet--remember in the traditional approach I hope to have that done by today but I'll have it done by Wednesday and I'll hand that back. Its important that you handed all of those in. I know ginny did not grade them and I've had to look at them in terms of content rather than grammar. If all of you would proof read your comments, you don't know how much damage



that does to you professionally if you don't proof read it. People know you by what you give them in terms of the work product and if an architect had ink spots all over his drawings, they probably wouldn't use him again, maybe not even pay him the first time. And you simply have to learn to read it. It's detail, detail, detail and you've got to follow up and the computer glitches, just because it happens to be computer output doesn't mean it didn't glitch and you didn't miss something in the final proofing. So in this course we're going to be particularly parsnickity about that. We do not accept close enough for government work. You simply have to follow up on the detail. If you have misspelling you simply have to look up the word and you repeat three words in a line, it may be the computer or when you were making a correction you didn't delete or provide whatever operation was required, but you simply have to follow up on that. And everybody says I don't have to worry about that my secretary will do that when I get out in the real world, well, have I got news for you. If the secretary is that good, she'll have your job and you're going to be typing. Secretaries who will follow up on that kind of detail get \$25-30,000 a year when they're good and if you get out to the big cities like New York or San Francisco, one is capable of executing and understanding the subject matter that she is working on gets \$35-50,000 and will be a very treasured resource as you at your level of responsibility will not get access to those. She will be keeping the vice president or the president out of trouble and won't be caring about yours so you're just going to have to do it yourself. Okay, the demographics I think we have here that identify for you relative to Parkwood Plaza. A complete set and a comparative set for three comparables Today we're going to start talking about the income approach to value. It falls generally under the simulation approach because what we're looking at is more from the buyer's view point then we are from the seller's view point. To some degree however, it is moving towards being a true market comparison method in that both buyer and seller looked at the property in the same way and in fact

will negotiate from the income approach. A good example being your comparable on Fitchburg, they both agreed on what the following 12 months what is was going to be, what the proforma income statement was going to look like, they then agreed and negotiated on a cap rate and that's the way that they arrived at the value. Now at that point then it becomes a market comparison approach when we have a buyer and seller both thinking that way and in fact negotiating the component of the market comparison approach. You don't often get that. Nor do you get a clean sale as in this case in Fitchburg property. Often the prices are engineered for a variety of reasons but this gives you an example of two sophisticated parties in the market in defining what it is you're buying and what rates would you apply. You're looking at the income approach. There's a number of steps to go through and the first step of course, is going to be defining the revenues that are attributable to real estate, or the revenues attributable to the interest being appraised, which makes a difference. The second major problem for the appraiser is defining the expenses in such a way that they can be matched against the revenues per period so that net income is an accrual accounting number. That is not the way brokers do it. Many appraisers wouldn't know accrual accounting from cash accounting, but the emphasis is on defined net income on an accrual accounting basis. Once you have reached that point you will adjust that net income to fit the methods by which you are converting net income to capital value. Classic capitalized income where you take the NOI as the normalized net divide it by a capitalization ratio, goes right from accrual accounting. On the other hand, if you're using Ellwood, you adjust the accrual accounting so that the only reserves are for those items that will be replaced within your forecast period. So if you're using a five year forecast period and you're using an Ellwood approach you would take only those items to be replaced and charge those off on a five year reserve basis against income, and therefore your accrual income will probably be somewhat higher, than if you take a longer term view. On the other hand, if

you're looking at true discounted income value we're going to have a whole series of adjustments to make for items such as tenant improvements to be made that year, or concessions to be made or a variety of other items that will clean it off. But your first step is to define the revenue that is related to the interest that you are appraising then match expenses to that revenue. That's a tough job. You're looking at a shopping center, how much of the revenue is attributable to the operating agreement. How much is attributable to the land and the buildings. You're doing it for a tax appeal, and you want to value the land and buildings, because the operating agreement intangible property and not subject to the tax, therefore, any value that creates through the center is not subject to the real estate tax. The same would be true of a hotel. How much of the revenue in the hotel is attributable to the land and buildings, and how much is attributable to management and furnishings and franchise and the kitchen equipment and the tableware and so on? So you really gotta know your accounting. Right there, several drop out of appraisal. Now once you're down to a net income, obviously the problem is choosing a conversion system which will allow you to price what that expected income return may be sold for in the market. There are two prominent methods currently in use. One is simply capitalization of the net income accrual figure. Direct capitalization is as it's referred to. The second is discounted cash flow. When tax shelter was a significant factor in real estate investment, it was often after-tax discounted cash flow. But today I would say the majority of income property appraisals are being done on a pre-income tax basis. And the discount rate being used in the discounted cash flow typically. There are two reasons for that, I think. One, of course, is the fact that a significant factor in the market place for larger income properties are tax-exempt entities, pension funds primarily, retirement funds, where the income tax is not a major factor. Its possible that unrelated to this income could be a factor but its typical. And the second major reason is that if the project doesn't make sense before taxes, its doesn't make any

more sense after taxes. In the old days if you gotta loose money to make money, doesn't really fly any more. Now as an investor with a particular tax rate in a progressive world which is not as progressive as it use to be, you may have fine tuning that you as an investor will make on a particular project in terms of matching income, capital gains essentials or tax shelters to other income that you may have in your portfolio and so forth so that has become really so unique a matter of investment planning for that individual that it's almost impossible for the appraiser on the outside to really make any distinction. So a few years ago, when we had first time buyers and second time buyers, and we had special write-offs for remodeling or rehabilitation or accelerated write-offs on low income properties and so forth, certainly the tax law had much more significance relative to purchase price you simply pay and so on. Now that we have a much more level playing field, relative to real estate, it really doesn't alter very significantly the price that will be paid for real estate. So you can operate pretty much on a pre-tax basis. Occasionally there will be properties with special tax features such as low income housing, financed conventionally entitled to a 9% investment tax credit for a certain number of years and so on, in which the after tax factor becomes significant in the financial feasibility of the project and so on, but by and large there's a great variety of funding. If you look at it as an appraiser, it will be on a pre-tax basis. A number of studies have been done to show that discounted cash flow is probably the predominant method used by knowledgeable real estate investors today. The reason for it is that is it is most precedent to expectations of income change either up or down. It's true that a fixed normalized income capitalized by some factor can induce an expectation of an income rise or fall, the J factor in Ellwood, for example, the straight line method of capitalization which presumes a fall in income equal to a percent of depreciation times the interest rate over 7 or slope downward. But basically this kind of cash flow is much more sensitive to the irregularity of income. There are very few adjustments that

you can make today in which the income trajectory falls on a straight line or curve--it tends to be more irregular than that and therefore, traditional capitalization methods tend to be insensitive to trends in income change--hence the discounted cash flow. Gladstone has done a study, Edmond's done a study, Real Estate Research has done a study, and most of them are working on the discounted cash flow format on a pre-tax basis. Now let's begin to look at each of the components of that income property. First thing we gave you was Exhibit 4. And under the revenue we start out with base rent. The base rent obviously are the contracts in force or the market rent available for the space in question. And it implied a schedule. You really have to start thinking as an accountant in that the base rent number on line A is really the sum for each period of a schedule which establishes each rentable unit in the property. And I mean each rentable unit. If you have an office building with 10 floors and those 10 floors are subdivided into multiple units, each unit will be identified given its room number or its suite number, and so forth. The amount of area the tenant has leased, and so forth, and the rent that would be paid on that unit will be on that schedule and then in addition, as we'll see later, other factors in terms of pass throughs, so that base rent line really is simply a summary statement of a rent roll schedule. So the first thing that you need for your Parkside Plaza is going to be a rent roll identifying each tenant, spaces they occupy, the rent that they currently pay, whatever other items they pay in terms of pass throughs, etc., and the rent bumps that may occur along the way. The next thing that you would do is you'd create again another schedule that would identify the adjustments of base rent that will occur, when they will occur. They use a five or ten year forecast, the convention typically is a ten year forecast, but its foreseeable that if you have 5 year leases and so forth that you might not look at the roll of the critic. The next element is percentage rent. Percentage rent is a very controversial item in real estate. If we're talking about a relatively new center in which the presumption is that the

landlord was able to get market for face rent, any percentage rents realized probably would not be included in the appraised value of the property. It probably would be determined that that was the product of management, not the real estate. That is the merchandiser is able to exceed the sales on which his base rent has been initially established, it's probably from good management, or it may be elusive, it may decline. A very volatile one, for example, is many pizza parlors have a relatively normal base rent, a significant percentage factor and they bounce all around. One of them may be doing great business because they are going to deliver and maybe they decided not to introduce gasoline cost into their pizza and so they stopped the delivery service and so forth, or their sales fall or they open another one and the territory they were previously servicing by auto and their goes their sales falling. It's very volatile. In shopping center taxes appeal cases you almost always argue that the percentage rent is the result of the marketing synergy that's been created by management. It is not inherent in the land and buildings, if in fact the base rent represents market rents for the property. On the other hand, if you have an older center in which the base rents were set in another era, and now you look at the percentage rents, they really reflect a permanent change in condition in terms of price structure and they're moving into the sales that paid percentage rent, not because of management primarily, but because the whole price index has shifted on that kind of merchandise. And their unit volume may actually be down even though they are now into a dollar range of sales in which they have to pay percentage rent. In that case the percentage rent simply is anticipating the fact that the base rent is below market and that if they were to negotiate that lease today, the new lease would be at market and there probably would be. I mean no percentage. If you're particularly in short term leases, 3 year leases and so forth, the appraiser would let percentage was rent alone, and decide that essentially it's going to roll with market when it renews, and if that if business conditions suggest that sales buying is going to

stay up there, the market rent will simply incorporate the percentage rent that's being paid. Its quite often the case in neighborhood centers and so forth, that keep relatively short leases, so that if the guy starts to show high percentage rents, bingo, the next time around that's using the base rent and they lock it in. So again the appraiser says the proof of the pudding is what are we rolling the leases for, that becomes market rent and the percentage rent is a temporary phenomenon attributable to management. CAM, Common Area Maintenance--we've talked a little bit about this and it's become more and more prevalent for a variety of reasons. One of course, that it typically is now payable monthly in advance of what the annual budget is estimated to be with a 13 month reconciliation for over or under absorption. In addition it contained typically a collection factor or a management factor of at least 15% so if the true cost is \$0.75 per sq ft. they're probably paying closer to \$1.00 per sq. ft. and the management people would be picking up a profit center on the CAM. Whether that be included in the income of the real estate or not, is pretty iffy. We would argue on a major shopping center case that that had to be pulled out. That was a return to management, not to land and buildings and therefore is not part of the real estate, it might be part of going concern value, we're going to raise the general partner's interest in the shopping center. Certainly a profit center in CAM is one of the reasons he's in there. Not to mention the leasing commissions and the other profit centers that he might have. But if we're talking about a real estate tax appeal, you want fair market value of land and buildings, we would have to adjust CAM for the profit center and pull that out. So as a result, D is CAM may not meet A under expenses. The expenses under A are those actually concurred while the CAM factor in D are those actually billed to the tenant and that would be a larger number. Okay? The question is what interest are you appraising? If you want a very specific statement as to what the land and the buildings are worth, you really ought to pull that profit center out cause it's the management's profit center. On the

other hand, if we're saying what are you guys going to pay for the center, given the fact that in that there are a number of different profit centers you'll probably leave it in. If we're looking at different buildings that have different management plans, and different degrees of CAM, and we want to appraise the real estate, you really have to factor that out. You really have to look at that and then decide, gee, does that profit center belong with the real estate interest that is being sold? If you were valuing the general partnership interest, then that is one of the things that the general partner is buying. He's interested in buying the management fee, and the insurance commissions and a bunch of other stuff. If you're evaluating the real estate for the assessor, that's one of the things that you want to pull out, because that's not land and buildings. Question--Your CAM for revenue and expense based on what you're saying should match, right? Chief--no it shouldn't. In fact it would match if you decided to pull the management fee out, that's right. Now there's one other factor, however, not all CAM may collectable. It depends on how its worded. If you're a sophisticated operator your CAM is distributed among all of the occupants of the center. So if you're 85% rented, the guys that are there are paying all of the CAM. In other areas its prorated among space, if we had a 15% vacancy we only collect 85% of the CAM. In other cases if you have a split system in which one of the concessions given a key tenant with a cap on it. He says well all right I'll pay my full share of the CAM, until we have a ten percent vacancy and after that the landlord has to eat the difference. So all of the CAM may not be collectable once you read all of the leases as to whose sharing in what. Pass through collections are just that they are escalators as well as full pass throughs. Again, most pass throughs and escalators would be what the total amount is and then pro rate it, and then you would have to decide how much in fact are being billed and collected. In a soft market that is the first thing that goes--the property manager simply becomes nonaggressive in pursuing those, or may close his concessions on his opening



renewal and extension of the lease. The next item is the amortization of tenant's loans. More and more today the developer may provide his credit to the entrepreneur so the restaurant that will go in will in fact be financed with Mr. Andy getting the bank loan, lending the money to the restaurateur, taking a spread on his bank rate versus the rate to the entrepreneur. Again, it's useful for the operator to recognize that the receipts from the project which in the old days was included in the rent, exposes him to a higher real estate tax, if it's below rent. Where as if in fact you look at it as a loan and the interest on the loan and the amortization on the loan, though it may contribute to the cash flow of the project and the payments on the loan may have appear later in the debt service component on the project, it's important to distinguish that from an accounting standpoint from rent. So when the assessor comes in you can say this income is available from the real estate, this income is available from building and land, but this income is from my credit rating and that's not accessible. If I'm playing banker here, and if I want to be in the venture capital business, that's fine, but it's not real estate income. The other element we have is interest on escrow accounts which is becoming more and more frequent. Loans require reserves to be held in the entity as we have seen in the real estate finance class, mortgage bonds and industrial buying and so forth or any type of trust being boarded will probably have the trustee holding a cash fund to assure timely payment on the debt and the borrower is allowed to sweep that interest income into the project. In the case of FHA projects and so forth, that will be included in income for the FHA valuation. Same is true on tax exempt financed housing units and so forth. But it's basically not an income from the real estate, therefore if you're trying to appraise the real estate as opposed to the project, you would have to drop those last two items out. Real estate is often concerned with going concern value. Those are two different things. Hotel and shopping centers are probably the most dramatic demonstration of the fact that there's a difference between a high silhouette

piece of real estate that happens to be moved in the business, and value of the business per se. But even smaller projects still have that distinction of going concern value versus real estate value, and you need to be careful about that. That gives us our total revenue. From total revenue you subtract the vacancy allowance which should report the actual rents being logged and market rents times the spaces that are vacant. The vacancy allowance is not sufficient to say 5% or 3%. In most income properties in which you have multiple spaces available you would have to identify those spaces that were vacant at the market rent that was attached to those spaces. It makes a difference in a multiple story building, whether its the first floor retail space that's vacant which might have a \$15 per sq. ft. rent or whether its the basement storage space that's vacant at \$4 sq. ft. Flat 3% or 5% is the classic indication of mental bankruptcy by the appraiser. We need a schedule of spaces that are vacant. Now there may also be a schedule of spaces that you expect to be vacant. The lease will expire at a certain point in time and therefore, you will loose a certain amount of revenue. Here's where the appraisers starts getting himself particularly where he's doing a discounted cash flow over time, he's going to have to make some assumptions. Gee, this lease will expire at such and such a point, then lay in my forecast, what is the probability that it will renew, versus what's the probably it will go vacant. If it goes vacant how many months will its be vacant before I have a new tenant. And then of course, he's going to have to figure out what it's going to cost to get him a new tenant, what the leasing commissions are going to be, and the allowance for tenant improvements, etc., etc., etc. And, in fact, I think once you're into the business you will find these are some of the critical assumptions of the cash flow forecast. Does he assume a 50% roll over in which half of spaces with leases expiring will turn vacant and the light will go dark, and now he's got to find a new tenant, or does he make a gracious assumption that 90% of his tenants are yet to stay and therefore, he won't have a tenant improvement bill and he won't have to pay the

full commission for a new tenant, etc., etc., and he won't have that loss of revenues. A very subtle change in finsim II or any of the other models which allow you to program at lease by lease on that assumption will have a profound impact on the cash flow to that project, and therefore, the viability of that project in terms of its loans, so the appraiser really has to regard those assumptions very, very carefully. The other element of course is free rent. The accountant will want to determine the average rent on the project. Let's assume that \$10 a sq. ft. for 5 years and you give them one free year. The accountant will say gee, his rents aren't really \$10 sq. ft., they're \$8 sq. ft. a year. On an accrual accounting system that's the way it handles. But that means Oh Oh, I'm forgetting to add income in year one of \$8 sq. ft. really more than I'm really going to get because I gave him all of his concessions in year one. So you have to be very very careful that you match the actual free rent given in the year there is not occupant. And you have to be careful in reading that free rent thing, whether it includes everything that the tenant might pay, or whether as is more cleverly worded in many cases, it's the base rent which he is forgiven but the index is collectable and the CAM's are collectable, and the passthroughs are collectable and so forth. So again, free rent is not a flat percentage or an essential number, it is a supporting schedule in which the final net free rents for each year is now brought forward and introduced into this summary proforma. The accountants prefer to say that the effective costs of my rents on an accrual basis is \$8 rather than \$10 because the overall productivity that I'm going to get from that lease is a \$40 return on my nominal \$50 total rent over a 5 year span. That doesn't recognize the present value of money. So once we've taken the total revenue and adjusted it for vacancy now or in the future, free rent now or in the future. (Question by student: Do you capitalize nominal or effective rents?) Because free rent is matched, okay, in this case, if you were to use capitalized income remember that's on an accrual basis and so the only free rent that you would deduct would be say for a 5 year

lease, would be 1/5 of it to arrive at an accrual net revenue here. But again the guiding rule is arrive at accrual net income. If you think free rent is a temporary phenomenon, what you would try to do is take only the annual allocation of free rent against the normal years revenue. The base rent would be \$10, the deduction here would be \$2 by representing 1/5 of the total one year's free rent. That is why it's very useful to keep in mind what the net revenue line is supposed to be. It's supposed to be accrual. Now from the net revenue we need to subtract expenses. In the old days we used to talk about management, fixed, and variable, and sometimes what they called capital costs, which included insurance and real estate taxes. Today you organize your accounting system so it produces the base number needed for distribution. So you would have one schedule for CAM and then a computation of how that was allocated to the various tenants. You'd have another allocation for pass-through expenses and another allocation for landlord expenses, things that he's going to have to pay for out of his own pocket. Often insurance, structural reserve and that sort of thing. Then we would have management expenses. Management expenses will typically be a function of the net revenue and maybe split between those which are fixed and those which are variable based on performance of net revenue collected and you'd have to build a schedule of those. In some projects, it gets a little more complicated in that there may be budget numbers for the CAM, the passthroughs and the landlord expenses. And to the degree that management is able to hold the actual cost below the budget cap, management gets 50% of the savings. So you need to know if there are in fact in the management agreement some sort of budget gap on those items and therefore, incentives for managers to hold those costs down. The next item, amortization of tenant improvements, is an accrual adjustment so that I didn't spend \$100 a sq. ft. setting up the tenant for a 10 year lease. \$10 sq. ft. would be released against this year's income. That \$90 that I actually had out of pocket would drop down to item 4 where it says tenant improvements and leasing

commission in excess of accrual. Since the net income will be on accrual basis only that cost which in turn goes against that year's income falls to the expense side. The other \$90 of my investment is really buying future income. It's what I paid to have that tenant in for the next 9 years. So as I move from accrual accounting to cash accounting I have to deduct the \$90. But from an accrual standpoint only the first \$10 appears in the line B. The same is true for tenant concessions other than rent. If I paid his rent where he was for a year, if I bought his old space off and got him moved into the building, I essentially bought that tenant for 10 years and 1/10th of those other costs would be released against this first year, and so forth, and the balance would have to be charged on a cash basis below line four. And the same is true of leasing commissions. The leasing commission has to be charged off over the life of the lease so the first year's costs will be paid there and the balance that was paid to the leasing specialist would come out on line 4 then we move from net income on an accrual basis to net cash on an distributable basis. Most overvaluation occurs because appraiser don't take that second step. Quite often they don't take the second step because they aren't bright enough to realize it's a problem. If you're talking about a new building, those costs of tenant improvements, commissions and leasing are part of the capital budget. Therefore, there doesn't appear to be an operating charge in the first period, all you really have is the accrual charges. But when that lease comes due 3 years from now, or 5 years from now or 10 years from now, now you have to make that assumption, what's going to happen to that tenant. Is he going to move out, is he going to stay, if he's going to stay, what's he going to nick me for today. And today, in today's soft markets the landlord is approaching that tenant two years in advance saying let's strike a new deal. Let's renegotiate the lease. And we'll pay for it up front. It's a critical thing for him to be extending the duration of income under contract. He's much better off to get the guy to redo at the same base rent he's on with no up for the first 5 years,

and extend the duration then to suddenly realize two years from now that everyone with a vacant building will be on that guy's doorstep offering him a marvelous package in getting him to move. So if you're going to stabilize the value of your building, you're much better off to extend the duration of the leases in place, than you are to raise the revenue. And even then you may make concessions, how would you like new carpeting? What, you would like the luncheon room paneled? You need a kitchen? There are a number of firms and one of those that are lead by one of our alumni in Minneapolis are making quite a name for themselves nationally. Representing tenants who have considerable time to go on their leases at rents which may no longer be market but are higher than market so they go back and renegotiate the deal for the tenant--in a very professional way. Most building managers would rather deal with Nelson and Company than they would deal with a lot of other folks that really don't understand the game and what the negotiations are all about. Once we get down then to total expenses on an accrual basis. Expenses to be released against that period, we're down to net income on an accrual basis. From that we subtract those portions of cash outlays made in that period which were not released against that period's income which are in fact buying next year's income, and the income after that. This is where the real break occurs. Now through IV we're really talking about property management. Annual operations and how much income we are going to produce. The difference between 4 and 5 is in fact asset management. What is our position in terms of how much we're going to assess in future income. That's what asset management is all about. How do we stabilize our tenant group, how do we position ourselves in next year's market and the market after that. One item is tenant improvements, the second item is deferred maintenance. If we're going charge the roof off at this particular point, fine. If we have an ongoing maintenance program of replacing for example in a hotel you may replace 20% of the furnishings each year in order to maintain your competitive position. Apartment buildings might have a regular

replacement cycle, stove, carpeting and so on. A fairly on-going item which is not an operating item, but is a regular cash commitment necessary to maintain the future market position of the property. So that would all be in deferred maintenance and then we would add back funds transferred from escrows. For the relatively new building, the construction loan may have funds that were available for tenant improvements, etc., and then as you complete the process those funds are now released. That obviously would have an impact on the cash net available for distribution. In other cases there might be a sinking fund, for example, the FHA project all have sinking funds which are extremely hefty after the first 10 years. And they're designed to be there to refurbish and replace the hot water heaters and the roofs and the other things that tend to go out and you have to apply at the FHA administrative office for the rights to release those funds for the project, and they would then be transferred back in. Interestingly enough, as an FHA project sells in the market place, the price includes the escrow funds that traveled with that building. So an FHA sale has to be adjusted for the escrow account. Even the college dorms have the same thing. The university dorms here are under 4.5% FHA student loans and they all have very significant escrow funds which are available for repair and refurbishment of the dorms. So in any event, there may be a variety of escrows that are available to do that and therefore, offset the cash flow drain of the deferred maintenance and the TI and so forth. Question--Suppose you sign a tenant to a 5 year lease and they go bankrupt after the 1st year. Do you charge off the balance of T.I.'s? Chief--If you have a 5 year lease 20% of the tenant improvements would be charged against the first year's operating which tenant is there. Match of 20% of the cost of that tenant against the rent paid by that tenant. The other 8% would be written off in the same year but below the net income 742. The object is for the property manager is to estimate what the total cost and the budget is for that year for the CAM item. And at that point there may or may not be a tenant's association to approve the budget, it depends

on the nature of the building and how sophisticated the tenants are and so forth. But in any event that budget then, 1/12th of that is assessed every month, whether in fact the snow plowing incurred that month is irrelevant. What you're doing is funding that in advance and obviously a clever property manager collects everything in advance. If you start out in June and significant part of your CAM is snow plowing, you've got a fair amount of money in the bank before the first snow flurries hit, but the feeling among landlords is it's better for him to hold the money than the tenant. The net distributable cash, therefore, is what the real estate game is all about. Net income on an accrual basis has always been a traditional appraisal item and when you're lending money it's very dangerous to base your value on net income on accrual when that money isn't going to be there to help repay the loan. Banks are just starting to learn that what they really got to look at is distributable debt. That's despite the fact they have a first mortgage, they don't come first. You gotta keep the property going as a going concern and that's going to require dollars invested of funds to buy that future business and therefore, they're interested in distributable debts. Roman Numeral VI--Debt Service. Obviously is the interest item and second of all the principal payment item that will be according to whatever schedule is appropriate to the appraisal assignment. It may be the loan on the building if that's assumable, but its more likely to be the loan and repayment terms that are available in the market place at that particular point in time and as of the date of appraisal. And finally participation. And bottom line 7 is cash for equity and the income tax, and as we've suggested more appraisals are concerned with that than with the after tax. Now this is simply a generic format and for virtually every item of revenue in A through G, and item of expense A through G and for that matter the items relative deferred maintenance and tenant improvements, there will be a supporting schedule. You would put this in the report with a footnote on every one of those items and then you would have a supporting set of accounting notes



which would then explain where they came from. And that accounting note may be a single short paragraph because it's a group of tenant deposits from so and so of the following bids or whatever else and that's it, or it might be a full schedule relative to the spaces that are in the project and the assumptions that you've made about them. You would put the proforma in front and then each of the schedules would essentially be a footnote from one line on the data.

Question--...net distributable cash if you're paying out \$50 for one of these items in let's say year one and your accruing it over 5 years and you're still paying it out in year, that seems to defeat the concept of net distributable cash. Chief--That's right there isn't any. That's exactly right. And that's what you need to know as an investor. What is the timing of the cash available coming off the project, as a lender I want to know whether its capable of meeting that loan payment or not. Now, if you're saying, gee, that's no fair, the charges will make it look bad, then you gotta figure out where is that money coming from? In the early years of the project the construction loan presumably set up an allowance for TI and concessions and so forth and there's an offset there with funds transferred from the construction loan escrow. But if there is no offset, then that's going to have to be financed internally by the deal before there's any money available to pay out to anybody else including the lender. I realize traditionally this is not the way it's been done, and traditionally that's why everybody is loosing their ass. It's a business which is either going to finance itself internally, or you better know where the funds are coming from before the fact. Question--Chief, when you're doing a discounted cash flow analysis, is that done on a cash basis over 10 years? Chief--That's right on a distributable cash basis. Appraisal on a cap rate, however, is done on accrual. Question--what happens if you have a situation and you want to do a cap rate analysis, you have a 2 year guarantee where all tenant improvements and leasing commissions will be paid for by the seller, including any free rent or any vacancy over and above 5%, how would an appraiser

look at that from a lender's point of view? Chief--Well again, it depends on which method. He's making an applied assumption. If he chooses a straight cap rate based on the normalized incomes that's guaranteed, he's really saying that my market analysis tells me that in the third year we can do as well or better. And the income will continue along a flat trajectory or whatever trajectory applies for the cap rate that you choose. Question--So what you're saying is you have to take a stab at the third year. Chief--Absolutely. The appraiser needs to start doing that. He's really been copping out on his function by taking a normalized net assuming everything goes along smoothly the first year. Babcock was writing about that in the 30's. Nobody really took him very seriously, but today they do and in the article that you have by John Robert White about weather real estate appraisal will ever become professional. You take the single greatest innovation in appraisal at the moment is the lease by lease model which allows you to get at heart of the productivity of a multiple tenant income property and say gee, how is this going to look as the scenario unfolds and tenants move in and out and so forth. It forces you to be explicit too about your guess. The fact that it's a guess is not a sin, and that fact that the guess is explicit you have to explain your rationale is a critical point. I mean doctors are working with guesstimates too, they're educated guesses but they are still guesses, and they're still professionals. There's nothing wrong with the appraiser making an educated guess as long as he doesn't make a guess that's biased in favor of whoever he's supposed to be an advocate for. So it is required that you think about what it is you imply by your methodology. Okay, assuming we now have either a normalized net income on an accrual basis, or net distributable cash, now what do we do? Obviously, one element of return has not been considered as yet. That's the resale price. So one of the next things that we're going to have to talk about is different ways of treating our assumptions about the ultimate resale price. Traditional appraisal as you know, using a straight capitalization rate, assumes that the

property will be held to the end of its useful for life, like the wonderful one where ? will turn to dust and the land and the ? will remain.

Obviously, most of us take a shorter term view and we're not quite sure if the one ? is the appropriate analogy and so Ellwood brings into play, of course, that the resale price is the critical element in our expectations about the property and we're going to have to deal with that future eventuality in some way. So the next thing we'll do is we'll look at different methods of dealing with the resale assumption either in terms of making an explicit price projection or an implicit price projection in the cap rate methodology that we choose. And at that point I quit for today.

A number of you have read your leases, quite properly so, and realized you needed

tax forms from previous years in order to establish the index year at which they would

prorate and so forth, all necessary tax forms are being handed out to you at this time.

And if you're wondering why do I have to know about 1965 or 1974 or 1984, you haven't

done your homework relative to the leases which is all I'll tell you. Now one other thing, however, I would like to alert you to, that reading the Middleton tax form can be somewhat misleading. Be sure you get the number that is the net tax payable by the property before 1.) special assessments, 2.) interest charges for delinquency, or in one case the tax indicated is only 6 months because they had paid the other 6 months previously. One of the things you're going to have to learn about getting information is to read the information carefully, therefore, I alert you that all the information that you need is on the tax form but be sure you understand what it was they said in this box that you get the number from. The next thing that's being handed out is the land contract, both pages of. Apparently that is not in the library set of materials or has

evaporated from the materials. So now everybody has their own sheet. If it disappears now, your roommate took it. Again I have to alert you to the fact that a land contract is amortized and it's your problem to figure out assuming that it's conveyed on schedule which it has, what is the remaining balance as of October 1, 1987. The last handout is the second part of John Robert White's article on the future and professional status of appraisal. Some of that is rather controversial I suspect and in any event, John Robert White is our last guest speaker in our series on Dec. 9. Any questions? The information on building structure and so forth is courtesy of Lisa Graham who talked to a number of people and found an old set of working drawings somewhere. The leases information may or may not be relevant depending on your judgement. Question-- We're assuming in this appraisal that we're taking out a brand new loan and not assuming the land contract? Chief--Wait a minute, that's not what we're assuming at all. You better read the land contract. Find out if it can be prepaid, which it can't. At no time did we assume fee simple. In fact I pointed out to you that the ownership was split and that the small parcel at the back was owned in fee simple by the owners of the center but the largest part of the property was a land lease converted to an installment purchase contract that's locked in so that there is no prepayment so they don't lose the benefit of the tax treatment of an installment sale. Any other questions? Question-- When we do the back door ranking of alternative uses I noticed in the example that the default point and equity yield rate varied for different alternatives, and I was wondering on what basis you made those changes? Chief--It was the appraiser's judgement reflecting what he perceived as the risk inherent in each of the alternatives and the character of the loan that might be obtainable under each of those scenarios. Certainly alternative uses of this are much simpler and much less elaborate in terms of their scenarios than 25 N. Pinckney or some of the others that we've done. One other question on that, people ask me well don't I have to do a whole separate appraisal for eminent domain? No. The

purpose of looking at eminent domain and market value as required for eminent domain is simply a short paragraph or short analysis which says whether you believe that most probable price in this case is something different than market value or do the circumstances in this case in effect meet all of the assumptions of market value? As we pointed out it's quite possible that most probable price and market value would be the same thing if you felt that the requisites of a market transaction were met. That nobody was being forced to buy, that nobody was being forced to sell, that there weren't special benefits to somebody that they might buy on a most probable price basis which eminent domain wouldn't compensate for or there may be a situation because fair market value means in essence market value rents, and then an allocation between leasehold interest and other interests in the property, that there would be some other allocation of price than the one that you arrived at in your most probable price element. You do not have to do a whole separate appraisal value. The question is, is there a difference in the assumptions of your most probable price appraiser and those of market value as defined by eminent domain? If there is, then you have to make an adjustment for that, but you don't have to reappraise the property. Essentially you're pricing the difference in assumptions and adjusting there too, or explaining why it was necessary to do so. So it is not two appraisals, put that rumor to rest. Any other rumors that we should put to rest? Gee, I guess we got it all explained so that nobody has a problem. I believe one of the pieces that was handed out last time was the legal description and a correction for the amount of land that was taken by the rounding of the corners for the intersection and so forth. Was that handed out? It's a single sheet.

Question--in the appraisal there are four alternative uses that we need to consider. However in my judgement because of the constraints in the leases that are put on the project itself, it makes two of the alternatives infeasible. Chief--that's fine, you just have to say so. It's simply saying that as an appraiser you have to check off at least four alternatives, current use,

modified current use, change in use or demolition. And one or more of those may fall out very quickly on an absolute that says I can't do that. You still set up your grid and explain why that fell out of it. Any other questions? We will have pictures available after you get your first draft in, and you can choose from a board as to which ones you want. Not everybody has to be a photographer. While we mention that however, a photographer, I'm having a difficult time finding a photographer that's available to take pictures of our guest speakers and so forth, does anybody here, who has a descent camera and a reasonable eye and a high powered flash gun, who would like to earn some money at the conference taking pictures of guest's presentations and so forth. Does anybody have a room mate that does that sort of thing? Does anybody have a wedding for that day that they canceled with a photographer? Okay, I will continue my search for a photographer of one form or another. Lastly at the end of this class there is a collating party in which the various materials for the seminar were going to be assembled in this room and I guess a goodly number of you have volunteered, we will be happy to shanghai additional ones and that will commence immediately after class. Today we're going to take advantage of the fact that there's a number of the alums returning. We have two persons here, Bob Parson and Rob Erdmann, and they have gratefully consented to talk a little bit about their career on the appraisal side and perhaps give a war story or two on what role they play in the mighty movements abroad, and obviously real estate is now back as the fair haired investment and if you were able to save your down payment. Bob Parson graduated from here, but is a Madison boy that actually went down to Kentucky and taught at Eastern Kentucky the appraisal courses and so forth and worked out of Lexington with MAI's there, and then went with Arthur Little and Company on the west coast in Los Angeles and now is with Touche Ross--the big eight accounting firm moving into the field and he's going to talk a little bit about what he does supervising their commercial appraisal business around the country. (151) (Side two Chief starts lecturing at number

135) Okay, let's talk about your appraisal a little bit further we were talking about setting up your income statement, we had talked about the fact that each item on the revenue side will have a supporting schedule and that supporting schedule will reflect each of the defined rentable spaces in your project or revenue sources, if there are revenue sources that aren't necessarily spacial in character. Not only does it apply necessarily to this project but there's quite often other sources of income for property that may have to be accounted for. Surplus parking might be leased off to the building next door, or you may lease space from the laundry room from the guy that runs the laundry in a large apartment project. At the same time on the expense side every item on the expense thing will have to have a supporting footnote that says where does that come from and why? And as you project those into the future you might decide that the inflation factor for utility might be negative you might find that in talking to the local utility systems and so forth, they actually expect the price of gas to fall for one reason or another or they think electricity will flatten out and so forth. It may well be that in your appraisal if you find the building is relatively inefficiently managed from an energy standpoint that your expense factor is going to have to recognize that prudent management whether to install the switching system that would avoid the surge charges that they were currently paying and therefore, electricity costs could conceivably decline and so on. By the same token if you look at the real estate tax just after you've said gee I think the inflation factor for the next 5 years is 3% you have legitimately said, but the real estate tax is going to move at 6 or 7 because state aids are in decline, the real estate tax is going to have to pick up the loss of state and federal aid the school board is running into the following problem and therefore its reasonable to expect that the real estate taxes will move at this rate and so forth. Every one of those assumptions has to be identified and what is the logic, what is the reason that you did that. In this particular project, of course, your utility bills and so forth are

relatively easy to handle because they are essentially the problem of the tenant. So you really aren't concerned with that. If you were talking about a major office building like the First Wisconsin Building, you're appraising that, the first thing you would have to do is define the BTU budget for the building. And second of all the kilowatt hours budgeted for that building, and then begin to price BTUs using whatever system they used to generate steam or survived heat or whatever the case may be and by the same token talk about the kilowatt hour factor and decide is that reasonable for that building? Or is there something here going on that I don't know about, why is the kilowatt hour budget per square foot twice what the state would allow under the current energy code and is it correctable, or is this an inherent element of obsolescence in this building. Well the First Wisconsin Building downtown is an inherent element of obsolescence. That green house effect out front is a disaster because they air condition until its minus one in terms of the banking floor. And the heat gain that they have to pull off of that and so forth, they never designed the building to pull off the heat off the hot side and pump it to the far side. And that technology was available they just didn't do it. And other buildings of course, could take advantage of that, and actually reduce their overall costs by capturing heat in one area and moving it with heat pumps and so forth, to other buildings. So the appraiser is expected to understand enough about the management of the building to know when the costs are normative and when they're--well, something's wrong here. They may be wrong because there's the wrong thing included. For example, we're doing a tax case for the First Wisconsin some time ago, not too long ago, a couple years ago. We looked at the costs of the staff necessary to handle that. When we looked at it on a cost per square foot it didn't make sense. That's the figures they provided us. Well we went back and looked at it and we say, wait a minute, what's going on here? Well, as it turns out when we investigate why they have that many staff, what they're doing is they're serving all of their branch buildings with that staff.



That really wasn't chargeable to that building at all and as an appraiser if we had used that number and then gone into court and somebody else would have picked that up, we would have gotten slaughtered. So at that point and you're facing litigation you as the appraiser, you're protecting your image in the court room, you don't care about the client. The client is going to give you information that is not misrepresentation per se but the sin of omission in explaining the organization report. You have to look at those numbers and the fact that's under general ledger doesn't mean anything. So you figure out okay, where did that payroll come from, how many people are there and why are there that many people there? And would a prudent manager really run the building that way? Do you need a doorman at the second door if you're doing a ritzy apartment? Or would you in fact only have a doorman only at the front door, the side door would be locked for security purposes, and if you can take 16 hours off your payroll per day, that's a sizeable piece of change. The changes in cap data and your cap rate you're talking about the a significant piece of value. So you need to know something about property management and something about budgets and initially in the game it's very hard to do that as a youngster. You don't necessarily have sources, or you don't have enough experience to say whoops, wait a minute, what's wrong here. By the same token the mortgage banker comes in and says the insurance is going to be .08 a sq. ft., if you have a little experience you say, wait a minute for this kind of building I'd been looking at .20 to .24 a sq. ft. for insurance because of the following changes in the fire insurance rate and the public liability rate and this type of thing, and the appraiser has to go back and rebuild it. So every item on the expense side needs to be footnoted. Now, in your case we have given you some operating expenses, estimates and so forth, and you're not going to be in a position to call 14 insurance agents and figure out what the insurance rate is, you're just going to have to take it as given and make some assumption as to which was you think inflation is going to go and extrapolate from there. You

should be sensitive to the fact that ordinarily in your research you're going to have to look at those major kinds of items and challenge the figures that are given by your client. Because your client already has a bias in which way he wants that to come out. And you're certainly going to be encouraged to give you a last year's set of figures, rather this years set, if he wants the high number, on the other hand and you're doing real estate tax, anything you can do to help come up with a lower number and validate it, because you said it was the operating expenses work, you could help me lean in that direction. Take nothing per se that the client gave you without challenging it. And that goes for the legal description. You should have some kind of check on that. Challenge that. We found one case down in Missouri where they didn't even own the road coming into the project, they never knew that before. And they gave you the legal description of the total parcel, but the heart of it had already receded away to the neighborhood. The neighborhood association which has the party building, the tennis courts and the marina, and so forth, had already been acceded away and the lender that was part of his collateral. Opps! He got the pines back there up on the hill. So his collateral simply wasn't there. So you can accept nothing for granted and then I have to counter that by saying in this case the operating expenses that we gave you, you will more or less have to accept for granted because we can't have you bugging the hell out of everybody. I know a number of people have been out to see the city planner and so forth, we have to repeat our plea that you check with us if there is something that you want to research so that we do that in a coordinated fashion. And the last person who was out there, went home with the materials that he gave him but he never paid him for it. Again looking at the expenses, not only are the utility factors a significant factor but obviously the physical design of the building. Ultimately you're going to have to become familiar with the state building energy codes and fire codes and be able to recognize when a building is currently nonconforming and some sense of what may trigger major rehabilitation

in order to bring it to code, and so on. In this particular case you're left dealing with the problem of parking, but it's totally unlikely any redevelopment to trigger of a parking situation and if so, what so? What other caveats can I give you and expenses? Anything else that you look for Bob? Bob--Insurance, for insurance coverage they're typically three year terms and then they bulk may be 20% so they may give you an insurance rate that's really an old rate, so it's worth having some sort of secondary source. The idea is you really don't want to take responsibility for saying what the insurance rate is. So you find another source that publishes ratios that at least give you some kind of a handle. The approach that we take is simply do something, approach the situation from more than one direction. Try to find a least two separate ways in arriving at the expense whatever it happens to be. You really run a check on you own standard and the validity of the numbers that you have been given and you can't do that here. Chief--Dollars and Cents of Shopping Centers are in the library from last year and I believe that is broken out by regions that might have ratios. Any other questions on revenues and expenses and net operating income. Question--can't hear it. Chief--In this case you really ask the question what's it likely to sell for right? And what it's likely to sell for is what revenues and so forth you're going to get and therefore, it's contract rent. The title is encumbered. Okay? On the other hand, if you were doing this for the MAIs fair market value appraisals, under their current standards you would have to assign market rent to all of the spaces, arrive at a full value, because when you say fee simple you mean not encumbered by current leases that may be adverse or provide exceptions. And then having arrived at that number, allocate that between the encumbered fee and the tenant. And say okay, XYZ is store is in at a buck when they should be in at three bucks, so they have so much lease to go and so forth, and therefore, the present value of that leasehold advantage is x dollars and you would deduct that from fair market value. But basically fair market value means fee simple unencumbered and then

you adjust for either contract rents which are in excess of market value or below. Now for example, yesterday I spent an hour arguing with a bank in Texas that will go unnamed but they hired me as an appraiser. And lord knows they can use a lot of help in Texas on appraisals, since Bob left. In any event they're saying well gee wiz this office building is leased at \$16/sq. ft., the tenant's locked in for another 8 years and so forth and so on, and so the appraised value is such and such. I said UhUh. I said that tenant is going to be in the door and its going to be saying gee guys, I'm \$4.50 above the market and with 8 years to go I'm going to break the lease and dare me to do something about it. And just down the street there's a guy willing to move me for free, give me 2 yrs up front free, pay for my telephone and give me and my wife \$10,000 to go to Europe because that won't show anywhere on the deal, and now what are you going to do for me? Now you'd have a vacant building and can go to war in the courts or we'll cut a new deal. As soon as you have a significant gap between the contract rents and market rents, that tenant is going to be on the doorstep and you can't simply extrapolate that in a market like Houston. We had another one last week where unfortunately our fund owns an office building in New Orleans and the principle tenant is the Jefferson Bank. And the Jefferson Bank got its butt in a sling making loans to the energy industry which was their speciality, and now in the paper there is a big announcement that the FDIC has agreed to put in umpteen million dollars to absorb the losses on a set of loans and a new set of investors is coming in, the subordinated debenture, owners got wiped out. The bank account was structured and saved by the FDIC and they're now going forward on that basis. Now we got a call from them saying on the deal we that were just negotiated few years ago to build a parking ramp, change the ramp, etc., etc., etc., gee fellows, your rents are like \$3 above the market in Matari, therefore, we really think you want to cut the rents for the next five years as we get started. And I have to go back and I have to read the deal with the FDIC. Nothing in the deal with the FDIC says that they've got to

restructure their rent. That wasn't part of the deal. Its a done deal. Its going forward. We said golly, we really can't help because it doesn't seem like its going to change the deal any, but I'll tell you what we will do. We'll sell you the building at this price, and we'll sell it to the private big money boys that came in and bailed out the bank because that's their little side kicker. What a way for them to get their money back quickly for having invested in the bank is collect the rent that the bank is going to be paying anyway. A nice little way to get the money out the back door, and it's sheltered in part by the bank, and there's 25,000 vacant feet in the building and if you've got enough reciprocity going with your other folks, you get 25,000. You certainly wouldn't want to cut the rents on the building that you were going to buy. How would you like to buy a building in Matari? And so you have to look at each situation as an appraiser to say what's going on here and is that contract rent collectable over the remaining term, is there a way to get rid of them? The Kmart down in West Palm--Kmart had an extremely favorable lease, they took over a million dollars value off the property. The owner came initially to Bob Callaway and said give me the bad news, tell me what its worth, I'm going to dump it this is going no where. I happened to be down there for my usual sail fishing expedition, in January, and I went over with Bob, and we looked at it and we said gee, why does Kmart want to be here when they've got another one just down a mile down the road. Has this ever reached percentage rents, they've been in there 12 years. Never once reached percentage rents. We said why does Kmart want to be here? So we went back to the owner and we said gee, why don't you let it be known to Kmart that for \$100,000 they could buy their way out of a bad lease? And they did. Kmart paid \$100,000 so that they could break their lease, with another 8 years to go. So now all you need is a million dollars value, you've got \$100,000 cash to offer for him to tell a story. (laughter) You have to look at each case, is it contract rents-is that going to hold? Or could it be higher, and I'm sure that Robert White will tell the same story the way they

sold the Pan American building as it was to the owner Pan American, had a really bad lease in the deal, its was a very low rate per sq. ft. which was appropriate at the time they built it. And they said hey, if you really want to sell this building, what you've got to do is peg your rent at the market. And that will establish the market rents. So Pan Am rebuilt their own lease to make it attractive to the buyers and as a result the building went for \$100 to \$200 a sq. ft. in value. So as an appraiser you have to look at each lease and say is this contract rent going to hold or is it so high above the market that those guys are going to wake up and come down and crush you, or is it so below the market and there's other reasons that are involved and the tenant isn't that happy either--he would likely to get off it--maybe it never occurred to him that you would let him off a 20 year lease. And so like a good citizen he was plodding along making the payments and doing his thing when he would much rather be up the block, 2 blocks where that happens to be the right thing to do. So the appraiser has to look at that and the MAI doctrine right at the moment is, appraise it at the market rent and then adjust it for either the present value of contract advantage, which may be relatively short term, or deduct the leasehold value to the tenant if it appears that the tenant isn't going to go anywhere anyway. And he may also have to adjust it for nonmarket financing. The guy's locked into a 12% loan, its got 2 more years to go, and to buy your way out of that nonprepayment or that maintenance yield prepayment penalty would cost you x dollars, and as a result the property value encumbered will be reduced by the existence of that loan on the property. But those items have to be identified separately. The trends in appraisal are try to come down on a standard definition of value and not try to conceal what's going on with non real estate interest or with encumbrances which are relatively short termed and cause the value to shift in one direction or another temporarily as of the date of the appraisal.

Appraisal project details talked about. Question on fixtures and remodeling--  
Chief--

no personal property included. All counters, shelving, etc. is property of the tenant.

People have been overly concerned about how to compute cost to remodel  
Appraisers

don't compute costs to remodel. They can set up an allowance of so many dollars a sq.

ft. If you're doing the floors and cleaning up the ceilings and so on it would be about \$3.00 sq. ft. and you start moving on from there and you're going to do a white box for the tenant its probably 8 to 10. Most leasing in this town is white box retail leasing. That means that you have a dropped ceiling, strict flush fluorescent in the ceiling without any fancy patterns to fit any remodeling and so forth. The walls are dry walled, the floor is cement and the tenants would provide the floor finish. Well it may be in the leasing that the tenant and landlord will make other concessions to finish it out, or modify the entrance or whatever, but in general to bring it to the white box stage would be \$8 to \$10. There is no basement in that building other than a very small concrete box under the supermarket which had I think two bathrooms. It's 570 sq. ft. The dotted line on the drawing. Question on add on: Chief--The

mortgage doesn't go with the property, it doesn't matter, it's irrelevant to the appraisal. Sale forecast--no assumable mortgages. You still have to deal with obviously the land contract which can't be prepaid. Question was about interior storage space. Again set up an allowance. I would separate parking lots and surfacing and so forth and so on. \$5 sq. ft. for exterior paving is a lot of money. Question on discounted cash flow, would you justify that by breaking out expense for reupgrading space at a certain year and setting up a reserve.

Chief--Well you've got obviously two problems. One is setting up just until the space is vacant. The longer term view is then what do you do about the

refurbishment and that would have to be specific as to what year that's going to occur by the very nature of discounted cash flow. Remember the overall cap rate method requires accrual accounting. Discounted cash flow required cash value as to why you have to adapt the NOI below the NOI line for deferred maintenance, tenant improvements, tenant concessions, leasing commissions and so forth at the time they roll over. And what you're looking for is a distributable cash, not the change each year. Questions on leases rolling over--do you just assume tenants will exercise options? Chief--generally appraisers look at lease renewal with or without the option and make a statement as to what percentage are going to renew and what percent aren't. Now you can argue that gee it would be conservative to assume that 50% will renew and 50% won't. Now, once you've made that decision then you have to ask yourself all right do I pay different commissions to someone for a renewal versus a new lease, do I have a different tenant improvement cost for the renewal or a new lease. Do I have other concessions that I'm going to make? Now Madison's market is as rotten as some of them are but in Denver, or Dallas or Houston they ain't going to wait till the renewal date. If the landlord's marked he's going to push the durations out on his leases and he's going to renegotiate 3 or 4 years before it comes through. If nothing else simply to change the years in which they come due. My friend Billy Rider at lunch was moaning because he had a building in Denver that when he built it six years ago he signed all 5-year leases. And he's gone from 100% occupied to 70% occupied and everybody sold blind. And then all his other tenants know that everybody got a five year lease and they're bargaining position is pretty good obviously, you wouldn't mind staggered terms and you pay something to do that and then you have to deal with one tenant at a time.

Okay, let's move further into the problem of if we have established an NOI on an accrual basis and we want to use the direct capitalization method to convert that to a value, presumably the income approach to value, how do we go about doing that? The basic idea is NOI over overall rate (OAR) equals value. The



question of course is which theory of the overall rate are you going to discuss. Those of you that have had 556 recently will recall that essentially the overall rate consists of: 1.) an interest or return on the investment and, 2.) some provision for recapture of the investment. Some provisions for recapture of the investment including anticipate the fact that not only would it be recaptured on a resale but there would be a capital gain as well ala Ellwood for example. The first question, of course, is which theory of recapture are you going to espouse. The second question is, how do we get an interest rate, what interest rate of return should we be expecting on our money. Looking up at the little diagram on the board.  $OAR = I$  (for interest return) plus  $R$  for recapture, how do we compute the recapture rate? As you'll recall the traditional method initially was a so called straight line recapture rate that assumed that the depreciable of real estate not including the land, like wonderful one horse sheik had a specified life and that you needed to recapture all of your money over that life so that if you had a building with a 50 year useful life, as determined by the appraiser through mystical method that he would get 100% of the value of the improvement over 50 years or 2% per year, straight line recapture. Now that implies that in essence each year 2% of his capital has been recovered and is apparently being reinvested someplace else and that if the yield is to remain the same on your investment, it must be declining each year. So if you remember you could compute the fact that if you choose a straight line method of recapture, you immediately implied a decline in income equal to the 2% recapture times the interest rate that you were presuming on the project divided by the recapture plus the interest rate on the project. And that would imply a 3% decline annually in net operating income or whatever. Ultimately the income would decline to that which was required to provide the rate of return on the land value. And the property reached the end of its useful life with a net income being produced that exactly equal to the income you should be earning on the land value. If land values went up, the property's

useful life terminated sooner because you were in essence allocating a portion of your income to the land and you could go to a land residual and a building residual and a property residual and so forth. So the straight line approach implies a net operating income declining along a mathematically predictable line. Somebody came along and said gee, we're really ignoring the fact that the sooner we get our money back and reinvest it the better off we are. That that 2% recapture factor is going to be reinvested and Mr. Hoskol, many many years ago about the 16th century came along and said, really what you're getting is interest on your money plus a sinking fund which will be invested at a safe rate to recapture your investment at the time the wonderful shay comes to an end. So remember the Hoskol approach, you looked up a sinking fund factor which might be a safe rate of 3, or 4, or 5 percent, and you added that to the desired rate of return on your investment and you came up with a factor that was somewhat smaller than the straight line approach because the sinking fund when invested at 5% would ultimately accumulate to that and in the mean time you needed to set aside less each year. And of course, the higher the rate of return you presume on the sinking fund, the less you really have to set aside each year, therefore, more income was allocated to the interest return on the project, and the result was the Hoskol method always produced a higher value for the property than the straight line method. The third approach was to say gee, why would I want to invest in a safe rate, why wouldn't I invest in more real estate? Why wouldn't we presume that as we take the money out of this project, we're putting it back into another project and therefore, the readjustment rates on the recapture of capital would be the same as that by which we were discounting the income. And son of a gun, now we have the Inwood table which was always developed back around the 16th century. Inwood was an estate manager in England for the Lords and Earls and so forth who had a lot of married in the well sons who would have to sell their interest in the rents from the estate from time to time to settle up their bar bills and they needed a way in which to price the sale of the

estate which had been left them at one time or another and so Inwood developed the Inwood table as a way of pricing those rents from the inheritance that were being sold. So the present value idea isn't really a new idea. The present value tables that you all use are essentially Inwood tables which are assuming that as the capital is recaptured from the investment it is reinvested at the same rate at which you're discounting. Therefore, if you have a 20% desired rate of return on the investment side, the sinking fund is also earning 20% and the sinking fund which is earning 20% doesn't need much of an annual deposit to quickly compound to the total value of the asset. Therefore, Inwood always produces a higher value than Hoskol and Hoskol always produces a higher value than the straight line simply because you need to put less of the income in the category called recapture, and therefore, there is more income remaining to be defined as investment income on the property. So far so good? Now along came Ellwood and he said, Ops, wait a minute, property values may go up as well as down, what we really need is a way of adopting for that--what we really need is a way of converting a future resale value to an annualized equivalent. So if you remember the Ellwood formula essentially computed that the recapture factor as being essentially the percent of depreciation that would occur from the original purchase price times the sinking fund factor necessary to recapture that at the equity discount rate. And if that property was going to appreciate, then the amount of money that you needed to recapture was negative, remember? And when it became negative you subtracted that from the investment return called  $y-mc$ .  $Y$  was the investment return and  $M$  was mortgage loan ratio,  $C$  was the mortgage coefficient and then you subtracted or added an adjustment for resale price. And if property was appreciating you'd subtract an allowance for the return required because part of it was going to come from annual income, part of it was going to come from cumulative capital gain at the time that you resold the property. Even the Ratcliff text of 1947 indicated that in looking at returns not only did you have to look at rate of return on the annual

dividend or income, but you needed discounted cash equivalent of future resale price. Which brings us down to the last one, bringing into the formula discounted cash value of the residual based on capital asset pricing model which would allow for the risk in that assumption. We'll come back to that in a moment. The main question then essentially is, what kind of return can I get on my money. Ironically we're going full circle in how to compute that. The initial economists of the 30's were enamored of the idea that the capital markets were an array that represented the adjustment in return for risk and liquidity and interest and so forth, and then if you looked at different instruments of the capital market from short term to long term, from government to some form of private investment, and when the rates went up there was a presumption that the risk factor would be accommodated for lack of liquidity would be accommodated and so forth. And so partly on the prompting of Fisher and Babcock and others they presumed that you could establish a risk free rate of generally a creditary rate of the same duration of your cash flow forecast. So if you were making a ten year projection to the end of the useful life, you'd use the government 10 year rate, if you were going 50 years you'd listed a 50 year government bond and that became the base presumably riskless rate. To that you added something for: 1.) Liquidity, 2.) Management, not in terms of operational management but the fact that there was still nevertheless the hassle factor in supervising whoever was running the real estate as opposed to the government bonds which could lay there dormant in your savings deposit box and you really had little chance to supervise the federal government as to what they were doing about that and, 3.) There was presumably an adjustment for perceived differences in rents. So if you took the bond rate that was appropriate you added a certain number of basis points to each of those developments, you'd arrive at what presumably the economic return required on real estate. Now surprisingly appraisers had as much trouble doing it then as they would do now. How you measure that volatile market in terms of risk and so forth and so on

then you begin to know proxies the premise was, for example, the difference between a treasury and a mortgage was really measuring the market's perception of additional building and management hassle and so forth. And so if that was a 150 basis points or 175 basis points that was a way of beginning to construct the load for real estate. Appraisers typically pull that number right out of the hat. Old line appraisers still do. I was in a court trial once where he went through this whole litany for his subdivision appraisal and said that he had begun with the U.S. Treasury bond rate and when by suggestion the attorney handed him a Wall Street Journal and asked him where he got the treasury bond rate, he couldn't find the bond quotation in the Wall Street Journal. But nevertheless you still see the old fart part that's 60 to 65 going along on a built up rate base. Ironically you also find the youngest most sophisticated doing that on entirely different formula and we'll talk about that in the next session. Rulack, for example, has a very elaborate risk matrix based on capital asset pricing model theory by which he constructs the rates starting with what you call the real rate of return and building from there. As I say by the time we're done we'll probably have come full circle. Certainly the initial build up rate was a little clumsy and appraisers really didn't know enough about the capital market to apply it with skill. It made a great theory and it linked real estate to the capital market which was a good step in the right direction.

The big phase two came with the so called investment bandseries, which recognized there was more than one source of capital in real estate and that that source of capital, each source of capital had its own perceived desired rate of return. So in the simplest sense if he had 75% of the money it was going to come from a mortgage lender, you could simply say fine, mortgage lenders at this point with this type of property are required a 9% rate of return, and so forth. You say that 25% of equity want at least 300 basis points more than the mortgage lender and therefore, if he wants this kind of return, then you'd multiply this 25% by the 12 and you'd end up with a weighted average.

I can prove to you, by the way, if we had more time that the mortgage coefficient in Ellwood is nothing more than converting that method of taking an average to another method of taking an average by ? . But essentially the investment band rate said what we do is we take the desired yield for each component of capital--the ground lease, the first mortgage, the second mortgage and ultimately the equity position--computes the weighted average cost of capital or desired return on capital and that will give us on ? . It worked very well and you still see that probably done maybe in construction of cap rates in appraisal today. Some very interesting questions came into order. One was: Are we only interested in the interest rate or do we have to consider the rate at which the mortgage is being repaid? Could we use, in fact, the mortgage constant. Ellwood said you use the mortgage constant and then give credit in the future to the equity buildup. Now if you remember the mortgage coefficient in Ellwood in fact says what proportion of principal is paid over on the projection period and then you convert to E as principal to pay off over the projection of the period to an annual equivalent using the sinking fund at the equity rate. Okay? So you've leveled that and built that back into the deal, that's essentially what was going on mathematically. Others, computing the so called brokerage rate, said we won't worry about that what we'll do is at the end of the deal is we'll take the sales price that we expect, subtract the mortgage balance still due at the end of 10 years or 15 years, and then we'll discount back to the present the presumed equity realized on sale of the property. Now Ellwood was locked into a premise that we wanted everything to happen in one calculation--  $\text{NOI} \div \text{OAI} = \text{Value}$ , and therefore, it was necessary for him to convert the various elements that were going on internally to annualized equivalent so that he could continue to have everything neatly capsulized in NOI over OAI. He was not a dummy. He knew what he was doing because he wanted to teach appraisers a new way of doing things and he wanted a model which would allow him as a mortgage lender to quickly figure out which

projects were capable of carrying of debt--someone was applying for a loan application and which weren't. As a decision model Ellwood was great. He could decide whether, *prima facia*, given a net operating income that somebody assumed for their project. And given the loan terms they were applying for he could turn the crank very quickly and discover whether that project was capable of carrying that loan, etc., within the other loan to value ratios and so on that he had to live with. If it didn't, he could put it all back in the envelop and ship it home and not wait to sign on the application. However, the appraisers began to realize that some of the more significant parts of Ellwood during a period of rapidly rising prices in the mid-60s and well all of the 60s actually, was the fact that the overall rate could be justified as being lower therefore, you get higher value if the reversion factor becomes more significant. As soon as you say gee I think this property is going up 25% in value over 10 years or 5 years, why it justified a lower cap rate, which then of course, generated a higher value which is what all of their clients wanted and it did it with this sophistic logic that was pretty hard to refuse. The problem with Ellwood was that as more of the value was the result of future resale price and you then began to lend 75% of the total value of the project, including this residual value, pretty soon the mortgage payment exceeded the net operating income available to pay it. So that the lender really didn't see what happened to his debt cover ratio, he was likely to make the loan that the project was incapable of paying unless in fact you did sell it for the appreciated value. And therefore, the Home Loan Bank by the late 60's declared the Ellwood method unacceptable for an income property loan and most legitimate lenders did also. Mortgage brokers of course, continued to love it as a way of legitimizing high ratio finance. Now notice the opportunity for prophesy, the ability to rationalize a lower cap rate can be very subtle but very devastating to those businesses appraised. So you play around with sensitivity analyzing you'll find that by dropping the cap rate by 20, 30, 40 basis points has a tremendous kick

in terms of the total value of the property and it didn't take people very long to figure out how to do that in terms of their build up approach or the investment band approach or whatever. If the interest rates of mortgages were relatively low you simply raised the loan to value ratio a little bit and pretty soon the mean average rate of return on money starting to drop and that of course would simply be the percentage of the useful life then to a sinking fund approach ala Ellwood with the equity rate built into the sinking fund--you had another drop in the cap rate, really the value was pretty well up there and if you're going to be making a 75% loan on value which was 105% of cost, which is of course is all a lender is able to borrow and what your looking for, so Ellwood had his heyday and then it back fired and was gone. Now we ask the problem in 1987 how do we use the direct capitalization method or NOI over OAI. Probably the dominant method that I see is the investment band approach. And the investment band approach uses as a point of departure either the current mortgage rate quotation or 10 year treasury plus a load of maybe 175 basis points. The question then is what yield do you use on the equity. Coldwell Banker ran studies for years that showed that the cash dividend return to equity tended to be lower than the mortgage rate by as much as 150 basis points. Since they were talking about using NOI and your basic return here is a tax dividend, that you're going to treat the reversion separately because tax shelter because the anticipation of appreciation due to inflation or asset enhancement was always there, if the mortgage rate were 9 you would probably see the equity rate down at probably 7.5 and balance of the return was anticipated to come from those other elements. They would then construct their investment band on that basis. Then along came a couple of fellows who said wait a minute, hold everything--what we really need to do is establish a threshold for returned equity and then decide what percent of that will come in cash and what percent will come in presumed long term tax, inflation, and appreciation. And most pension funds began looking in that light--they'd say, okay our overall desired



rate of return let's say is 10% on our real estate plus the inflation rate, we think the inflation rate is 5%, then the overall return ought to be 15%. Of that 15% for this sized property, or at this particular point in time let's say when inflation was rising rather rapidly, we expect 50% to be in cash dividends and 50% from other benefits. In any event if they took 60% in cash dividends they would multiply 60% times 16% which would be a 9% expected cash dividend return and the balance of their return would presume income from inflation, tax shelter, whatever. That mentality is still around. Many portfolio managers still look at a property and decide that if the threshold rate of return now is 13%, that good properties aren't easy to find because inflation has flattened to 4%, so they take 9 plus 4 or 13% the threshold rate for equity money and then they decide if they want 80% of that in cash, that's starts to give them some sense of where an adjustment band rate should be calculated. They began to realize that what they were really talking about was the fact that they were trying to sustain a real rate of return. And therefore, portfolio managers began to in fact look at their property not in terms of overall threshold which would compensate them for all these other wonderful things, but we'd build it up instead by what was the targeted real rate. And then to that like a build up rate they would add so many basis points for liquidity, market risk, physical obsolescence and so on. Today must pension funds hope that real estate will provide them a 5 or 6 percent real rate of return -- that kind of startling because I think the real rate of return has been closer to 3 or slightly less over the entire investment spectrum over say a 25 year span of time. That is being built into their contract. Asset managers who buy property for them in many cases today have incentive contracts which say okay, when all is said and done, and we've sold the property in 10 years, etc., we will first of all give the pension fund a preferred return equal to a real rate of return in which is essentially the IRR less the inflation each year and so forth, factor calculated let's say out of the government deflator index and then to the degree that the

return on real estate has exceeded that base for inflation and the real rate of return the asset manager will take 20% of it. In other cases the pension funds are simply instructing their asset managers to evaluate their real estate portfolio in terms of a certain real rate of return, and if not we'll get a new asset manager or we'll sell the real estate, or whatever. So this idea that there is a real rate of return that can be expected from real estate and if that's the base number from which we are going to build up, its becoming quite prevalent and beginning to creep into the appraisal report. There are those that think the premise that real estate is competing with all other investments, therefore, the real rate of return may be as low as 3%. Because most of the pension fund agreements that I have seen take 5 or 6 of the targeted real rate of return for real estate. To that then you begin to have a series of loadings. Those loadings are rationalized in a variety of ways and I will have a hand out for you next time, the Rulack group, for example, as to how they compute those loading for the marketability of the property, the tenant's character and quality to the property, the operating risks of the property, the community risks to the property, etc., etc., etc. They may build that little 3% real rate to as high as 16% with a whole series of adjustments to reflect what they perceive as the risk yield matrix that is appropriate for capitalasset pricing model. We'll use that and discount one, the income stream, distributable cash that we're talking about on the property and the residual. Or they will use that as the NOI factor in the property and then add to the NOI present value an additional value for resale value discounted back to the present. Any questions on that quick synopsis. Hopefully this is more of a review of your ? .

Answer to question--Chief--The cash on cash rate has nothing to do with the appraiser at this time. There was a time when you deflate properties that way. Cash on cash is one thing, return on equity is another thing. The back door approach everybody pencils out initially it would be nice to get 8 or 9%, when things settle down and so forth. They're trying to get at least 70% of their

return out current income and relying on 25 to 30% of their return for the possible upside on the property or side benefits of the pact. That's virtually the reverse of Ratcliff. But that's not an appraisal tool any longer. (side two of tape.) NOI then is an accrual income number where we're using a single overall rate--And the cap rate that you choose is going to reflect several different major assumptions on your part. One, do you want to have sensitivity to anticipate a decline in income. For example, if you were doing a single tenant building in which let's say the income was going to be as flat as a board for the next 10 years, you would definitely use the Inwood approach, and then add a present value for the residual. You want an assumption which holds the income constant. For example, we're selling a old Brown's lease in Milwaukee, its \$13,500 a year from year 2022. No ups, no bumps, no changes, national credit, not going anywhere. At the end of that time you have to figure out what the building is going to be worth over on Mitchell Street and you would probably price it a couple of different ways: One, assume it's worth nothing and then it will be a pain in the butt to dispose of so that anything that you sell it for will just about cover your cost totalled. Another may be to improve under the terms of the lease that the tenant will renew and the terms for renewal are 6% income for 20 years based on the appraised value of the property in the year 2022. And you may want to take a nominal number and go from there. The option is also available for the owner of the land to simply buy the building at its residual value in the year 2022 and terminate the options of the current tenant. Straight Inwood discounting method. The nature of it improves as income is flat which is guaranteed by contract and the appraisal process really on what rate of return to discount at and what's going to happen to the residual value. And one has to assume that not a lot is going to happen to the interest rate between now and the year 2022, which is good. Now, if we had another type of property in which expenses were Trending upward and the rents were constant, then obviously you have very much a declining income situation. You can compute

the slope of that decline and then choose either a Hoskol or a straight line factor will produce that desired recognition of the anticipated decline in income. Obviously if you move on and you say gee I don't think the income's going to be flat and I don't think its going to decline along a predictable path. We're back to discounted cash flow, right? We can't use the cap rate approach if the income cannot be anticipated to fall along a mathematical line-- the underlying critical assumption of a cap rate approach. It doesn't matter whether the income is straight going down straight on an annual increment or whether its going along a projected curve ala the J factor of Ellwood, and so forth. They are all mathematical lines. Most properties today don't lend themselves to that assumption and therefore, you can't use the cap rate approach. Many appraisers do, nevertheless, as a check on their numbers. You will notice for example, on the shopping center appraisal that we have given you to read, the appraiser does both. He constructs a cap rate into an LI and then he also then does the discounted cash flow. And the discounted cash flow number comes out somewhat higher as he is bending the income upward to some degree. You'll also find in your reading by John Robert White, pointing out that the greatest break through for the appraiser in terms of technique is that fact that he now can deal with income which is erratic or irregular in its pattern, whether you construct it with a lease by lease analysis as you will in your case, and trend your expenses up and try to rationalize when you're going to have capital improvements encroaching on your available income and so forth. Nevertheless, you are now dealing with straight discounted cash flows, either before or after tax and before or after debt. If the property is of institutional size and quality in most cases today you would ignore the probability of debt on the property. Pension funds may acquire a property subject to existing debt either because it has prepayment penalties or because there is some positive leverage for the moment. It also gives them a way of using current funds to take advantage of current opportunities and then as

additional funds come into the pension fund they can pay off the mortgages. Where they don't find any other properties out in the market place to invest in they simply start using the income available for assessment to repay the mortgages obviously depending on which gives them the best rate of return and so forth. It would not be unusual for a shopping center of institutional quality to have a discount factor applied before time and before choosing the desired equity return of pension funds which probably right now are somewhere in the 12 to 14% range on reasonably decent property. If you're talking about hotels and nothing else, that's a different ballgame. Nevertheless, that was unheard of a few years ago, that you would use no debt and that you would look at it as straight discounted cash flow and resale price again without deduction for balancing on the board. For property of less appeal where the most probable buyer is going to need the help of mortgage financing because you can't pay him otherwise, the professional standards of the appraiser today would require that you first appraise the property assuming mortgage money available on terms available from a third party regulated fiduciary, two very important qualifications. Third part, somebody has no interest in the deal. No seller financing, etc. No financing from the broker, no financing from the builder. Third party financing. But the other element that's important there is regulated. More and more we have none bank banks participating in the real estate deal, and they can put together some pretty fancy financing by the time they combine Japanese capital with their own money, etc., etc., that's not the kind of deal that's contemplated by the appraiser--third party financing either. The most typical sources for current terms will either be a local commercial lender, of which there aren't too many in Madison, a few investment bankers, or some sources which suggest regional or national norms at a particular point in time. One of the best known is schedule M from the American Council of Life Insurance Companies. The Council represents I believe currently 18 major life insurance companies and catalogs every quarter, all of

the mortgages which they have closed on various properties by type of property and by size of property and they will provide the interest rate, term and constant on the mortgage and will indicate if it was generally common to have some sort of ? . The numbers which they publish are the mean of all the transactions in that class and there may or may not be very many transactions. Occasionally the report will indicate this is only one transaction reported on hotels this size, etc., but nevertheless fairly good indicator. Second source or type of source will be a regional news letter that does go out and monitor rates. For example, Real Estate Research Company in Chicago has a monthly newsletter. There is one put out by Paul Sailer of Rusty, I can't remember its name, which has the current quotations on a number of major lenders. There is a group (gap in tape) (Starts again at 136) Every two weeks the terms or at least the central tendency of terms available by classified property and so on. Many appraisers are using those. In any event you would have to cite whatever source you use rather than pull it off the wall so that you demonstrate that in that first part it's regulated. And obviously you're going to know the interest rate, constant the part that collects the rate of amortization and the debt cover ratio required by that lender. You would then adjust your distributable cash available for that debt service payment. You would then take the present value of a remaining distributable cash after debt service, that's what we term the equity discount rate today, and you add the mortgage, the present value of the cash available for distribution after debt service and the present value of the reversion of a resale price less cost to sell, less mortgage balance due at the time of sale. Three components. ( Repeats)--You would take the present value of the cash available for distribution after debt service on the first party loan plus the original balance on the mortgage, plus the present value of the equity reversion on resale and the equity reversion on resale is resale price less costs to sell, less mortgage balance due, including any prepayment penalties and so forth that might be appropriate. It gets a little sticky

obviously when a lender has a participation mortgage. You would have to compute his share of participation as well as the basic constant and do the same on the reversion in terms of what bonuses the lender may get on resale. Now it may be that having determined that number which would be the price it would sell unencumbered, etc., you may want to go back and compute what incremental value could be realized if you sold the property subject to existing financing. You must know what the current financing rates are before you can compute that. Because what the investor will buy is the difference between the distributable cash if he has to refinance it himself and the distributable cash if he can assume the existing debt. That's really the difference between cash equivalent value and the value given creative assumptions of the existing package. Now the question for the appraiser is--Does the seller realize the full value of the present value differential between current market financing and the financial value of the terms that he can provide by assumption. Initially the appraisers presumed that they could. I think the overwhelming weighted evidence and most of the literature today suggest that there is, unless there is some other reason a tendency to split that difference between the property owner and the buyer. So there was determined that there was a present value advantage of assuming the existing mortgages at \$500,000. You're not going to add all \$500,000 to the value of the project. They're going to say that I'll offer you \$250,000 for that advantage, because one that advantage could evaporate if interest rates fell in the market place pretty soon there is no spread between the so called market rate and the assumed rate, and they'd probably be better off to simply pay it off and refinance it at the time that the market gave him the opportunity to do so. That's problem number one. Problem number two is--that quite often where there is that assumption the buyer couldn't have gone through the transaction at all because the cost of funds would have required a lower amount of mortgage money, and higher amount of equity money in order to achieve the desired third party debt cover ratio that

was required and it's just as much in the seller's interest to sell as it is in the buyers interest to buy, or the seller wouldn't have put it on the market in the first place. So to facilitate a transaction he's going to have to concede just about as much as the buyer and that rationalizes that split of the economic benefit between the buyer and the seller. Now you can argue that, okay, the seller was sitting there fat, dumb and happy and the guy pounded on his door and begged to buy the property, and he didn't want to sell the property, and so forth. Obviously in the nature of that transaction the seller is more likely to realize the full premium but now you can rephrase the question: is that an arms length transaction? Somebody defined an arms length transaction the other day, I think it was Kletenberg, when asked what fair market value was he said, your honor, that's one where the seller thought he could get a little more and the buyer thought if he negotiated just a little longer he could get it for less, but they said to hell with it and settled on something in between. And that's probably as good a definition of market value that you're to have. And so for lack of any evidence to the contrary, typically you would adjust the price of a property which is foregoing the benefit of nonmarket mortgage rates to be assumed by approximately half of the financial advantage of assuming rather than refinancing. Okay I quit.

Administrative information and social engagements announced. Real Estate Club field trip to Milwaukee. The trip will cover Yankee Hill and the last onsite conversion

of their Botining?? Building, a multiple use project. We'll then go to Northwest Mutual,

who is buying lunch, and we will use their auditorium to look at the joint venture they are doing with Paisans. And then we'll look at the structuring of the Grand Avenue Mall. And then we'll conclude by going over to Grand Avenue Mall and back here by 8 o'clock. Another project we'll be doing is Northwest Mutual and Tramell Crow's Theatre District Project which is a real wow. We will



look at slides at Northwestern Mutual and then drive by the site. Question--do you include leasing commissions in proforma. Chief--Well the leasing commissions come in below the net operating income line as we pointed out on our format, except for that portion which will be released in the first year. So if you have \$10,000 worth of leasing commissions in the first year for a 5 year lease, you'd have \$2,000 released above the net operating income line, the other \$8,000 released below that along with tenant improvements and similar items assuming they are all paid in the first year. Typically the leasing commissions for the full lease term are paid in the first year although occasionally if you're negotiating a big deal you can get them to spread those out in order to even up the cash flow and in some cases leasing agents would prefer to spread out the income so that they get a better marginal income tax rate. Typically it's based on the total rent to be paid over the term because if you have a 3 year lease which was let's say \$30,000 a year and its \$90,000, and you would probably pay at least 8% on the \$90,000 or \$7,200 right up front. Obviously you can get into much more complicated structures some of them particularly on a new project they might pay 40% when the lease was signed, another 25% when the tenant moved in and the balance at the end of the second year to make sure that the tenant stayed around for a while. But the appraiser is going to have to look at it in terms of what's the typical cost to do that. He's looking at average management, he can't anticipate the profit centers. Question--What do you want in our draft? Chief--What we want to do is exclude the art work. Now that doesn't mean when I say exclude exhibits I had somebody last year exclude the rent roll and the capitalization formulas and so forth. We want all of the analysis done. I don't want any of the art work. Put in white pieces of paper that say, map of neighborhood, map of site, another one that says pictures and so forth, but don't provide those. At least you'll be able to refer in your text to Exhibit 1 which is going to be ultimately such and such, because you want to plan that out it will drive you nuts if after you've finished the

appraisal now you gotta go back and clean up your exhibit numbers because they don't match. Particularly if you have pagination on your computer you may not have anticipated that sort of thing and really wastes a lot of time gee, I can't find that picture, now I gotta renumber my exhibits. Its always Exhibit number 3 that you loose, when you've already accounted for exhibits 1 through 24, so rather than renumber everything you invent Exhibit number 3. Any other questions? Don't forget a letter of transmittal by the way, you're being graded on your prose, so be sure you provide all of the writing elements. Any other questions, going, going--Yes. Question--terms on existing mortgage? Chief--The existing mortgage doesn't matter, you're not going to sell it subject to the existing mortgage anyway. What you're saying is the net income is what we're selling. The new buyer's going to have find his own financing. The appraiser has to learn how to be intelligently arbitrary about his assignment conduct. He's never going to know all there is to know and ? . Ultimately he has to get arrogant and make the call and proceed. They're not paying you enough to research all of that. Consider that you probably get paid \$3,500 for doing that appraisal. Then figure out how much time you are going to give it. If the object of your game is to earn fifty bucks an hour, you got 70 hours baby, and at some point you just call it quits and go. That's the reality of it, that's the way the game is played otherwise you're working variable rate per hour. You never loose money in appraisal, you just end up working for \$1.50 per hour. Perfection is attainable, but make a call. You are expected to make intelligent guesstimates and you go forward. If they want to pay you \$20,000 to do the appraisal and you refine the estimate, and it probably won't a difference of more than a half percent on your conclusion. The pay off matrix simply isn't there. This may be discouraging, but that's the reality. You do the best you can and then move on. I realize this is the first time you've done an income property appraisal, so you don't trust your own judgement, but common sense plays a lot in it and you have a better feel than most people would have for it,

probably a better feel than most of the appraisers in Madison would have for it. Make the call, this is the best we can do. Where did you find that number, better blame it on somebody else. (laughter) Okay let's talk about the process. First of all leases and lease roll overs and so forth. I just got off the phone with my friend Charlie Yeagers. Charlie and I are among the few that talk like this, I'm not sure if the rest of the world is ready for this or not. In any event, when you buy a piece of real estate obviously one component that you're purchasing is already under contract and you can evaluate the credit behind those contracts and say gee, I'm going to get so many months of income from the XYZ tenant group and so forth. The tough part of the appraisal comes after that point. Anybody can take a present value of an income that's all triple A credit and so forth. The real tough part comes when what happens when those leases come up for renewal and the area in which you can distort the value or earn you P as an appraiser is setting up your assumptions as to what the lease roll over pattern is going to be. The first item of course, is knowing when the leases will expire. The second thing is knowing enough about your market to know whether they're going to be allowed to run out that far, or whether in fact they will be treated as expiring earlier and in the soft markets today it doesn't matter if it's a 10 year lease, if it's significantly above the market, you're going to renegotiate that quite early in that the tenant can find a million different reasons for busting the lease and moving out and daring you to do something about it. So knowing the market will determine whether it's going to go to the end or whether it's to roll and be renegotiated earlier. Now the next question is, of those that are going to expire, how many are going to renew and how many will represent new leases? Typically those that renew receive, one, a lower commission than those that represent new tenants. The renewal commission may be half of the new lease. And second of all, of course, is the issue of concessions. If you have a major tenant in a major building, the chances are good today that he will be representative at the time you

renegotiate the lease by a tenant represented who knows exactly what the concessions are that are being given to new tenants and therefore, he will be likely to negotiate almost the same package for the tenant that stays. The concessions may not take the form of special tenant improvements or whatever, but probably will represent either a dollar payment or a free rent period. And that free rent period will probably be distributed over the life of the lease, in the old days indicated 5 months on a 5 year lease, you've got all 5 months up front, and if the tenant is subpoenaed, you didn't really have much to show for it. Probably today you would get one free month for each year that you paid rent so the thirteenth month and so forth each year would represent the free months rent. As a result you got to stay there to earn it, you know kind of thing. But in any event, the concessions provided for those that stay probably won't be significantly less than those that -- talking about a soft market -- than those that come in new. The significant difference, of course, is how long will it take to replace a tenant that moves out. Is it going to take 3 months, 6 months before you have a new tenant and then of course, when will that new tenant start paying rent. You have a difference between an occupied space and a rent paying space. Again related to what you perceive the concessions factor to be in the market. Madison and Middleton are not as devastated markets in which you're giving away the farm to get a tenant. But in any event you have to think about what the roll over rate is going to be and how long it would take to replace it. And that's a tough call, somewhat arbitrary but nevertheless a real one. There obviously are some very good computer programs these days Finsim II, Project Time, ATV, Mr. Cap, a variety of them have different levels of sophistication in terms of how to handle lease roll overs. Question--in retail, don't you find less tenants leaving when their leases expire because of the good will factor than say office tenants which are more mobile? Chief--I don't know if there's any general rule, most of the problem with retail is that tenant's go bankrupt before they get to the end of their lease. It's a major

factor particularly for the small tenant. It is probably more important to select the retail tenants carefully or they will never get to the end of their term on their lease. The next element, of course, is that once you have the roll over, you do have, obviously, the commission to pay. You may have tenant improvements which will be required. And these would be of two types--one will be the standard allowance which is the stated marketing program of the project, and they say we'll give you \$5 T.I. or \$10 a sq. ft. or whatever the number may be, and then if they have to go after somebody they may spend a couple of extra bucks over and above that in a form of concession for that tenant. The appraiser has to deal with the average or the norm, he's not clairvoyant and he's not running the building. Keep in mind we're always talking about average management is what the appraiser is representing. Even if the building has never had a vacancy that doesn't mean that the appraiser doesn't use a vacancy rate. The management of that building might be exceptional, they may have a real knack at winning the allegiance of the tenant and so forth, but that's unusual, and therefore, he'll still have a 5% vacancy or whatever he has determined to be appropriate, even though the building has no history of vacancy. Then that of course really buzzed a lot of clients--what do you mean, I never had a vacancy and now you have a 3% rate on my building and so forth. Again you talk about average management--what will the next guy do, he may not have his skills, he may not have the kind of qualities, whatever. The third element, of course, are the concessions and how they will be timed. And again the appraiser can only simulate a common sense marketing approach. He doesn't know exactly what that next buyer is going to do. But he has some sense of what makes sense, if you're going to give a year away to get a 5 year lease, you're obviously are going to continue that over time or your tenants are going to be on one year leases and leave about the time it comes time to pay. And second of all you have to be able to distinguish between a concession on the base rent and a concession on the pass through. I would say except if it's an absolutely rotten

market, the concessions that you hear about are the base rent. The tenants are still paying their prorata share of CAM and pass through expenses and so forth, so that its not a free ride. If the tenant wants a free ride, you may want a different tenant, you may not sign him up to begin with at all. If its a free ride you might as well keep it vacant and hope that somebody else will show up. All of those have to be built into your scenario about what happens when a lease expires and what's the probability of them renewing or moving on, etc. And of course, the subtleties of that are such that we're talking about a major project and the appraiser decides that 80% are going to renew and 20% are going to move on and then he cuts significantly the concessions and so forth to those that stay on, he can very significantly distort the cash flow over time and arrive at a higher value. So if you're reading an appraisal report, that's the first thing that you go for. How is the appraiser handling that. And also, very quickly, once you get into the appraisal game, you decide which computer programs are user friendly and taking your assumptions about that and which ones are a pain in the butt. Finsim II is a real pain in the tail feathers, the change of assumptions as to those kinds of pass throughs and so on, very flexible in handling different types of terms and leases and so forth, but its very painful to go back and change that set of assumptions, then test it for an alternative view point. The English typically do not raise the rents on the rollover. The English's view of life is that it is special if you assume that rents will continue to increase at 3% or 5% or whatever rash assumption you want to make about inflation. That we're going to appraise the building at current market rate. We will assume on average leases will renew at whatever the market rate was at the date of the appraisal, but no higher. Obviously, if you have a very unpredictable contract rate and it expires, they move that up to recapture the leasehold value. They do not have a slope applied to the base rents so that if they presume some rate of inflation in the computation. Today, more and more investors are saying what will be the rate as we go forward in the current rate,

or even have a decline slightly as a result of recession and excess competition and so on. And then, how much of our increment in value is dependent on our leasehold assumptions, our really good assumptions. So Akerson talks in terms of breaking the value of the project down into four components, talking pretax at the moment, and this will certainly relate back to Dilmore's seven components as you look at an equity investment. But essentially, what's the present value of the assured income--income that we have under contract now, in which there's a reasonable probability that we'll go forward and collect at the end of the term. Second of all, what's the present value of the nonassured income including the income anticipated as the result of roll over. Because of the complexities introduced by pass through of expenses we simply prorate those. Or, if 20% of the income in the year is assured and 80% is dependent on our assumptions, while lease roll over, then 80% of the pass throughs are treated as nonassured and 20% are treated as assured and you work through each year with that allocation. And Pagarson's cash flow model and a few others will allow you to break that out. At that rate the third component is assume the building resells at the price that you paid. And finally what is the present value of the expected difference between the price that you pay, and price at which it will sell. Now there are situations in which that will be negative. Talking about a special use building on a long term leasehold in which the telephone company isn't going to be able to use that kind of switching location in the future and the building doesn't have a great value other than shell value and so on. But by and large most people anticipate some increment in value for the resale. Those 4 components then will tell you what percentage of the value that you anticipate under DCF is under contract, and what is dependent on the assumptions. You have a way of beginning to evaluate the risk inherent in that investment. Now if you got really sophisticated, you might use a split cap rate and you might use a lower rate on that which was assured treating it almost as the bond rate. A bond rate was a small basis point loading and then attach a

higher discount rate to that which was nonassured, because obviously they do have different risk components. And again, you might have a different reversion rate for selling at the price at which you purchased it and selling it at some enhanced price for whatever reason, and discounting that increment at a higher rate, simply because it is of less certainty. Most investors have not gotten to that point yet. Most of the sophisticated appraisers like Akerson and maybe there's 25 of them around, including bankers, will break down the value of the property for those components. Now there is a article by Dilmore which breaks it down into seven components and the basic difference is that he is interested, first of all in the mortgage factor--how much of your yield is dependent on amortization of the principle on the mortgage which would be an additional component in this case and then he would also be interested in how much of the value is on tax shelter of other income and there would be two elements to that obviously, one, the accelerated depreciation component that you're buying during the operation of the property or straight depreciation as the case may be, and finally the capital gains at the end on the resale that may be of use to you, or the capital loss value which may be of use to you as well. So that you would have seven elements in his decomposition of the present value to what are the various components that you bought in the deal. Again, this cash flow program monitors this--carry that forward--once we got a cash flow program its not real tough to flag which leases are assured and which leases are a roll over and then simply aggregate that up separately. Most appraisers aren't using their systems with that degree of sophistication, but it's possible to do that. And I think investors in the long run will tend to do more of that as we get more and more incite into portfolio characteristics it will be interesting to know how much of the income in that portfolio is really assured, how much of that is based on some assumption that rents are going to rise at 3% willy nilly as the leases roll etc., and you may want to alter that. You may want to buy a building in which everything is assured at that point in order to bring back into proportion



the present value of your portfolio income to stream a point where 50 or 60% is assured and under contract, only 40% depends on ups which for one reason or another may be a little conditional and questionable particularly as we go forward into the current economy. The ground rents that are unsubordinated really are a valuable component of the portfolio even if there's no ups in them and those buildings that you bought with high expectations of rolling the leases, suddenly you'll find that you really don't need as much because you're not quite sure that those folks are going to renew the leases or you're going to have a 25/75 split between those that stay and so forth. People are going to start asking those kinds of questions. Given the growing dependency on the income approach they're going to want you to know more about what was the present value of what I bought and we see that already in tranches in the bond market in which we say, gee, if all the money is going to repay the first financial collateralized mortgage bond issue, they're only going to cap theirs on 6% because they have preferential treatment, and so forth and so on, and in the next transcript another discount factor and so forth. Well in buying an equity investment we're going to see the same thing. We're going to look at the assured income as one trend, the income from the assumption about our future renewals, and so forth, as the second trend, our resale of the property at some conservative base as a third trend, and really the last appreciation on resale value is going to be a D-Bond type of tranche in which, one, is postponed and, two, it's a highly conditional kind of thing and therefore, probably subject to a different discount rate, than the first three trends. ...Computerization of the mortgage levels. But ultimately the equity portfolio is going deal mostly with real estate in the same way. Indeed there is considerable discussion currently of NCREIF that a portfolio is not a set of buildings at all. A portfolio is a set of leases which may be one or more of those. If you buy a regional shopping center you're getting a portfolio of 150 leases of different types of retail merchandise, of businesses of different quality level in terms

of their credit and market ability, in terms of the duration of the style of the product that they sell, etc., what we begin to look at is a portfolio lease--you own four buildings but you've got 600 tenants in those buildings. Now how do those leases diversify, both in terms of their duration, in terms of the credit power behind those leases, in terms of the kinds of customer profiles to which they retail. So that if they are talking about basic blue collar kind of base, good now that's a fairly stable thing even if it isn't a real big number sq. ft., so if you want a recession proof kind of portfolio you're going to want a dominant proportion of your leases and the kinds of things that go to the basics that people buy and will buy whether they're having good times or bad times. And on the other hand, if you want to participate on the up side when times are good you may want a larger preponderance of your leases in upscale retail or whatever. So there's a very rapid shift there, in terms of our sophistication about income property, we leave NOI over OAR in the dust, there's just no way the appraiser will contribute to the investment exceptions and understandings in that way. Only recently are clients beginning to ask for the kinds of analysis that appraisers are capable of spinning off if they have done their lease by lease analysis correctly. People would too soon look at the bottom number without discriminating between the bottom number on this set of properties and the bottom numbers on another set of properties and not really going back and looking at the sources of that income. Question--how valid is it to be using this on really sophisticated decomposition of cash flow method for valuing buildings where the market of buyers isn't that sophisticated, that's not what they're looking at, maybe they want simple cap rate on stabilized income. Chief--Oh, don't get me wrong, I'm simply saying that for the higher priced properties appraisers are beginning to rely on more sophisticated processes. Now the other question is, having decided the most probable price, what you're really saying, of that probable price, now how would it be allocated among what I bought. There's nothing wrong with that at all. It doesn't distort the

probable price that they will pay, it simply saying, how dependent is that conclusion on my assumptions about what might happen, versus what I've already got under contract and can be reasonable certain about. All right? The fact is you might hear a statement about the risk inherent in that because essentially an appraisal is a set of assumptions about the future. You really have to give your reader a way of evaluating those assumptions and the implications of that value conclusion. If you can't buy the assumptions, you can't buy the appraisal conclusions. And the appraiser isn't used to barring his soul and saying here's where it's off. Question--how do you justify a different discount rate, since they obviously so important to value. Chief--At this point nobody is doing that. We're simply saying that inherent in that common sense tells us that those different income streams are different risks. Roulac is starting to talk about that and I have a handout for you next Monday. But Roulac is beginning to address that and saying that you can have a build up rate for those different components which reflect certainty and uncertainty and marketability, and liquidity and all those kinds of things. But at this point all we're saying is having arrived at your conclusion as to value, let's assume that the income approach is a significant factor in that conclusion and we now allocate that value between, in this case where we're talking before tax and unleveraged and we allocate it to those four components of value on a percentage basis. We're using the same discount rate on all four components. And simply saying the next step of the evolution will be to apply risk-oriented discount rates that differ for those things. Okay. But that's back in the lab yet. Kevin Wurtzebach and Delisle and I will talk about that for an hour to prove that's a possibility. They are not ready to do that yet. But I'm simply saying if we take it one step a time we begin to look at what is assured and nonassured income, what is an assured or reasonably assured reversion versus expectations of an increase of capital gain, that begins to suggest that maybe we ought to do split rates. Now if you go to work for the little MAI down the street and you mention this to

him, first of all he will probably throw you out, right? And second of all he'd say, dammit Graaskamp is on his soap box again. Don't tell anybody that you've heard this or it might cost you your career. There's reason to suspect that savvy investors are doing that intuitively now or when they look at a property the reason one for more or less than the other is really a function of how much of that income stream was locked in and how much is problematical depending upon conditions down stream. So yes, they would be useful now, but at that point the appraiser is moving out of his function to predict the price at which it will sell into saying now here's how you use my appraisal as an investment value. There's nothing wrong with an appraisal having other functions, in fact it should have. The appraiser did a very poor job of selling his skills to provide a variety of service to people. If he's regarded as Little Johnny One Note, that all he can do is fair market value according to the Institute and that's not true. But he has to change identity, he calls himself a real estate counselor, then he can do those things, but the Institute might otherwise blush. So you're quite right, its useful now (end of side one). (Side Two) Contract rent versus market rent is a different issue. Contract rent is what we're really concerned with here. Question--Your contract rent is assured, you're income is not assured. Chief--When we talk about that in appraisal we're really trying to measure leasehold values of the property. How much of the value is independent versus how much is in the equity position. Now another way of looking at that in terms of the up side of the property is how much leasehold value of the tenant can be recaptured through the equity because that lease is going to expire or because that tenant is in financial trouble and so forth. It becomes an added service of the appraiser to provide. Much of the ups in investment today, recapture leasehold interest by buying people out. So you say, you're not happy here are you, how would you like \$25,000 to be happier someplace else. And we'd both be happier. And many times it never occurred to them that they could break their lease and they hadn't been adding anything to

the synergy of the shopping center or you might have a welfare office and what you're trying to have is an upscale office building and it's a disaster to have a client from the welfare office mixing it up with the upper scale psychiatrists and family counselors and so forth. So we say gee how would you like to go over to this office which is close to the bus line and so forth, and we'll pay you \$50,000 to help make the relocation and they're going to be happy to do that. That's asset management, not property management. The whole area of assured versus not assured and the assumptions that you make about base income. One last comment on reversions. How do we handle a reversion? Be careful on 1,2,3 model and the 1,2,3 model typically takes the income at the end of the period. So if you compute an 11-year value to your value for the property, the 1,2,3 model will discount from the end of the 11th year back and under state your reversion value. The common mistake is that it understates reversion value. There are many conventions that you've probably heard about, one of the most common being taking an 11th year discount and capitalizing it on some number. The question then is what capitalization rate to use. Typically people are using cap rates which are 50 to 100 basis points below the going in rate. If you think that the market for that kind of building is 9.5 currently and so forth, you'll probably use 10.5 on the reversion 10 years out. The reason is first of all recognition of risk, that the income forecast 10 years from now isn't all that reliable to begin with and related reasons may be that interest rates will have risen particularly if the lease is a long term fixed rate where interest rates are going to rise, therefore buyers are going to have a higher effective cost of financing and so on, and you may simply feel that your prorating expense ratio isn't particularly reliable once you get out on the 10 year program and therefore, you typically raise the cap rate and some people of course, will even understate the retail value. Given the fact that discounting is 10 years back at an equity yield, the degree of impact on the final value conclusion is relatively minimal anyway, but I think it is extremely dangerous

to assume that income is going to inflate and that the cap rate is going to drop. Now that was the favorite ploy of Denver and Houston and so forth, for years just extrapolate the old income off the end of the chart at 5% a year, 6% if you were aggressive, and then in addition have a cap rate that was lower at the resale date on the assumption that now they have a seasoned property and have established a place in the market place and appraiser had a wonderful time bringing that value back, getting that few extra dollars of value out of the property in order to assist a bigger loan or whatever, I was thinking like a broker, not an appraiser. You probably should shave the cap rate at the end if that's the device you use. If we're talking about apartment buildings and so forth, they're much more likely relate to gross rent multiplier than they are to a cap rate. You may want to use both. They provide an array of leases. One of the most common that I have seen among conservative assessor, is to assume that any point along the way it will sell for the balance due on the mortgage. If it's a nonrecourse mortgage technically that's true. You can stick it to the lender for that amount at any one point and take a walk. So you technically sold it for the balance due on the mortgage, and on an after tax model it will figure out what kind of taxes you will pay relative to your basis if that's the case. And some conservative lenders work on that basis. It was highly financed, highly reversioned, I'll assume that I can always sell it for the balance due on the mortgage. Others may take simply a spread, that I can always sell it for the mortgage plus the commission, so the mortgage at any one point in time was 94% of the retail price. And that presumably is your bottom line in which case kind of situation. Others may assume for this particular point in time that they can sell it for the original cost to construct less let's say 1% for depreciation, wear and tear, and throw away functional obsolescence. So there are a variety of other bases than simply taking the income, particularly if you're nervous about the income extrapolation in the first place. It depends in part on the client, it depends in part on type of property. When we're

talking about special lease backs, almost invariably you take the land market value at its current market value and perhaps add some nominal amount for the shell value of the building if it had been. Arby's on a leasehold and so forth, given the goofy design of an Arby's, the scrap value at the end of that period of time is pretty nil and you just gotta write it off all together and assume the reversion would be a fairly nominal scrap value if any. Often the problem is assisted by the fact when you look at the lease on Arby's or a Ponderosa, the entire interior finish is the property of the landlord because it is a decor logo that is part of their advertising image and they would take it all with them when they go, particularly the kitchen equipment and all of the specialty character of whatever the franchise offered. And you get left with a shell and then the question is the shell any good or would it be better to take the land value as the value in reversion. Okay, one last item--treatment of overage rents. Overage rents are obviously 1.) a function of the base rent. Old 20 year leases that say they are now in their 10th or 15th year and inflation is taking place and as a result are well over the floor when the overage kicks in really represents an adjustment on the base rent that can be counted on as a pretty much assured type of income simply because it represents a change in the price of the goods that's being sold, not necessary an increase in the volume of goods that are being sold. On the other hand if you're talking about a recent lease, and they went into percentages let's say in the first year or second year, that may be the result of 1.) good management, and 2.) it may be the result of extra merchandise and marketing advertising efforts of the tenant at the outset of his business which may taper off as the novelty or the marketing effort stabilizes for that particular enterprise. Appraisers take different views on the overage rent. If we're talking real estate taxes, you almost never count overage rent except on these old term leases in which it's really taking the place of a regular market rent. The theory is that all of that rent is attributable to management, not to real estate. Astute marketing management has

produced that surplus. The second view is to have a split cap rate and apply a higher discount rate to that part of the overage rent which represents presumably volatile and perhaps short term marketing advantages of that particular retailer or that particular set of retailers. The only time you see overage rent being counted equally over again the old older lease, is when somebody is reaching for a value. That's a tip off immediately that shenanigans are going on. For example, the factory outlets which are now all bankrupt such as the one out here in Madison, the first year had outstanding success, relatively low floors, high percentage rent, and when Beverley Hills Savings and Loan came in and made a second mortgage loan on the deal, nonrecourse, they used an appraisal which used a debt cover ratio of 1.05 of using all of the overage rent of year one. Totally irresponsible. As a result, Beverley Hills Savings and Loan will probably loose their entire second mortgage as they should. The large appraisal company in Milwaukee that did the appraisal ought to loose their license too, but that's another problem. And anybody that was editing and reading an appraisal report and saw that kind of treatment, a debt cover ratio of 1.05 combined with net income including all overage rent, would know immediately that appraisal was a fraud. That somebody had gotten to somebody. That's totally unethical appraisal practice. So percentage rents typically should be treated as either, contributable to the management skills, or discounted sharply to recognize the fact that they are volatile and probably not sustainable. Due other caveat out there, if you have relatively short term leases and most neighborhood shopping centers do--3 to 5--and the landlord sees consistent payment of overage rents, it tells him that his base rent was too low and when he renews the lease he will move the base rent up to capture the overture. At that point it's a legitimate obviously real estate income. Where before that it certainly suspect as a vested interest of the ownership. One of the reasons for using short term leases of retail property is to capture those percentages as quickly as possible in the base rent, both as a management



strategy and as an appraisal strategy. So it gives you a good clue if your protecting lease forward and they're constantly in over age rent to pay another \$1.25 in overages on the average, that lease will be renewed at a base rent that will probably capture that \$1.25. When it comes to contract vested interest rather than ? of the property. Okay I quit at that point. Review of information for the appraisal assignment such as grading and preparation.

Question--Is the proforma we generate for the properties going to include the debt

service and we discount to get a present value after debt service? Chief--

Well, what

are you doing the proforma for? I presume you are using the income approach to value.

Okay, which income approach are you using? Answer--Just discounted cash flow and present value. Chief--Okay, now how do you do that for an appraisal? Does your seller expect to use financing or not? Answer--Yeah, probably. Chief--I would hope he would, not a lot of guys who can step up and pay cash out of the attache case. All right, what are the rules under appraisal? First party financing available from presumably a regulating institution. Right? So whatever the appropriate terms are on that would be part of your discounted cash flow analysis. Question--What type of discount rate would you use? Chief--What kind of discount rate to which point? Discount rate applying to what? Answer--12 to 14% before paying off the debt service. Chief--There are different ways to look at it. You can build your rate several different ways if you want. Go with your mortgage rates, whatever you want. Some more questions and handouts. Loans are no longer made on a loan to value basis. The only way you can determine the loan is with a debt cover ratio. Loan to value is a nonsense number, it's something that's derived after the fact. If you want go down to distributable cash, that's what you discount, then you're saying that's the way

the buyer behaves and I don't think that's true in this case. Is this a property that anyone would buy? Cash buyers? No. So the guy who buys this baby is going to have to have to leverage this property, so you would drive off the debt cover ratio, determine the mortgage, and then discount the cash throw off available on an equity discount rate and the equity reversion on a particular discount and add those two elements back to the mortgage ratio. That still leaves you with the mystery of what to do about the land contract of that portion of the site which they don't have title to or don't have equitable title to, and then you have to ask yourself, well how would a probable buyer structure that--Is he going to want that in deed by the seller so that it plays no part in his financial structure, or will he assume that and continue to make the payments? Then you have the interesting problem of gee, I wonder if that old lady in Verona would allow anybody to assume it and let Anding off the hook. Well, if she doesn't let Anding off the hook, then you don't have a cash sale do you? Then you have to say to yourself--gee, what meets the conditions of a cash sale? Do I deface that by putting it in escrow with enough of the sales proceeds to pay that baby off over the term of the contract because the lady doesn't want all the money at one time because then she has to pay capital gains tax on all that stuff and you got it set up so that if essentially and pre-1981 tax treatment, that's a pretty favorable deal. So you have to set it up so that she has not received the constructive receipt of the funds. So that she has no discretionary authority interest over the money. By the same token the buyer may want to acquire that in such a way that he doesn't have to worry about that either. In which case part of the sales proceeds would be used to defease that at the title company and the title insurance would be written as if that didn't exist and in fact, then you would have a mortgage on the whole property. But also, leaving the interesting problem, if you read your land contract as to whether she'll subordinate the land position to the financing on the center. In this case the it is a partial subordination. The real estate is subordinated

she has no responsibility on the note. Can't buy her out, she has the right to decide whether she's going to accept prepayment or not and the answer would be pretty firmly. How does the appraiser look at it, he doesn't know what her tax situation is. That's the other problem. I'm simply saying that as an appraiser you're going to have to make a call on how you handle that. You'll treat it as a second mortgage on the property after a full financing, or are you going to treat it as allocation of a sale motif which are used in the pieces. Other questions? Don't forget also that when you're done with most probable price you're going to give me a small section on whether or not that is fair market value and if not what's the difference. Question--If we do a fair market valuation, do we have to go through the three approaches? Chief--No, its much more basic than that Mark. It's going back to the fundamental assumptions--what are the fundamental assumptions of fair market value? Have you observed all of them, explicit and implicit in your most probable price. If you have, there should be no difference for the interest and the price. If you haven't, then an adjustment would be necessary. And I want to know the amount of the adjustment.

Again, remember the date of sale is October 1st. I don't want an investment counseling that says he would be better off to wait or better off the get the spaces leased, do the remodeling first, wait to the road to be done, he had to sell it on October 1. One of the essentials of market value of course, is the appropriate exposure on the market has occurred prior to the date of the sale. No fair saying well it would take at least nine months to sell it or so whatever happens after that, dadadadada, phooey. The exposure has occurred and offer and acceptance occurred on October 1. Any upside as the result of being able to do something with those spaces ultimately primarily going to the buyer who will of course, have provide the managerial skills in order to achieve that. The old them that takes the risk, takes the profit is a fundamental. Okay, going, going gone. First of all you should have excerpts from the Investment Bulletin. One of the elements on that is the Schedule M. There are considerably more pages to

that report than simply Schedule M, but I guess I wanted to provide you with a "for instance" and it will give you some sense of financing available through the second quarter of this year. Now remember, they state those as average rates for the transaction. Some of the interest rates they may have charged may have been a little higher, others may have been a little lower, but it is a weighted average in terms of the number of dollars lent at each of the rates which go into computing a weighted average mean number which is recorded here. That will provide you with a bench mark. Quite often we use schedule M tax cases simply to neutralize disputes between us and the assessor as to what was the appropriate rate at a particular point in time. It's also useful when you're doing litigation work and some attorney is about to scowl at you and say, and where did you pull a number out of that hat and so forth. Why you can say frankly, gee, how can the 18 largest insurance companies be wrong. I added 25 basis points to get mean rate, to the fact that this wasn't el primo, etc., and give them a little wide eyed innocence and let them figure it out. Great.

Question--The one on the DCR, they're showing 1.37, in that it would probably be more risky than the norm, can we up that? Chief--Well, I guess I would probably tend to discourage that in terms of lenders, you know, generally want to make the deal and 1.37 points is a pretty heavy debt cover ratio relative to what some lenders are doing these days. Question--They say amortization over 30 years with most loans being paid off within 8 years, 9 months. Chief--In another words, the maturity is 8 years, 9 months. The amortization factor is 30 years. It's a mean. I'm sure you get some 10 year amortization, 5 year balloon and some that are longer term, it depends on the deal, so that's a weighted average I'm sure. The constant includes the interest rate. The first one the interest rate was 9.34, the constant relative to amortization was 10.1. The second element is Roulac's terminology. He refers to discounted capital increment formulas, then he says the cap rate is the discount rate plus the recapture rate, I don't think that's true. The discount rate, he defines as the

rate of return necessary to attract investment capital for particular investments--what he's really saying is the cash on cash return necessary to attract investment capital because it applies in this case only to the NOI. Obviously, the ultimate discount rate or the IRR is going to be also a function of the resale price which in his formula isn't really built into it. Remember Ellwood you get a return on your capital, recapture of your capital and when you're using an NOI as your base, the only thing referred to in this case is the allocation of your cash on cash dividend. Because his formula here as stated in this paper makes no allowance for the resale price. He's not using the term discount rate correctly. So it's the cash on cash rate plus capital recapture rate. And then he goes on with this mathematical adjustments of the discount rate, etc., etc., etc., but he's really misusing the term. However, with that as a caveat--if you look on page 477, 21C on the bottom. I tried to track discount rates, or cash on cash rates relative to different points in time, from 1981 to 1986 and the inflation risk factor and so on. He makes the assumption that the real rate of return being sought in real estate is 3%, so obviously you have to add back the inflation factor to get at that, but the standard real estate business risk loan is another 300 basis points, and sometimes 4 basis points, reflecting the nature of the time, as long as it goes up in the '85 and down in '86 again. The illiquidity factor adds 100 basis points and the management of the risk factor then he comes up then with a discount rate for high quality existing real estate 18.4%. He then adjusts that for basis points representing interest rates, risk premium, and you have a floating rate, there's an economic risk premium which oughta be pretty high at the moment, a regulatory risk premium if the property is vulnerable for one reason or another to change in its legal status or the risk interestingly enough also the absence of regulation and many markets it would be more significant to a long term investor that land uses weren't regulated. It was a free market, anybody could do what they wanted, because then there was no limit on supply. Where if you look at

San Francisco it is highly regulated and it says I don't care who was doing what, we're only going to allow 300,000 sq. ft. net new office space in this defined downtown area in a year, that's very good for the environment. So the guy gets into an existing building, because it's limiting entry and if there's anything that real estate needs it's the limitation of entry. So regulatory risk here quite often in terms of the analysts view point will relate to the absence or existence of regulation--once you've got your permit, and once you've got your building you're all for tight land use regulations. Remember free enterprise is the art of making your own monopoly if only for a moment. And real estate is ideally suited for creating a monopoly after the fact by going in favor of God and regulations. Then what's got theirs is very much in favor of life quality, environmental protection and conservation: So by those that enforce or create momentum for building control, and those who already own their building. And prove your a home owner or office building owner or a shopping center owner. So regulatory risk here is how free are they with the building permit. Development financing, risk premium, construction risk, a marketing risk premium tend to be over supplied or under supplied or whatever and the marketability of the building is it well located, or is it the wrong design in the wrong place and so on, and then he comes out and for a adjusted discount rate for residential development, which is relatively higher--16.5 and 21.5 for the equity side. That's about right. I think if you look at successful residential projects over the last five or six years by the time you take an income tax and everything else into consideration the investor is probably doing a little better than 18% on the average. That's really what you're shooting for. That always kind of shocked appraisers. I remember when we first starting doing cash flow models for the Institute, and we starting using discount rates like 20% on a cash-on-cash yields, after tax and that kind of blew the Institute away, all the old guard sitting there, where did this come up. I have the overall rate at 8.5%, well, its different my friends, we haven't counted taxes,

we haven't counted inflation and so forth, well, I'd appraise on an 8.5% cap rate. No idea of what was going on in the market place. Now I'm not suggesting that these particular loadings are correct although the overall pattern comes out reasonably well, but I am suggesting is that there is a move back toward the old Billfuss rate, the 1935 economists were in love with and that it now has moved well beyond the simplistic element of management risk and illiquidity to a variety of other elements of volatility in the real estate situation that ultimately control the success or failure of the project and therefore, those adjustments which occur after the traditional investments here, I think are illustrative of the way in which analysts are attempting to go. I'm sure each insurance company has at least 20 analysts buried in the back table someplace trying to figure out how to measure results with what has been simply the mean costs of these variations in the past, or are there proxies or analyses that we can find in the market and so on. A good example, the number of basis points differential between a mortgage with an adjustable rate, and a mortgage with a fixed rate. Obviously the spread represents the basis points representing interest volatility, anticipations of the lender and so on. So there's a good deal of research going on in these areas attempting to find ways of objectively measuring the basis points that should be allocated to these different factors, I don't think anybody has the answer to that history yet. The other thing that's questionable about this is whether the real rate of return is 3% or not. Most of the asset management contracts that I see and we just went through a bidding of the Wisconsin Investment thing in which we had the 50 major asset managers all, had their real rate at 4.5%, I think it was the lowest, some went as high as 5 or 6, was the way in which you measured the success or failure of the adjustment program. So if the real rate of return was set at 5%, what they would do is at the termination of the closed end fund, for example, they would make sure that the investor received a real rate of return of 5% plus whatever you have to load each year for the inflation factor. Then if there were

additional profits left over and above that, the asset manager got maybe 20% of the increment, over and above those profits allocated on that basis. So rightly, or wrongly the asset managers are promising real rates of return closer to 5 and that's probably phenomenal, because I think if you look at the long term history the real rate of return on asset investment has been probably closer to 3 traditionally and negative in the case of the federal treasury and so forth after you have adjusted for inflationary evaluation of the longer term debt. Question--When they're doing that though, the only thing that they're adjusting for is inflation, is that not so? In other words, when the project closes out they recompute the return and adjust it for inflation, use 5% to the investor (Chief--5% plus the inflation factor) so in fact, they don't adjust for all these other risks. Chief--No, that's not particularly true, you can argue that maybe a 3% real rate of return and a 2% loading for the hassle of real estate. So they're going to have to go back and say all right, what is the real rate of return, what's the spectrum of that on risk? If the real rate of return for government bonds is 1.5 and the real rate of return now for real estate is 3, isn't there 150 basis points spread that represents the difference in risk between bonds and real estate? There's already a loading in here for the perceived differences by category. Now, there may not be a difference perceived in terms of building relative to another building within the same category. And I think the premise of the asset managers is that the portfolio process averages those risks down. If they have 10 or 12 or 15 buildings in the fund, does that takes away the individual building risk. There's additional research in that--how many buildings in a portfolio before you neutralize it, the building and business risk of the investment. Prudential originally argued that it might be 1,500 because they were the only people in town who had 1,500 buildings in their portfolio. Some of the early studies by Miles indicated that wasn't so, that you could do just as well with 10 or 12 buildings as you could with 1,500 in terms of variance. Now there's some evidence that the data



Prudential had on which that study was based was invalid for a variety of in-house accounting reasons and those studies are being redone. So I don't think anybody quite knows how many properties in a portfolio neutralize the business building risk. There's always adjustments here between categories because the real rate of return on other things like bonds and stocks currently will be lower, but there may not be an adjustment for risks internally to the portfolio. Question--Did you mention that these returns are all cash then? Chief--This will be the discount factor that's then going to be applied to the whole 9 yards. So we get all done at 16.5 is your rate for 1986. You apply 16.5 to all the equity returned and to the equity reversion that you have forecasted down stream. Okay? Question--So you're not assuming any debt on the properties? Chief--No, I said through the equity reversion. Can you use this at all on your appraisal for this Monday? The answer is no. People I'm simply trying to show a direction in which some of the more sophisticated analysts are going who have relatively unsubstantiated results. Question--He goes into the real rate, the inflation rate, the standard business risk group, and real estate risk. Chief--Okay, an Equitable building \$150 million portfolio, maybe I would use this as my criteria. Say I'm Charlie Spoust, and me and a couple of my buddies are going to buy a property out in Middleton and try to figure out how those buyers behave, I don't think they'd behave like this. I'm simply saying that having defined the most probable buyer, you have to say to yourself how is he going to think? On the other hand, if I were Heitman and I was trying to unload a million and a half sq. ft. of industrial space and 25 buildings in three cities in the Midwest, I might market at this point. The main subject for today is testing your answers. The object of the test is probably three fold. All leading to the conclusion that the price and the range of prices which I have determined in my major evaluation methodology which ever it might be, seems to be confirmed by running at it other ways. Anybody with good business instincts is always going to get his conclusion and test it several different ways. It's

really not much different than adding a column of figures from the top and then running it the other way, adding against the bottom to see if you get the same answer. You obviously like to confirm what you're doing and one of the things that people hate to do is that kind of very careful checking to see if you can consistently arrive at the same answer. However, if you have chosen what you feel is the most reliable method for your principle valuation method and let's say it turns out to be the market comparison approach, then you really have to realize that the next best way of doing it which might be the income approach is just that, it's the next best way. What you're really looking for is patterns. Are the patterns suggested by your conclusion consistent and plausible, or do they leave you some rather incongruous ratios. For example, major shopping center appraisal and you're testifying against the group in court, and they use Ellwood's method and they presume a rate of inflation on the property, that was fairly substantial so they've got a relatively low value. They then lent themselves 75% of that in their conclusion and when you tested the debt service that was then required to carry the mortgage against net income, you had a debt cover ratio that was negative. You had a factor like .85, well immediately you will now have a pattern showing up that is incongruent. What lender is going to lend you enough money that you would have a debt cover ratio less than one? That's suicide, so obviously something has to be wrong with my value number. Right? You either got to find a lender who's interested in suicide or I have to go back and check my value approach. So you're really looking for a series of value or ratios or benchmark which suggest that your conclusion is consistent with what else you know about real estate. Now the first way to do that is do a quick front door approach and say okay, if so and so pays x dollars for this building, and gets a mortgage of x dollars, what kind of rents is he going to have to charge to do that? So you add up the debt service and then you come down and do the operating expenses, the front door approach and you come down and say, gee, the rents gotta be \$14 sq. Ft. in a market that's at \$8. Oh oh,

something doesn't hang together here. So test number one would be does this make sense on a front door approach? If they paid that kind of money and they have the expenses that I forecast and the debt service that would be required on that premise and so forth, am I bringing it in at a base rent in their opening year which is consistent with the market? Or would I have to do 50 cents better than the market or so forth. Now I don't know, it might be that the property was El Primo and you could get 25 cents better than the market. Once you get down to those fine tuned calls, you're getting pretty close to a pattern and then you may want to go the second route and say gee, given my market comparison approach which is a little shaky nevertheless, it works out to say a range of \$25 to \$31 a sq. ft. and seems to be closer to 25 to 28 and son of a gun, if I take the price that I got and divide it by the GLA I get \$28.25 sq. ft. Great, I'm within the brackets of what people pay for this kind of property. Another confirmation that I'm within a range, you know I'm falling in a pattern, you may want to look at it and say gee, what would be the cost to construct that baby. People are charging \$35 sq. ft. for hard costs and \$15 for soft costs and this building is one-third of its useful life is shot, what does that look like? You're simply looking for patterns that suggest as you work your price conclusion, that it turns out to be not beyond the norm in terms of the critical statistics. Price per sq. ft., the market rent that you would need to obtain for the property, whatever other bench marks you want to use. Now if you use a market approach, to figure your own value, then obviously a discounted cash flow or cap rate approach is a useful test. If on the other hand, you have relied primarily on the income approach--let's say discounted approach, why then you could add the whole market comparison test and certainly in your property case you have three somewhat screwy sales, they're certainly not a great deal like each other, they're kind of like each other and so on, but surely one of them has a real good benchmark number. The buyers negotiate the cap rate first, and the income coming up on the next period second, and so you have a real good

hard rock cap rate, which you really don't often have. Now if you've used discounted cash flow to forecast it, the cap rate from your comp sale would be a good pattern, how does your conclusion relate to that one? If smart money comes down and buys for public fund at that cap rate, why would dumb money go out to Middleton and pay a lot less than that cap rate for something that isn't as new and it's going to need repair, etc., etc., you gotta ask yourself hey... So you have a variety of benchmarks which your tests can utilize to provide the reader with some confidence that the value conclusion you have arrived at for your principle methodology produces ratios and check points which are certainly consist and within the range of the other data that you have, which is sometimes imperfect. You're not going to get an absolute confirmation and you'll never get to a synthesis that you see in the American Institute of Real Estate Appraisers, that's absolutely off the wall. You find an appraisal in which the three approaches arrive at the same number--throw it out. Scratch the guy's name off your list and don't bother calling any more. Garbage. Probably only one set of reliable data around for appraisal. Very seldom do you get more than that--I did it once for the Tenney Building I did a market approach and a discount approach at I came out at a million five on both of them and I had to apologize in my report. Jean and I couldn't find out what we did wrong so we just apologized for that. Now, once you've gone through the test you are then at a point where you can do your interpretation of values. You can use either the certification of the Institute, or if you'll recall in R41C which is in your reading books, there is a precise statement as to what you must state as a certification. One of which says that it conforms to 41C and you have to ask yourself, did I conform to 41C and there's a pretty resounding answer no, and that you did not use all three approaches as they require, etc., etc., etc. So you want to look at your certification carefully and be sure that what you're certifying to is something you can certify to by the nature of your appraisal. Question--Would you want to explicitly state that this does not conform to R41C,

or do you just want to leave that out? Chief--Well, that would certainly be a useful statement if you're giving an appraisal to somebody who might go shout that to a lender, warn the lender right up front. Furthermore, quite often people will say well it doesn't matter if I'm going to the bank for my loan. Then the bank goes out and finds a participation partner who is a Savings and Loan and now he comes back to you and says, would you mind modifying your certification to 41C. I'm sorry I can't modify my 41C because if I did that I'd have to rewrite it to conform to what they want in R41C and that will be another \$4,500 please. Then your client's really serious. Question--That's why you find out the purpose to begin with. Chief--Yes, and probably counsel your client that if there's any chance at all that a Savings and Loan is going to be involved in this baby, you might move to the right the first time. But otherwise that's a wide caveat statement. Any other questions on certification? Almost invariably 10% of the group forgets to sign it. Which is a little trick by us to assume that I'm not willing to certify it. The last element are the limiting conditions and assumptions. They fall into several categories. The first probably the most important is the nature of the information and its sources and whether you're giving a warranty on that or not, obviously you're not. Certainly the model provided in the 25 N. Pinckney which has a clause in it to the effect that you did this as part of a class exercise, you were not permitted to visit the comps or visit or ascertain or verify these things and so forth, are an appropriate part of your limiting conditions. To that degree it is not a legitimate appraisal report. You have not done certain things which an appraiser would otherwise have done in terms of verifying gross sales, etc. There is obviously some information which is your best estimate based on reliable data but you're making discounted cash flow you're not guaranteed that the future is going to be as represented, that it was only a simulation etc., etc., etc. Then of course, you also have the problem today and the Institute has provided certain language. You have no verification at all as

to whether there are environmental problems with this property, as to whether there's asbestos behind ceiling, toxic wastes in the soils, radon in the basement, etc., etc., and the appraiser particularly provides a broad statement absolving him of technical knowledge there to point out that in most state laws today the client has a responsibility to disclose those hazards to the appraiser as well as his broker. The second element having to do with limiting conditions is obviously limitations on use. Again the model provides I think a pretty good example of that. And, of course, an important element to protect the appraiser is that he is not required to testify or appear at government hearings or otherwise just stay in the various fact finding elements without previous arrangements which is a euphemism without arrangements on my fee. Obviously a major element is there can be no disclosure of part of the appraisal report of the context and wherever the appraisal report is used in public in the name of the appraiser, American Institute, etc., is to be left out of the announcements. I think that's rather intriguing. Don't expect me to stand by this thing in publication. Taking the 5th. Another element, of course, is the uses to which that can be pushed in terms of litigation or representation to others who have the right to have possession of it to utilize the results and so on. And a very real constraint is the need to withhold any utilization at all, in anything related to security. In other words, if it must be used in a prospectus or similar element that you have the right to review the precise language in which it is identified and the information that is contained in that element. And that without your approval they can't issue a prospectus or letters to the security commission or whatever else might be involved. And thirdly important, because syndicators have a way of exaggerating or misstating the value. I've seen any number of prospectus in which the value reported was the total value including the creative financing and so forth. Where if you go back and you read the appraisal report yourself the syndicator says its available during regular working hours at some obscure address in Hayward,

Wisconsin. If you go up there and read it, you'll find out the first number was fair market value and then if you add the value creative financing to this, if you the value of that, and you add the value of the guarantee provided by the syndicator, etc., etc., etc., now you come up to this number as reported in the prospectus. So any self-respecting appraiser is no going to allow in court the last number and so the cash equivalent number is reported in the conditions of the caveats and elements that which he added are included for that are identified. So you have to control that, you can't charge for that. Once your appraisal is printed, as part of the prospectus you carry the same liability as the accountant and the lawyer, who put that prospectus together. And your entire appraisal report is referenced into that and under the court you may be guilty of a significant sin of omission, inadvertently or otherwise, and under securities law that make you equally liable with all the other who put the prospectus together. Therefore, you charge an insurance premium for that. In one case I think we did about a \$25,000 appraisal on the project. They later decided to syndicate it. I got another \$6,500 for my number reported and the condition and pull back. That number is in the report and that was part of my condition for approving your prose and they really had no choice in it. We've lost another appraisal but that obviously was more than expected. So its a very significant element both in protecting you against liability and two getting paid for you risk. Most errors and omission insurance has now exempted any liability on security laws. If you get yourself a corporate shell hang on to your hat. Most had the insurance on a discovery basis rather than on a current basis, and therefore, I think where they have attempted to pursue some of the appraisal fraud, they have found that the insurance company has since cancelled when they suspected the appraiser was guilty and as a result once it was discovered that he had in fact foot planted him for the appraisal report, it's no longer covered because the policy was cancelled prior to that point. I guess on a discovery basis there is no recourse. Very little errors and omissions

insurance for appraisers is written on the current basis meaning that if the insurance was enforced when you made the mistake you're covered as opposed to when you discovered you made a mistake. So by and large error and omissions insurance doesn't cover. At the moment we don't have it. By the time they define what it is they cover, then you look at the premium, its \$2,500 or \$4,500 a year. You'll say, hell I'll get a corporate shell keep my working capital at home and getting out of the shell. Let them take the corporation. I looked at one the other day that was done for a nonprofit agency here, thinking about buying a building therein. But they got a very nice looking appraisal and it says fee simple title on the front page which is what it was. The only problem is they have like 10 years to go on their lease and they're about \$3 below the market rate. There was no reduction made for leasehold values at all and the owner of the building is in one floor of the building which is in miserable shape and you would obviously have to redo that space and then subdivide it for tenants if you were going to rent it according to scenario. There was no deduction for that at all. So many people just really don't know how to read an appraisal report. So in this case on a \$250,000 building they were about \$60,000 high. It's true it would be worth that if it was fee simple title but it's not. But now here's a bonafide appraiser with MAI certification really beautifully done, sure looks impressive, had a letter quality printer back at the office but it doesn't address the question of how much should they pay for it now that owner wants out. Any other questions on limiting conditions and assumptions. Going, going gone. Finally, the letter of transmittal. The letter of transmittal performs basic functions. One, is to remind them of course, that you to do it in terms of the report, etc. Second of all, here is the issue that we were trying to address and why we choose this definition of value and why it's good just for that specific issue. At that point you report the date of your valuation, or as of when your valuation is good, the amount of your valuation, and because it's contemporary value, you then state the range



around that central tendency. In this case you will also then state in the second paragraph if the fair market value (reference whatever page that is in your report you don't have to repeat it in your letter) that the value would have been such and such as of that date, etc., because. And then you will alert them to the fact that one, these conclusions are going to be subject to certain assumptions which are underscored and made throughout the report and two, relative to the limiting conditions and assumptions which appear in the report and identify them specifically. This is a hold harmless clause. The client needs nothing more than the front page of the report if you want him to know that he's on notice that there are a series of very explicit constraints and limitations on your conclusion. And one of those may be that he wouldn't give you an architect when you asked him to or he wouldn't give you an engineering study when you asked him to, etc., etc., etc., and therefore that's a significant gap in the information disclosed and made available to you and that may have (gap in tape) etc. etc. But it's very important that the letter referenced in specifically the limiting conditions, both those which are formally identified at the end of the report and those that appear throughout the report as you explain why you did this or that. They are part of the limiting conditions and assumptions of the report. The obligation on him is then to read the entire report and find out what those are and whether that is appropriate to his purpose in getting the appraisal. Okay. And include the draft of your letter of transmittal.

Review of exam. Institutional economics is the fundamental building blocks of appraisal here at the University. Essentially institutional accountants rejected the

so called pleasure and pain of the traditional economics in which everything was related to price and distribution and argued that instead of individual self-aggrandizement that much of economics depended on institutional structures so the institutions were continually evolving out of social environments and that

in order to one, anticipate the way things would go you had to understand the institutions and two, to manipulate the way things would go to solve problems and achieve social objectives you modified the institution and the institutions effectively exploited that pleasure pain characteristic of the individual actor to achieve collective goals. And that effectively is what you wanted to do to get in there. There's problem solving that was inductive, it was socially oriented and tended to be manipulative towards collective ends of the pleasure pain hedonism of traditional economics, Machiavellian economics, to demand, etc., which had been the economic doctrine up to that point. And there really is the whole fundamental element of real estate at the University of Wisconsin growing out of the institutional economics. It was simply a way of solving problems relative to resource allocations. A whole series of social elements. If the institution didn't exist you would guess it did which is why we created social security, why Wisconsin was the first state to have workman's compensation and in effect charge directly to the cost of production the injuries that were there and what's more create incentive to reduce the injuries. It was cheaper for industry to solve the problems of safety that it was to pay the insurance premiums and so on. So the whole Wisconsin tradition builds out of the idea that you can solve social problems and achieve social objective by manipulating the institutional framework within which decisions are made and you can see that theme all the way through being a Wisconsin tradition as well as economics. Cash equivalent refers to the fact that you must adjust comparable sales for seller financing or other terms of sale which were distorting the values underlying real estate so that included other elements to it and that typically that meant where sellers were providing the financing that you adjusted the price down. Many of you indicated adjusting it upward by that amount. Some of you are having trouble with your syntax I think and in the case of the fact that the property came with let's say a mortgage which could not be prepaid, might in fact justify a discount but cash equivalent was to be the

common denominator for fair market value and all comparables had to be adjusted to that standard and value had to be recorded initially in a cash mode and then you added back to value increments for any other elements that went into the deal. Some of you really just had a lot of trouble with your English vernacular. You had a vague idea of what cash equivalence was, you adjusted the wrong direction for one thing. Many of you had problems relative to what interest rate you adjusted to. What you have to adjust a deal to is the interest rate that was characteristic of the date at which the sale occurred, not the current rate. Many of you kept on saying you had to adjust to the current rate. That's not so. Two years ago the rate was 15%. Now when the deal was made then at 8%, sellers claim contract had much more influence. The interest rate much later sells at 9%. Much of the presumed value for the buyers by giving them considerable terms has evaporated, and as a result that's why you got to that if you didn't adhere to a strict present value concept because 1) there was no assurance of the interest advantage was available at the time of the contract. It was in both parties interest to make a deal since the seller obviously got out of certain liabilities that went with continued ownership and the buyer had his hands on the property sooner than he would have otherwise and so as a result its plain to point out cash equivalent was sometimes difficult to apply, but in terms of all I could judge was by your use of the English language and that wasn't very elegant on occasion. Comparable sales--Obviously one, you want some degree of sameness to the subject property relative to its potential most probable use and in addition, most probable buyer motivation. A good many of you lost at least a minus 2 on that question because you never mentioned the buyer's motivation. If you had a property identical to the one at hand with the guy who bought it--he bought it to tear it down because he was adding parking to the building next door. Anybody else would have remodeled it. Its not a comparable sale through the motivation. The second element about comparability that many of you left out was the fact that it had to be at arms length. Many

of you confused arms length by saying it had to be bought for the same reason. In other words if you had a condemnation you had to find sales that were acquired for condemnation. No deal, you can't use the condemnation acquisitions as a comparable sale or some of you had a couple of other examples, none of which were arms length. It has to be an arms length transaction so that it really reflects the market finding some equilibrium between the interests of the seller or the buyer given whatever alternatives they might of had, so comparables sales have to have those three elements. 1) Similar potential in terms of reuse or best use. 2) Similar motivation in terms of the buyer and as a subcategory having similar motivations. 3) It has to be an arms length transaction. Distributable cash--Distributable cash is a before tax concept. Some of you got running pretty good on your proformas. You got all of the way down to after tax and after debt service and everything else. Distributable cash is before debt service, before taxes and what you're really doing is adjusting net operating income determined on an accrual basis to distributable cash on a cash basis and one item that somebody pointed out to me the other day that I left out that I shouldn't of describing distributable cash is the add back of the cash on escrows and other releases. There also could be an add back for noncash items on the accrual side. If you amortized in the first year for appreciation or depletion whatever, there should be an add back on that because that's also cash, you know. I apologize for that. But nobody noted that on their exam. Okay, the next question was worth 25% write on one of the following two questions. The first one was relative to methods for solving problems under conditions of certainly ala Hayes. And I wanted you to get into where you find the so called methods of Downing?, lexicographic selection, additive weighting selection, inducing and satisfying the criteria in the process of going about appraisal decision making and some of you did that pretty well. Some of you wandered off into other directions. Some of you confused certainty and uncertainty. Adding to uncertainty you gave me a long litany on mini-max,

maximize, minimize the regret, etc., etc., etc., that doesn't fall under the conditions of certainty that frankly I wanted to impart. The second alternative was to trace the development of value theory to its present state ala James Boykin. Boykin as you recall divided up into three eras roughly 1906 to the end of WWII in 1945, from 1945 to about a year after the Wisconsin Colloquium on appraisal theory, and then to the present. And then went through who was influential in each of those areas by their specialty, all of them; I expected you to get at least some of them. Some of you said "they all gave us great hope and then lets get on with it." Some of you bogged down on the entire history of appraisal as it had to do with whether the cost approach was justified or not. And there was no praise to do said on that or whatever, but moving through Pritchers present value, Babcock, etc., then into Atkinson, Maes Stewart's era and then looking at the second phase which Ellwood and Gibbons and so forth and finally into the Ratcliffian Kinnard era and so forth. Okay. Roman numeral III, 25%. Discuss whether Ratcliff's contemporary appraisal thought represents a refinement of traditional appraisal theory or are all his concepts of value and the function of the appraisal (a new theory). One answer I really loved was the one that said clearly a refinement of traditional appraisal theories. It went all the way in then at end said guess I won't be called into a corner-it's a new theory. Obviously, no one answer to that. At one level of that fact its simply a refinement of placing the appraisal process into a larger structure of problem solving so that at some point traditional theories may be relevant, albeit if the problem is one of eminent domain or something that requires fair market value, then at that point you pick up the whole fair market value concept and plug it in because that's what relevant to that problem. On the other hand, if you're saying what will it sell for and what can I pay for it and so forth, you're back to most probable price. So at one level its a refinement its simply saying what we sent the buying people (clients) as the back-up (documentation), appraisal is a bench mark for some sort of decision that some decisions are

still appropriately treated with fair market value, but a more useful concept or perhaps a larger array of issues to which the appraiser may contribute is most probable price and you begin to look at the refinement of the definition of economic man to truthful man and so on and so on. To that degree some parts of Ratcliff aren't new. The idea of market inference versus simulation versus normative is really quite a different perspective than the traditional three approaches and simply regard as a whole new concept. Some of you properly pointed out Ratcliff regards simply regards it simply as an evolutionary process and a refinement in the article which we had to read and was what really prompted it. I think on balance you can argue that Ratcliff is a refinement rather a revolution, but I didn't have a preconceived viewpoint either way. You could argue in either way as long as you argued it well. On those types of questions for those of you that haven't had them before, with a 25 point question if you lost 2 to 3 points you're in the 90's which means an A. And if you lost 5 points you dropped down to a B. If you started losing more than that you either left something out all together. In several papers there is a note saying you are on the wrong track or you answered the wrong question. For example, on the "Lusht" thing (Ken Lusht-the author of the article assigned) a couple of people went off and running on "Lusht" market data determines the definition of value which isn't the question that we asked. We asked about new types of debt financing and so on. One of you frankly said, the only thing I remember about "Lusht is...."you know, I don't know what the question was but this is my answer ta da, ta da, ta da. The last one 30% with 15 points on each question. Hey, I thought I'd catch everybody on Robert Suter's question. Somebody had a very good abstract of that which they handed out to the class. And Korpacz and Roth on the changing emphasis on appraised techniques and the tax code, if you lost points on that it was probably because you didn't get into the fact that they were also talking about the fact that the net operating income over cap rate was relatively insensitive to changing incomes where you

have rising incomes and falling incomes and so on. Or you forgot to mention that investors tended to use this kind of cash flow and appraisers therefore, tended to follow what investors were doing hoping to simulate their thought processes. And the general report being the changing emphasis in real estate investments from simply buying an economic product to looking at the impact of leverage, and looking at the impact of the tax law which got increasing emphasis under which NOI over some sort of overall rate was kind of insensitive to. Some appraisers argue that if you got the overall rate from the market you had to synthesize into a single number all of the converging forces on the investor in terms of taxes, leveraging and so forth and so on. But that really wasn't true, it was much more precise to simulate using discounted cash flow. The other two where you chose to go that way you had a little more trouble with. Ken Lusht's opinions on the impact of debt financing--first of all the one thing that always makes me focus on an article is that either that Badigliaini(?) and Miller guy who say it doesn't matter what you do with the structure of finance. The basic discount rate is always the same on capital assets and the impact of syndication or leverage is not on a property by property basis. But to the degree that its changes affected the effective demand for real estate itself shifts the demand curve for real estate so that all investment real estate is now higher priced because of these demand pressures that are created by financing. On the other hand, if you look at a property by property the risk payoff matrix or the so called risk rated discount rate shifts continually as you modify the leverage factor or how far you break up the project into smaller pieces so more investors can participate or their maximum risk is reduced or their liquidity is enhanced whichever argument you look at. All of those things modify the weighted risk discount rate and as you are getting more leverage or more syndication and so forth, one aspect of it is going up, the other aspect on the equity side is going down and therefore if you take all of those things into account correctly weighted, it will produce the

same cap rate as the project previously or owned in the simplest fact. I don't buy that but nevertheless that's much harder. What he's really saying is that you have to distinguish the real estate inherent economic productivity from the value created in terms of markets or in terms of risk characteristics or whatever. If those values are inherent in the structure of ownership rather than inherent in the real estate, and therefore, if the value added in terms of retailing the investment rather than one that's inherent in economics in products. Harold Albrieghten(sic) something of a gadfly in defining fair market value as somebody pointed most of his comments were relatively shallow and nitpicky but he looked at some of his terminology specifically whether you're doing investment into the value of the highest price available. There was no reasonable period of time to market, did it occur before or after the date of the appraisal. We have to talk about now the buyers and sellers. Anyway, he had the semantics fit over the traditional value of the market. Again, a back handed Ratcliffian. Any other questions, political statements. Anyone who's seething with injustice, afterward it's possible there is an error in adding up the negative points on each test question either because you couldn't read my writing or I couldn't read my writing or whatever, but you're welcome to appeal it to the highest court in the land if you wish, that's \_me\_. Okay, any other questions. A reminder--no class coming up on Monday. Question--what's going on on Wednesday? Chief--Class. It will be me or somebody else. We will have class. You more than anybody understand the reliability of Northwest Airlines and if I do get here whether I'm in any condition to teach or not is besides the point. Okay, land valuation is the subject. A very broad subject area obviously, traditionally. And probably breaking its way into several major categories. Obviously one, farm, second of all, recreational and what we'll call bulk land of various kinds of wilderness if you will. The third category we will call, rural-urban transitional. And the fourth we'll talk about is urban-large acreage. And the final, of course,



is urban by the lot instead of by the acre. As a result one of the very first problems that one has is determining what is the unit of comparison. Do we price by the section, do we price by the acre, do we price by the site, or do we price by some unit, characterized by some foot or some foot of water, square foot of land, whatever. And the possibilities of course in terms of the reality being a resource in terms of should it be cubic feet of gravel or do we measure with barrels of cranberries produced or whatever. Each type of land has an optimal measure of productivity in terms of its potential and of course, as it move through the cycle of development of being truly rural to being truly urban a unit changes. I think it was Mr. Aster who had the great line, "buy the acre and sell by the foot" and recognizing the fact that the transitional process in fact creates significant amounts of value for the land. Now, in establishing farm value or any kind of agricultural production, obviously, the first element that one is concerned with is some way of determining the physical productivity of the property. Typically you just divide it into that which is tillable and perhaps that which is grazing or other grass producing land and that which is for one reason or another not usable for farm land whether its wood lots or wet land or whatever. That within those areas you would have to establish indices of productivity. If its a wood lot, it may well be that you would determine the number of cords of wood that it creates and if they're talking about Christmas trees you can set up a fairly elaborate model for the rate of harvest and so forth for trees per species and age and so forth and then you need an allocation, obviously, between that which is contributed by the building and that which is contributed by the land. Going to give you a couple of illustrations as to why that's a critical element. One, I think that's fascinating, I think that you'll a great deal of litigation in Wisconsin over the next six months having to do with cranberry bogs. Cranberry bogs as a result of the cranberry company "Ocean Spray" has created quite a market for it and the price of cranberries is up around \$55 to \$60 a barrel, depending on the

condition of the species and so on. The price of a cranberry bog acre developed and planted with ivy and so forth is somewhere in the neighborhood of \$30,000 an acre. Some of the cranberry boys are pretty well organized and they got the Governor to make the Chairman of the Tax Appeal Board for the State Department of Revenue, who happens to be the head of the trade association of cranberry growers. And the Department of Revenue was asked by many assessors by those counties that had bogs to decide what is the relationship between the buying and the land. Now the vines are perennial and it takes about 3 to 5 years from when the vines were planted to become productive. And the temporary bogs people are very clever, they got a exemption for perennials and perennials includes Christmas trees, cranberries, asparagus, etc., and they're not taxable under the state law. Now they certainly are attached to the land and you're not going anywhere without it and so forth, but they're taxed exempt as a perennial plant. Now Christmas trees have always enjoyed a very favorable tax status since the days where Franklin Roosevelt was a major Christmas tree grower in New York. To this day, the only farm product which enjoyed capital gains status are Christmas trees as a result of Mr. Roosevelt's vested interest in Christmas. At any rate, they first of all have vines planted that leads the assessor to say if it sells for \$30,000 an acre, how much are the vines worth and how much is the land worth? Now a cranberry bog is not simply land, its has to shaped very carefully by building site, canals, and road systems and then they slope the bottom of the cranberry pit so that the can pump water in, knock all the berries off, float the berries, and then drain the water out so all the berries go down to one end and they can shovel them out. Its a fairly sophisticated engineering job to create that kind of land. Well, its wet land to begin with, it sold for \$600 an acre so that ought to be the value of the land for a cranberry bog. Hey, wait a minute, \$30,000 for one that's already built would be \$600 for the land, you mean that the vines are creating \$29,400 worth of value? Sure. So lets have the Department of Revenue look at it. Well they did. They did their studies

and they got some real good costs. It cost about \$21,000 an acre to build all that stuff and essentially its just scraping the land, piling up dikes, and digging ditches and so forth. But somehow that isn't land. The DNR came out with \$21,000 as their first guess. Governor said guess again. \$12,000 now that's the fellow whose chairman of the tax appeal board says gee fellows I don't know if we can support that in an appeal, why don't we try to make it \$8,000 an acre. So at the moment its \$8,000 an acre for cranberry bogs. Now if you figure that out, they have lost about \$20,000 in value there some place, and with 8,000 acres of cranberry bogs that works out to \$160 million worth of tax base that's evaporated off of about 8 counties tax rolls that have cranberry bogs. Some of the other tax payers are saying, hey wait a minute, what would our mill rate be if those guys were on the tax rolls. So they're saying, well we better appeal it to the tax appeal board. And there smiling at the head of the tax appeal board is the head of the cranberry association, just appointed by Governor Thompson, whose got a lot good pull from those cranberry counties and at any rate--a classic appraisal problem. What's an acre of cranberry bogs worth in that you can't count the plants? Now you could argue that its worth zilch without the plants and by the same token you can argue that the plants aren't worth anything either without the cranberry bogs. Farm allocation becomes a very difficult problem. The second element about farms is the balance between the improvements and the land and different kinds of land. For example, a condemnation cases we did a couple of years ago on what is now the new 151 coming up from Prairie du Chein and the highway goes right through the middle of 160 acre farm and the appraisers for the state say well, we took 22 acres of farm land that's worth \$1,000 an acre on the average and therefore, we'll give \$22,000 for the land taken. Before value \$160,000, after value \$138,000 so here's your \$22,000. And the farmer said hey, wait a minute, hold everything here, the soil types that you took are the only ones on which I can raise corn and if you take 22 acres of my corn land and I need 2 acres of corn

land for every cow, you just took 11 cows from me that I can't support any more. Now I've got a barn that's got stanchions for 50 cows and now I can only handle 39 cows, which is not a very optimal number for one thing. And I've got milking equipment, a pump and a pump house and a contract with the cheese factory and so forth, that presumes I have 50 cows and what's more the 11 cows that you took were the whole profit. If we run the farm the other way on 39 cows and how much milk are they going to produce in terms of revenue on what I'm going to get from the milk check, minus all of the operating expenses, we'll have no net income at all. What was the marginal contribution of the soil type to the total value of the farm? You don't have a direct line, you know one to one relationship, you need a certain balance of soils and meadow lands, and grass lands and so forth to make that particular kind of farm operation operate at the optimal level. To the minimum scale there's a optimal balance of soil type and field layouts and so forth, and what's more if you take that field and reshape, why you change significantly the efficiency with which I can plow it and fertilize it and harvest it and so forth. Lots of things happen, which are not just directly related to a one to one taking and therefore, farm land becomes very tricky in terms of one, dividing up the land among the various types and then establishing the degree of balance that exists among the various components that you need for whatever farming is highest and best use on that particular property given slope, soil, productivity and so on. The other element about farm supports are the improvements. Given the general trend of consolidation that's occurring in agriculture, it may very well be that with a 160 acre farm with a barn for 50 cows and so forth, the most probable buyer is the farmer next door who wants the 120 acres that are tillable rather than the other 40 acres which are wet lands and wood lot and buildings and kelp wading areas and so forth. So quite often in appraising that unit once you have gotten to a piece of farm land that's below self-contained optimal size, what you really have to appraise is really two or three sales. One sale of the house, and related out buildings and

another sale of the tillable land and maybe a third sale of the recreational land which happens to be on a creek in which some trout fisherman would like to straddle a cottage and so forth. So as an appraiser begins to look at that farm really needs to know a great deal about the economics of agriculture in the area in which he's working and the economics of that is directly related not only to the soil types and configurations of the fields, in addition related to the type of improvements in buildings and so forth that are required to that type of farming. There are also interesting pieces of law relative to farm land. For example, major pieces of structure like the A. O. Smith silo and so forth, is not regarded as real estate it is demountable and has to be priced as personal property rather than as real estate although it looks like it's a pretty permanent thing, bolted to a concrete base only the concrete base is real estate but while they are not considered real estate. The hay crop may be still attached but it wouldn't necessarily be land in value, the same thing would be the corn crops and so forth and it makes for an interesting appraisal problem relative to the purpose of the loan. Recreational wilderness land is the second category. And once upon a time this was a fairly simple minded thing as you've heard Mike Robbins go on ad nauseam. And the view was at one point in time that if you had a mountain top of snow and all, billy goats and so forth the forest service would pay you \$50 an acre and you were lucky to get that-- so shut up take your money and run and so forth. The idea that you could buy recreational aesthetics of various levels of quality and so forth, is a relatively unique idea. The idea that you could buy terrain that had specific highest and best usage--a radical idea. A number of problems it mentioned, a case just settled in Alaska with the Eack tribe vs. Chugatch College in which they argued successfully that the terrain was uniquely situated and geologically appropriate for a reservoir for man-made development to generate hydro electric power. The Chugatch power company says now there's a hunting and grazing range for caribou or whatever it is and we'll pay you \$20 an acre for it, if we were good guys! .

I forget what the exact size parcel was, but they offered \$5,000 I believe for the piece of land. The court agreed, the highest and best use of this was as a reservoir and therefore, was worth \$125,000 in terms of what its contribution to the whole output of the hydroelectric system that was going to be put in there, and its an entirely different concept. Nobody had ever looked at a piece of land in terms of its bowl shape, in terms of the water flow going through it, in terms of the ability at minimum cost to put in a damn across one end of it and therefore, create this impoundment and so on, really as a component of a larger capital system, and yet that's really the meaning of highest and best use in terms of what it will contribute towards the larger enterprise. You will begin to look at both land a little differently. One wonderful appraisal case is about a total barren rock down in Nevada. Highest and best use is to hold the rest of the world together. Well, the jury heard this case. For example, I think I mentioned this, before we were working on a case in Bull Frog County, Nevada. And Bull Frog County is one of three sites characterized as suitable for a permanent highly radioactive waste disposal, about 80% of which will be spent rods out of our atomic power plants and the other 20% will be military nuclear waste, dismantled submarine engines and old A bombs and stuff like that. And if you were to go and look at Bull Frog County, there's probably a good reason why you didn't settle beyond the fact that its owned by the government, there's nothing there except rock. Ghosts would have a hard time making a living there and totally barren, not really adjacent to anything other than Yucca Flats which is best known for its atomic bomb tests, which happens to be Yucca Mountain. And Yuck is probably real good Indian term for it. Now, one of the unique characteristics is the water table is 16,000 feet down, you're not like to break into an aquifer in this case. Another unique aspect is it consists of something called tuff rock, which is a fairly malleable but nevertheless impervious rock, not given to small fissures which would allow percolation. The reason that Wisconsin escaped this "prize" is the fact that in

Wisconsin our granite shield has very small fissures in the granite and they're not sure to what degree fluids would leech through granite gradually. Granite's hard, but it nevertheless has these fine hair line cracks in it. Wisconsin may still win one of these awards but at the moment we're out of the bind because nobody knows how far the granite will leach, but tuff rock apparently doesn't leach. So that's quite a big advantage. The third big advantage is right next door is a robotics installation cost \$350 million for dismantling military apparatus which is highly radioactive and which can be all taken apart by these robots which apparently don't get sick and die from reuse, so that would be useful to have that nearby. Now the question is, because of the whims of the Congress when they passed the law derived some stake to the taking of this baby. They said that once you are characterized as suitable for this, the federal government will start to make payments to the local government equal to the real estate taxes that would have been paid if this enterprise were privately owned. Wonderful. First problem, of course, is what enterprise? How do we measure that enterprise? What's the land worth for that enterprise, because that's what we have now, there's nothing there yet but they now can bill the federal government. And in this particular case in Nevada they did. It's in Nye county, and although it's entirely owned by the federal government, it's three entities, the Bureau of, the Defense Department and somebody else, it may be the airport. They can bill it as though it were on the tax roll and Nye County bill them on the basis of \$20 an acre or \$25 an acre, goat land value. But in Nevada they have a cap the county can only raise so many dollars through the real estate tax so if they get x dollars in payment from the federal government everybody else's taxes in Nye County will be reduced proportionately. There's no net gain in benefits to Nevada that way. It just reallocates who pays the tax. And the State was kind of looking forward to either one, charging the Federal government so much that they'd go to Texas or Hanford, Washington because it's cheaper, or they will still and have a wind fall in terms of the

income. And in order to protect it from Nye County they created a new county called Bull Frog County. Bull Frog County consists of essentially just the very acreage that would be used for this depository for radioactive wastes. There are no citizens in Bull Frog County, there's no government in Bull Frog County, they're not even sure that you committed a crime in Bull Frog County, which would be very difficult to do because there is nobody there and nothing there besides. But nevertheless, as that happens, they're not quite sure how they would fine, who would arrest you, which court would you go to and so forth, particularly if you argue that's a local offense and I want to go to Circuit Court and so forth. At any rate the Governor appointed a three man commission that is responsible for running Bull Frog County. Nye County is infuriated and suing the state of Nevada in order to get its windfall income back. In the mean time with the state of Nevada, has a special predicament with the state government for nuclear repositories, fissures which Bob Forman and I have come up with a valuation theory as to how do you value land characterized as suitable. By anybody else's standards this is worth nil. The only thing it's got going for it is 150,000 acres of nothing. But its the very nothingness which makes it valuable. So we begin to look at most land in terms of its geological possibilities. We're no longer just looking at surface. I think a wonderful comedian singer, what's his name, a piano player in Boston, had a wonderful album out and one of them is There's no such thing as a vacant lot anymore. To some people it will look like a vacant lot, but its actually full of birds and bees-an environment, therefore, there's no vacancies anymore and that's what you have here. We're no longer looking at it as a surface, it has location and as an additional tenet. Non location can be significant advantage. Non - - gility can be an economic plus. So you need to begin to look at land as part of a larger environmental system and what do they contribute to that or what's unique about them. There's another case for example in Alaska, that we're working on for the University of Alaska at the moment. The University of



Alaska owns a long strip of land with in Copper Center (in a major urban center). The highway department is taking a piece of their land to straighten out the Richardson Highway. At the same time the gas line which would like to come down that way has also filed a plat which goes through the same route the highway is taking. So we looked into it and we said gee why are they doing that. They both run across the river at the same place. And we looked at the total geology and it is the only place across the river without going right through the middle of Copper Center and destroying the town would be natural gas line. This is the only point that will support a bridge structure. The only point that has bluffs so that you can build a flat bridge and still be high enough off the river. The only place that doesn't flood, soil types are appropriate, big load of gravel right there and so forth, the rest is muck land. Okay, they come in and they say gee, acreage in your area sells for \$32 an acre and we said no, bridge sites sell for a lot more, highest and best use is a bridge site. Here's the geology of it and how do we measure that? We measure that with what's called opportunity costs. What would it cost you not to have the bridge site? We'll split it with you. If you want to build your roads the other way it will cost you \$3 million more than it would cost to build a bridge. So for \$1.5 million we'll give you the bridge site. The opportunity cost theory has been well documented now in eleven major cases dealing with large land areas--bulk land areas. It began initially because Indian lands are not condemnable. The Indian reservation land cannot be condemned. So along comes the utility company and along comes the power company and along comes the oil company that says gee, we would like to get from A to B and the straightest way is across your reservation. Uhuh, White Man, what would it cost to go around? Oh, that would be expensive. Yeah, we bet it would. (end of side one)

In fact our engineers worked that out. And its going to cost you \$6.5 million to go around our reservation. More than it would cost to go across. So for \$3,250,000 we'll let you go. White Man's don't forget. Power companies

building reservoirs in the Northwest. Again, on Indian land in the Indian reservation, the Indians cannot transfer or devise their land for more than 50 years, and at no time can they have a lease that's longer than 10 years before the price comes up for renegotiation. The government didn't want the Indians to be flim flammed by changing conditions. So the Indians leased land to a power company that created a dam and created a new development and golly the price of electricity has gone way up and not only that, over the 10 years they found a way to make the dam much more efficient with another or couple of additional generators, another sluice-way and now comes time renegotiate the lease. And Indians say, Uh Hah, the total recounting value of your system is about \$35 million to \$150 million and the cost of all of the machinery and everything else is \$75 million so as a result the net economic surplus created by trading this than is \$75 million. 50% of that is skilled management picking a site and running the electric company and so forth. Therefore, the other 50% is contributable to the land. Because if I remember my basic economics, there's land, labor, capital and management. And we figured out what the management gets and figure out the capital costs, right--what's left is management and land. And if we split that equally and they don't have to split that equally, but just because they are reasonable folks they'll split it equally, they don't want to get into a spitting match whether land or management does more. 35 over 50% of the difference or \$37.5 million, so what, the next ten years the land is a new ball game again- it's worth 50 million, where is it the next ten years? That's the law of the land. And so you have prototypes of that sort which you're now spreading to the private sector. Opportunity costs is really a reflection of highest and best use. What does land, and a particular piece of land contribute to the enterprise? After all the whole principle of appraisal is based on substitution. Right? And if you can't substitute for it without a great deal more expense, prudent man is going to pay what it takes to get the piece of land that allows him the lowest improvement cost. So big and yet and

so easily and properly pursued in looking at all points. So as a result, looking at all forms of land, you really have to begin to have a much broader view rather than a conventional view as to what do these lands do? What can they contribute? Do they have any unique monopolistic characteristics in their geology, and hydrology and positioning that makes them a critical component of some larger use. Now in looking at the rural-urban transitional land the appraiser probably has some of the biggest problems of his life because the supply demand function is so obscure. Assuming an urban area pushes out at its borders, the entire circumference around the community, as you get a bigger and bigger city you have more and more circumference, therefore, the total land area which is now part of the city continues to expand, right? And presumably there's a tip over point at which any piece of land, now contiguous with the infrastructure and urban systems and so forth, is available at a price. So what do you do if you are a real estate assessor and one farm sells to a subdivider for \$3,500 an acre or \$6,000 or whatever the price may be when the next best use of farm land may be worth \$800 an acre. You either take that single sale of development land and extrapolate it across all land contiguous to urban services, because if all that land came on the market at the same point in time it wouldn't be worth \$800. The absorption levels for urban land simply aren't there to justify immediate development of all land immediately adjacent to the periphery of your market. The appraiser has a terrible time dealing with the fact that his comparable assume that the largest portion of suitable land is not on the market at a particular point in time. Therefore, the current price is more a matter of the fact that it was in the market on the market, available for sale and not because there was a suitable supply or not a suitable supply. That's different than any other kind of real estate. You look at office space and you say gee, there's two million square feet of office space and 20% is taken. And at the present the price of office buildings currently, given absorption rates and capture rates for that time of year. But in land it

doesn't absorb that way. The larger amount of urban transitional land seems to be a nonfactor in terms of supply, in terms of availability and the appraiser prices using one or two comparables and ignoring the possibility that if all property, were available, that was suitable, you would crush the price, it probably wouldn't sell period, let alone for any dollar. That thought number one: an artificial viewpoint as to what the available supply is. The second problem with it is that those who buy typically in the first round are speculating rather than knowledgeable about development potential. They can divide by the gross acre, rather than the net usable. But the discount from the next step up once you plan and the next usable is known is so steep they can afford to take risks. Predevelopment land sells at a terribly sharp discount. And most players as I say haven't the foggiest idea of what the net usable interests of the land are. By and large they don't do soil tests other than the obvious ones that are cat tails or something like that, and some of its under water and many of them are so over hopeful they go to Florida and buy the whole 160 acres are under water. Charlie next door channelled it, pumped it, put balled heads around all the channels and pumped the sand out of the water backup and presto, it was 2.5 feet above high tide as long as we don't have a high tide. So even if its below water it doesn't necessarily upset the speculator. But generally he's presuming, of course, the current status quo is worth the title. I had permits on that last year, I should be able to get permits on it this year. Pretty speculative comment, if people are now concerned about environmental quality and infection of wet lands and recharge areas and all the other elements that they suggest that we shouldn't touch that piece of property and obviously, through control are willing to develop it somewhere. So the developer has a second problem aside from the fact that the artificial surpression supply and that is no perception of the future utility. Whatever happened to the knowledgeable buyer and seller? That sort of dropped out. The third problem is for the appraiser to decide where on the curve of development

potential is this particular property. Is it totally predevelopment or has it already been zoned by somebody in expectation of what might be. Or has it already been blighted by a master plan painted as green as permanent open space or whatever. Has its already gone under public purview at some point with some fairly broad planning guidelines. Has it moved forward from there to a relatively detailed public anticipation of what it could be. Are there characteristics of the site which would preclude certain development opportunities. The University is a classic case in point, a piece of ground they bought for a golf course has some 75 to 90 acres of woods at the top of the ridge. After they got into it they discovered it had the longest holds for Audoboun bird migration in the state. So all the bird callers got together and said you can't touch my woods and my ridge. And the University said, I guess we can't, because we're in favor of environmental quality and it would be nice, we certainly don't want to loose the vote in the legislature of folks that like birds. (fades out).<sup>123</sup> And it looks like we are going to develop houses and you know- five dollars and ten minutes late- oops wait a minute, you can't touch that because that's the way we're replenishing the aquifer in Dane County so you can't use that either. So it turns out to be a very handsome 640 acre piece of land although we already got 8 acres that fell off the bottom because its audited migratory woods adjacent to water and food and so forth. Another 80 to 120 acres falls because there's a high water recharge at the bottom and pretty soon the total buildable site doesn't look all that great. There is a great deal of investigation that needs to go on as to where you are in the development cycle and what constraints can already be anticipated versus those which may arrive by surprise. Question--When you mentioned the second problem about the average purchaser not looking at the net usable, are you looking at the fact maybe they are bidding up the price that a developer has to pay for that because as you said they're buying land based as if all of it is usable. Chief--Yes, you'll pay a small premium over agriculture and then not use it for

agriculture, trying to be very effective. Another factor particularly in part of my other course, is that the original farm sold by the quarter section. Since the farmer bought it in quarter sections, roads had been built on the section line and power lines have come through and so forth and pretty soon he continues to sell by the gross acre and of course, the buyer thinking net usable acres and they turn out not to be the same thing. And you can use a lot of acreage per section that way. In fact I think the State of Wisconsin has what's called a four rod road ordinance and anytime you go down the section line you can have a road 30 feet deep wide on either side of the section line and they don't have to pay anything to condemn the road, the land is free. It's a basic statute, but that's the way we settled the country originally, and therefore, a lot of the roads that you see are technically built on land that is legally described as owned by the farmer but it has a limited use dedication to the highway system. In fact there is an interesting case on that, ever go down Highway M between Middleton Junction in Verona. In fact at one time we owned the land which is now the University Golf Course and what they were driving by the power company, one of its stations to put in a balancing line between two of their substations and they were going right down through the middle of my pond. So I called them back handed, excuse me but you're running a high line through our lake and we find that rather damaging to our aesthetics. Poopoo what are aesthetics anyway. We're within the four rod road line and therefore we can do that because we have permission of the Dane County Highway Department to do that. Oh gee, that's not my understanding of that as I recall from and land use law that says that's a limited use easement for a road only, and that power line ain't a road and therefore the county can't do that. They said that's the way we've always done it. So me Lake Partners, at that time Glen McBurney who was a pretty good lawyer, we looked it up and we found out not only was that illegal but all the other power companies were holding their breath waiting to see if anybody found that out. So we called them back again and we said hey fellows,

you're wrong on that, here's the legal interpretation and what's more if we take you to court and you loose, there's 60,000 other post holes that you owe for in Dane County. So a couple of days later on the highway the electric crew was out there driving their stakes down the other side of the road where the land owner doesn't know about the four rod ordinance and the fact that they can't do that without the county highway's permit. So if you look down Highway M, you'll find the power line comes down to the corner of PD and M, dodges over to the east side of the road, goes by our farm, comes back on the west side of the road and continues on its way. Er, er, er. So again, what's usable acreage and how do you define the legal interest. The other element about urban transitional land is of course that it does not yet probably have its utility systems and the possibility of getting that utility system becomes a critical element. The appraiser will spend a great deal of time determining what the service zones may be in the future for the infrastructure necessary to make that urban. And that will require a fairly intensive engineering element because the nature of the sewer interceptors, the major line, what is perceived by the appropriate commission as being in the service area will ultimately determine the value of land. Equally important is whether you're out of certain service zones. A city like Madison controls by extraterritorial zoning, as you know 1.5 miles beyond its borders. The City of Madison will not approve septic tank subdivisions, its a matter of principle. Therefore, where Robbins lives in Cherrywood was specifically subdivided because it was exactly a mile and a half beyond the City jurisdictional line and therefore, could be a septic tank subdivision. There is a great number of subtleties to so called urban-rural transitional land that the appraiser really has to get into. That becomes more complex once you get into town governments and who owns what within the town government. Generally if there's any substantial real estate interest, he is generally the Chairman of the Town Board, in self defense. Two cases at Cherrywood for example, he couldn't get his plat approved by the town board because two of three town

board members controlled the adjacent first plat to Cherrywood. They hadn't sold all the lots yet, but they went about to approve a wooded addition on the back side and so threatened with a suit indicating their conflict of interest and so forth, in which case they decided that discretion was the better part of valor. On the hand, if you were in a case up in Stevens Point in which the major subdivider was also the chairman of the town board, and the town board had passed a rule that because they participated in the gasoline tax in proportion to the number of miles of paved roads that they maintained, they paid to build the roads. So their bull dozers and their graders came in and graded the roads and graveled the roads and then put asphalt surface on them. Which was a very nice feature for a subdivider in it meant that if you were a subdivider you had no costs for the road system at all. The only thing was that 90% of all the subdivisions was being done by the chairman of the town board because nobody else could get their plat approved. So when one of the appraisers testified in court in a case when I asked him what the roads were going to cost in the subdivision, he said "nothing." Didn't have to allow for those costs at all and the jury went teeheehee hee. And you know, nobody was going to pull the wool over our eyes and his own attorney didn't follow up and ask him why don't you have to pay something, he just let it lie there because he really didn't really want to disturb the town board commission by having come out and call the court that we have a little game going on in which the rules were such that it was catering to the town chairman. As a result the appraisal was totally discredited, it just didn't cost anything to put in a road. And on cross exam the attorney for the state said, does the farmer get away with feeding his cows for nothing, well no, there's costs for us, isn't there a cost of production for a subdivision? Yes or No? I would guess there would be. Whose cost? He was dead. So there's many little nuances to urban-rural transitional land that have to be picked up on appraisal report. Which brings us then to in town land, large acreage. Once you reach in-town in areas which are probably for a lack of a



better terms are called infill acreage, land which has been bypassed and now are being integrated into the urban fabric. The appraiser must begin with a detailed land plan. There's no way to do it without first of all examining the alternative development options that are available with the assistance of a land planner and civil engineer and costing those options out. Because ultimately the value of the land will be the present value of proceeds for the seller. And the development process has to be precisely computed relative to alternative uses and the limitations of the site. You need to know a lift station is going to be required, you need to know what density could be put on there, you need to know what lands would be reserved for public purposes and so forth and the entire appraisal will be derived from, what you and the land planner decide is the most appropriate or probable use of that site. There's no way to do that without doing it with a good planner and examining the options that you can apply for. That becomes more complex of course, now that we have land use development ordinances which allow you to negotiate with various parties as to what will be done with the site or we have a variety of community design districts which are wide open. Planning and zoning may be simply to have to be residential, but you can have different types of multi-family, single family residential, but a design district might be wide open in terms of combinations of office, retail and several forms of residential and so on. Simply no way to appraise that without beginning with the land plan and then proceeding with a reliable civil engineer who costs those out for you. It's a fun type of assignment, but it requires exhaustive analysis of the planning process, understanding exactly what the options are. Some day we can talk about appraising second point out here. Classic case of infill 16 acres adjacent to Eagle Heights, what are all the different options which the owner of that may have technically and then what do they have politically and how would you arrive at most probable use. So until you get that point there's no basis for valuation. One last element on that on major infill sites that are a part of

some sort of urban renewal program. The smart people developed in the past and appraisers tend to still use it. They kind of reverse mirror image approach to valuation, but they have total square block that has been cleared in a downtown area. They would look at the periphery of uses on the far side of each street surrounding that property and flip those over and say gee if it was retail on this side or retail on that side it would sell for \$3 a foot. If you would have something similar on the flip side and they would then arrive ultimately at kind of an overlay of uses that are mirror image reflections of the uses and the price you paid on the opposite side of the street and work their way toward a weighted average price per square foot. I don't know if that's a very valid method, but for appraisers it allows them to avoid the necessity of hypothesizing a plan. They didn't have to come up with a blank presumption about the density of massing the kinds of facilities that would go forward on that. They simply presumed that something street fronted where they had comparable sales and so forth was indicative of what the land value were and not part of town and then smooth those out and distribute those out over the existing site. You still see a lot of that system in major downtown or urban infill sites, but probably not valid. You simply have to go back to some sort of land use program for major urban sites.

What I want to talk about today is some of the protocols relative to interviewing in the

case of feedback, not all of which is positive. I thought I would pass a few guidelines on.

As you know we prepared a group of resumes for the Alumni up there. And as they put these together, they brought a number of them to me that were of relatively inferior quality, obviously not created with a great deal of care. And I sooner go ahead and print them anyway if only to embarrass that particular set of individuals to a point where they looked their work compared to the others, why they would obviously see that you simply do not circulate to the general public

a resume in which there are short comings and obvious typographical errors and formats that are just generally sloppy pieces of to work. The only thing that they're going to see of you is that resume and they will have made their judgments in 10 seconds or less. The confirmation of that came from a number of our alumni who called back and had taken those resumes out and had trashed them rather than show them to their employer, simply because they felt that some of them were such that they reflected badly on them as Alumni as well as the School and that they shouldn't be circulated and wondered what the hell is going on. I guess that's my own fault for circulating them. I was hoping the embarrassment would sharpen people up to the fact that we're not kidding when we're talking about an appraisal report or a resume that has to be perfect. You're competing with the Whartons and the Harvards and the others of the world who have the pertinence to pin on their student brochure which is why we have them on the cupboard in my office. But in any event, fellow employees of prospective employers have what they call a resume bashing party on their Friday afternoon social as they debrief for the week, tearing them resume up and they figure out which schools are which individuals from that has applied and are likely to fit into their group, and you just can't communicate that way. So that's problem number one, communication in terms of your resume. Some of you did a beautiful job, others did not. That fact that I included everybody in the booklet was based on the assumption that that's what they wanted the world to see, that is what the world was going to see. But I'm the one who is taking the heat on it, so I would suggest that the Real Estate Club organize some sort committee for uniform edited resume if you would like to do that. The second problem as you're coming back from some of the perspective interviewers and employers and so forth, that in this stage of the game thank you notes are absolutely imperative. If you go to an interview and they take you to lunch or to a meal or whatever you have a thank you note. If you go to their wine and cheese affair, the object is one for you to stand out from the crowd, so it behooves

you to be one of the 20% that sends a thank you note rather the 80% who don't. But its just automatic protocol. If you get an invitation to attend something and choose not to, get out your little protocol book and find out have you write a little 3 x 5 page note that says so and so regrets that he cannot attend the invitation, at so and so and on such and such a date and fire it back. You just have to do those things. And we're not doing them as a general program and that I'm the one who is probably at fault for that in that I just assumed that was modus operandi. But it obviously isn't always modus operandi you should do that--so that if you have an interview off campus, send a thank you note for their letting you in the door and talking about the position and so on. And be sure that even if they're on campus and you attend a wine and cheese party one of the best ways for them to remember who you are is to send a little 3 X 5 card thanking them for the opportunity to talk about the job opportunities with their firm, etc. Related to that is dress code. I've had a couple of complaints already just in interviewing for your 856 seminars when you have gone out locally. You have generally gone out in what you've painted your room in or what you may have mountain climbed in or something of that sort. You really have to treat that as a formal business interview rather "I was in my neighborhood on my way to school and thought I'd stop in for your opinion on such and such." One its reflects badly on you and you're probably not going to get as much information as you might have otherwise and two, it reflects badly on our program I think in that you don't treat their time and their business situation as just that--as a business situation. So that what is acceptable campus garb is not necessarily on the business front. Obviously most of you dress appropriately for your interviews and the same would be true for trials. You want to keep that relatively subdued and not express your character in your tie and so forth. Financial institutions tend to cluster and you don't want to be out of the cluster before you're in the cluster. Once you're established and want to wear a tie that sets you off from the others you can take that risk

particularly of its some kind of bonus time. I guess I would be very very sensitive on those elements while you're in the interview process. The last element is speech. Again, people judge you by how you articulate your thoughts and so forth and in one of two instances the employers reported lapsing into your fraternity room adjectives to describe something, that's not appropriate probably any place but certainly not during the interview because you're really aware of who you're offending or on what detail you may have offended them on. So there is a speech protocol as well as a dress code and I would urge you to present yourself as frequently as you can to those that you're trying impress by using a thank you note or an inquiry or so forth. It doesn't take very long, but it has a very positive impact. If you do not do it it has a negative impact in terms of the feedback that I'm getting from some of our Alums who are on the inside wondering why those of you that would like to be in their various organizations may not get invited for a second interview or a third interview as the case may be. There's just not enough social polish being shown to get into those groups. Okay, I will leave that to Tony and Pat if you want to do something on a uniform resume basis I would be happy to work with you, but I don't think you should as individuals expect the student committee to do the editing of your spelling or your formatting for you. Its your career, if you can't spend an extra ten minutes polishing up the resume form why that's going to tell the world or an employer whose going to expect you to spend some extra weekends polishing up other factors which in the long run will be less significant than your resume. Okay, enough on that. We were talking about land valuation at the close of the last lecture. And we had talked a little bit about the unit that would be required and than began to look at the necessity of simulating different types of purchase environments. In the process of defining most probably buyer you obviously go through the steps that you would in 554 or feasibility, I'm certainly not going to belabor the usual inventory of attributes of the site and so forth. But typically once you get down to most

probably use there will be a very limited number of comparable sales that may in fact be relevant to that particular property. They may reveal a general pattern but in terms of any really hiking down the range of sales within that pattern, the market comparable process doesn't work very well. You really need to go back to simulating how that most probable buyer will talk or look at a particular site, what feelings he perceives on it, and then attempt to construct a simulation model that reflects those variables. Most probable buyers do have patterns and they are generally aware of what each other in a particular line are thinking about. For example, as you know we've been talking to one firm that does large acreage purchases for designing master planned communities for resale. Really Steve Mulincamp is moving toward some sort of urban product which then can be sold off as sites. They don't go so far as to sell you platted lots but they do lay out a residential neighborhood and then sell the whole neighborhood division to a residential developer who then does the final platting and positions the lot and the road system appropriate to the kind of house product that is going to sell and the price range that he's going to utilize and so on. They provide the major infrastructure, the major arterial routes, the general master plan and zoning to support it and then sell off relatively large parcels within that framework subject to design covenants which provide some cohesive control over it. Now in their particular case, they're working to double the value of the land every three years and they expect to have a real rate of return of 8 to 12% minimum and that having sold 20% of the land they have a payback of 100% of all of the capital that they have invested including their interest. And once you start getting those parameters, then you have to start working backwards and saying, gee somebody looks at this kind of 8,000 acre ranch or 1,000 acre dairy farm or 200 acre pig farm, in that category, how do you meet those parameters. What price falls within those elements and how do we build a model to do that? Obviously most appraisers are not qualified to do a land plan. Therefore, we'll bring into the appraisal

process immediately a professional land planner who can evaluate physical characteristics of potentials. But more to the point, we'll probably bring in a land use attorney who will evaluate the political process by which entitlements are obtained for the property in question. That can be a fascinating exercise. This last year we did second point for the Jackson Clinic. We had to go all the way back into early Madison history at the turn of the Century when there was something called the Lake Mendota Drive Association who acquired view lines and list the areas virtually as a private park there operations and eventually termed them over to the city. And as part of that they really had to establish a master plan for green space and so forth along the lake and that begins to control virtually everything from Maple Bluff, virtually to the Middleton border in Madison, as well as places like Hoxt Park and Lake Monona and a number of other areas. And it turns out that, for example, the total required that there be 600 feet of road frontage for every single family home on an Ag-1 parcel, that happens to be zoned Ag-1. It doesn't touch the road. The appraisal really hangs on a title search with discoveries that the "four rod-road" is already dedicated to the lake on the west border, by happy coincidence there's 1204 feet on that border. That means you can have two single family homes on that lot without having to get any variance, without having to go through any board other than to apply for the permit. That becomes your base number. That research either has to be done by the title company or a land planner and so forth. Then as you go through the history of land plans for Madison you find a series of overlays on that site representing alternative uses, green spaces, and so forth and so on. That becomes part of the appraisal. In this case we can start with an excellent city planner who happens to have a collection of those documents from Madison going back into its early history, which gives the build up. Until you have that record by outside specialists particularly relevant to law and titlement history, why you're in deep trouble. The second thing the appraiser really has to do is decide the availability of infrastructures. Second Point is

a classic case again in which the infrastructure is carefully controlled by the University of Wisconsin deliberately anticipating the day when that parcel might go on the market and as a result the water and sewer line both die on University property and to hook up to either one of the public lines you would have to obtain an easement from the University. You have sewer or water at economic cost or you have to run a half mile to the west to pick it up in Shorewood and that kind of incremental cost in what is essentially a fairly rocky and uneven area starts to make many types of developments noneconomic very quickly. So you can have a third party regulating the site who has no status to regulate it other than that they can control the essential elements--access to utilities and that becomes part of the appraisal process. The appraiser has to begin to evaluate the different scenarios in light of the political history and in light of- as we should say, spokesman for different viewpoints of the use of the property and that becomes a very significant part of the appraisal. One of the things that turned up in that particular search was the fact that just down the road there was at one time six lots that were available for sale, each 100 feet wide representing 600 feet to the east of that tall condominium flat. And a developer came in and proposed to build six one family houses on those lots and the conservationists rose up in arms. It turned out however, that the city had been assessing them for years as single family lots because they were platted as single family lots. The courts said the city couldn't have it both ways. Couldn't make it conservation land and tax it as though it were single family residential and therefore, said make due with single family residential and can you live with that. And in effect what happened was that the developer was given permits to have duplexes on two of the lots so he got four dwelling units out of the six lots and a local conservation group had to pay market price for the other two lots and then in effect pay for two, got two as the result of the developer being allowed to double the density on his two remaining lots. And now you have a price for land that would be paid by conservationists for doing



nothing with the site. Now do you match the same history on your site in terms of assessment which in this case you could do. And presumable you can make the kind of prose, partial development, partial wilderness and the value of the land is set by the precedence which in this case is 700 yards down the road and again the appraiser has to research that even by fitting in the land use legal talent that you add or by doing the research yourself. The point that I'm making is that much of the research in land today, particularly infill, is not the traditional physical set of attributes but rather the entitlement process. What are the constraints, what are your bargaining tools, what are those bargaining tools worth? We're doing one currently over in Milwaukee, which represents an old, very handsome area on one of the lesser known lakes near Pine Lake and this has been for 50 years a private picnic ground in which the unions and companies rented in the summer for company picnics. There's a dance hall on the property and so forth. Everything else along the way is single family residential that's been grandfathered in since year one and so forth. Now the family that owns it want to sell it. There are lands that are somewhat on the environmental sensitive side but nevertheless developable with some intelligent use of sites over and above that was swamp area and so forth. Really a very attractive area. And the appraiser really has to sit down and say what do I have here? And obviously you don't have a dance hall and a private picnic ground which is kind of an anachronistic kind of land use. What you have is a big pain in the side of all the neighbors. So all the neighbors would be only too happy to get rid of the dance hall and the traffic that that's bringing down the lake road. So you sit down with a land planner and you say all right, what would you like, what kind of bargaining target. And now given this issue of density here and the fact that we can create a new road entry takes all the traffic off the road that traditionally had carried the dance hall traffic and so forth, can we trade? An agreement among all the present single family land owners for our land use plan which linked to a single family subdivision was rid

of the dance hall. The whole appraisal on the property depends on that reality. That if you can neutralize the political opposition but achieving something that the neighborhood wants to achieve very badly. In exchange for things which they will have mixed feelings on and are willing to give up on. That becomes your appraisal. Then the major contingency of your appraisal is: here's the best liked land use plan in the area consistent with boundary uses and terrain and soils and all that good stuff, and it depends upon you're being able to strike a deal with the constituents that would get them to endorse your plan in exchange for shutting this down and getting the septic tanks that go with that off the lake side of the road. And opening that up for single family home sites on the lake and leaving one or two of those single family sites as a public access road to the lake. And the other item that you're concerned with you know the government is going to be concerned with is the septic tank, since there is no sewer and none contemplated in the area and so forth, and so what you're going to have to do is put in a new lift station and carry that sewage into a septic field that is in fact uphill and maybe 200-300 yards back of the lake so that you can have the homes on the lake. The government should be happy about the lift stations and the septic field, the rest would be happy about the removal of the dance hall. And your whole appraisal takes on those two premises. If you hadn't done that you really haven't done your work with the client. You can't value something for which there is no feasible plan for execution. And so what you decide is most probable use and then indicated to that is the one thing that will likely be in the entitlement for the property. That becomes the appraisal function for that type of land site. That's considerably beyond what most appraisers perceive their job to be, which is say you know. How many square feet there are? Find two other camps that have the same amount of square feet and a couple of apple trees the same distance from the lake etc., and you have your value. You don't do your client any kind of service that way at all. It requires some creative development analysis if you will as they cut the gem

before you even appraise the gem, when it gets down to it. How many facets we got, we saw how many facets we had, we don't know how many thousands we may have when we get to that particular stone. One area of land valuation that is in the text books that you must be very wary of, is the so-called land residual approach. The land residual approach traditionally determined how many square feet of something you should build there, let's say an apartment house or a rental office space or something of that sort, took the present value of that total enterprise if as and when completed and subtract the total cost of carrying out the enterprise. Traditional land economics always told that land is a residual value, the present value of the total improvement less the costs of improvements leaves the maximum amount you can pay for the land. In theory it works out pretty well but it doesn't acknowledge two things--one, of course, is the sensitivity of that estimate to an error in calculating the present value of the improvements. Assume for the moment that the present value of the improvements is a million dollars and the costs of all of those improvement is \$900,000. Now if we go with classic economics, we can pay \$100,000 for the land. That would be the land residual. The problem is if you're just a little teensy bit off on your income like let's say \$5,000, now you capitalize that at 10%, that's \$50,000 so now he says gee, this thing is worth \$950,000 or its worth \$1,050,000, now you subtract the cost. Your land variance is going to be as low as \$50,000 or as high as \$150,000 and all you did was make a little error in your forecast of income of a hypothetical project of \$5,000. So you get tremendous sensitivity to the land residual approach in working out the income value presumably of the improvements and so on. The second major problem with the residual approach is that it doesn't recognize that a major thrust of a land investor is to increase the value of the site by achieving higher than expected intensity of use. They got it sold, so they thought gee, I talked to my zoning guy and he said I could get 20 apartment on that and the apartment sites are worth \$4,000 each so I can do it for \$80,000. But the guy who bought it knows

that there's a little loop hole in there that instead of getting 20 units he can get 30 units on the site if you only got "thus and so" and that times \$4,000 is \$120,000. So that the residual approach really doesn't allow for the value added by the developer. A value added which typically he wants as a paper profit so that the land can be 100% financed. In the days of Section 8, the federal government said well they will allow \$2,000 a unit for land as part of the cost of the project. And if you knew they were going to lend you 90% of your values, the most you would pay as a knowledgeable Section 8 developer was \$1,800 a unit for the land. So when they gave you a loan for 90% to value which was \$2,000 time 90% you got \$1,800 and you had financed out on the land purchase. So the whole objective of the negotiation was to in effect achieve the land ratio or the land price because when divided by the loan to value rates that was available for that kind of project, you achieved no less than 100% financing and hopefully more. Land residual approach doesn't do very much to recognize that. And indeed it is also sensitive to a potential error in the first place as what you should pay per unit. So as you see the land residual approach, as it is used for appraisal purposes it should be shunned and generally regarded as totally unreliable and unstable. It is used, however, a great deal by those who are doing feasibility studies. Trying to measure the value added of alternative schemata on the land, relative to either the offering price that they are going to make, or purchase price. They have to see to what degree they can achieve paper value increments by changes in schematic plans. It's a good feasibility tool, but its not a good appraisal tool. One other element, in looking at land sales that you want to use for comparables you must be very wary of and particularly so today, of the difference between the reported sales price and how much money actually changed hands. Most land deals are negotiated between the time that the offer is accepted and the time it sold. So that both parties can have the number they want. Let's say you have a pension fund that has a piece of vacant land that it is going to sell. Let's

say it's a former rail yard land and its most recent appraisal is \$1 million and the pension fund has the rules they can't sell assets for less than the current market value of the asset. Unfortunately the very market value of the asset isn't necessarily what its worth to the developer, the developer has to deal with that. So the developer comes in and says all right tell you what I'm going to do, we can make a \$1 million offer on the property, subject to closing adjustments. Now you have a fair market price that will be recorded with conveyance and everything in the public record. And now you get down to the "meat of it". The developer goes out and does some borings. Finds some old gasoline tanks there that have been leaking away that have to be pulled because they are in violation of state code relative to abandoned gasoline tanks. Find a couple of acres that had been covered ground for gravel and so forth and filled up with crap which if you were to remove some 20 feet deep of cubic yards of crap which would be a fairly expensive proposition. So he says, "Oops wait a minute- two out of 20 acres aren't usable so I want a 10% reduction on that. The cost of pulling out the tanks, taking a liability so that maybe they leaked and we're finding surprises under the bank in terms of creosol or diesel oil or whatever else has to be removed and so forth. And now over here is the old warehouse that's on the land and we'd have a little bit of asbestos that's all gotta be canned and hauled away and so forth, and so once we've had all of those closing adjustments we going to give you \$540,000 for the land." And the seller says fine. As far as the records show he sold it for appraised value of a million bucks. Closing adjustments occurred after that determination of value, the fact that he netted only \$540,000 never shows on the public record any more than adjustments for unpaid real estate taxes or rents owed but not collected, etc., etc., etc. You have to be very, very careful of recorded land prices. Another common way of dealing with the same problem is to buy the land at market value then the owner leases it back to store equipment on or to facilitate relocation of the business enterprise. One, of course, they avoid taking a loss

on a capital asset that would require an adjustment to his books. More to the point, he can write off the losses on the land that ought to be a capital loss, as an operating expense because its rent in the following couple of years. You as the appraiser, if you go out to get the land price but you don't really look into the lease back, you're going to end up way off the mark as to what the \_net\_ economic value of that particular parcel was. Another good example of that kind of tinkering, you don't see as much of it now as you use to because farmer social security laws have changed, but there was a point at one time when there was a window in which farmers could get into social security who had never been in it before, if they could work the six quarters. The developer would go out and buy his farm, immediately hire the farmer to maintain and take care of the farm for whatever the maximum taxable social security rate was, for six quarters. And at that point the farmer would qualify for full social security benefits thereafter, and that might be worth \$100,000 or more to him. So on a \$200,000 farm he's got to be able to get a \$50,000 discount if you would simply get him on social security. Lots of deals made at some point in time or another on that kind of premise. Or maybe he needs medical insurance, or maybe whatever, lots of different ways to do that. Many developers trade for those farm lands. Farmer is close into town and its no longer economically expedient for him to run a dairy farm on land which is transition to urban areas, but his land as development land is worth \$10,000 an acre, dairy land farms are worth \$1,000 an acre. He goes out and picks out a dream farm and then says gee, "I really need a 100 stanchion barn and a super new modern milk house and so forth," so the developer buys the farm land the farmer had his eye on, builds the barn, the dream milk house and puts on the appropriate equipment to make the whole thing run and then trades for the farm close to town. So there are two things that are achieved--one, the developer takes with him his basis that he had in the farm that he traded and the farmer, not being really particularly caring about appreciation and so forth anyway, now has a whole new economical

farm operation, out of reach of urban development for many years to come and what's more they remain a family occupied farm. They never will be subject to capital gains tax or a estate tax on the property under the estate tax law. So again, the reported price on the farm can be extremely misleading. In looking at comparable sales not only is it necessary that you get the right price which may be somewhat difficult to do. The second thing is to make sure that you get right \_unit\_ on which to compare prices. What you really want to compare on is net usable acres. If you take gross acres perhaps that are reflective of the county plat book or some similar legal description of the property you would have to subtract one, all road right of ways that utilize borders of the property; two, all the flood plains; three, all aboriginal burial and communal grounds, etc.; four, all soil and slope conditions which for one thing or another are unusable; five, lands which for one reason or another are locked into public use. For example, Wisconsin has a wood lot act that if you take your woods lands, your natural lands and put them into this program for no less than 20 years at a time and agree to never to graze cattle on it, not to cut the wood on it and so forth, it simply drops off the tax role, you don't have to pay for it. And the township is reimbursed by the state for the loss to revenue. Well its very expensive to try and get that out of that particular zoning. If you buy that particular piece of property, you're going to have to see it through to the window in which in fact you are permitted to escape that typically with a roll back of taxes that would have to be paid or would have been paid had it not been in that program and so on. These kinds of programs are much more comprehensive and common in other areas like California, Pennsylvania, and so forth, where land can be in essence locked into preservation programs of form or another for long periods of time and the only way out in most cases is a roll back in which the buyer who now decides its time to use it for something else, would have to pay A. all the real estate taxes avoided during the time it was in that particular program, interest on all the

real estate taxes that would have been paid had they been in the program and often some minimum penalty that represents the administrative costs for coming out from under the program. That can be a fairly expensive proposition. Now several of these items are relatively undefined often even to the buyer such as how much is in the flood plain, how much is Indian ceremonial burying grounds. We've got some classic cases here in the state on that. Right out here where WPS is, the Wisconsin Physician Service, having bought 420 acres originally for industrial office park development and there was never any history of flooding along the Yahara, that anybody could remember. They went into court on a highly technical case, they examined the site and found little creature that go bump in the night, and determined that they were of water family cultures, and therefore, That was wet lands and therefore was untouchable and 160 acres dropped right off the parcel. So if you want to talk about what's the price per usable acre, its not the 420, its obviously the 300 and umpteenth that survived that initial cut. That really represents the price paid. Then the question for the appraiser, did he know what he was doing when he did that or did he over pay? Obviously, if the buyer knew that there was a condition, but it was vague as to whether it was 120 acres or 80 acres and so forth, you can assume that some modest adjustment required is appropriate recognizing the unusable acres. On the other hand, when you get into Indian ceremonial ground and so forth, there's a piece that up in La Crosse that the train company owns, immediately adjacent to their plant, that's perfect for office park to go, it turns out to be the largest most intense area of Indian artifacts in the state of Wisconsin, formerly and major 1,000 teepee Indian village along the Black and Mississippi Rivers, and they're dead. There's just no way they're going with that. This is really a catch-22 too. If they give it to the state, they would like a charitable contribution, but the Internal Revenue Service says it isn't worth anything, because you can't sell it, because who needs an Indian burial grounds no one is buying those and therefore, the total value of your



contribution is probably you attorney's fees (end of side one) and so on, it isn't your historical cost. You paid too much for it in the first place and you didn't know what you were buying. So again in that case you can take virtually 90% of the parcel and write it down what they paid for the other 10% that is utilized. So you have to look at the cost in terms of the net usable acreage 1) as perceived by the buyer when he bought it. Consistent with your knowledgeable buyer/knowledgeable seller rule. 2) consistent with what evolves after the purchase. I love the story of when they were starting to put in the foundations for the Milwaukee Center project and they ran into a pile of bones which shut them down for weeks only to find out that at one time it had been a site for a slaughter house and they were cow bones rather than people bones, it came as great relief. It can be a little startling to start off on a major project and it suddenly plow up a problem of that sort. As you recall the speakers for the Embarcadero Center project this last year in San Francisco, pointed out that the entire project was build where the wharfs were extended out across the muck flats to a point where it was deep enough for the boats to unload and when the gold rush was over why many people didn't wait for extracting the boat or they had lost everything that they owned. Eventually the City just came in and burned the boats and the debris that had been left there to clear the site and all sank to the bottom and they started digging out for the Center and they hit this treasure trove of memorabilia of the gold rush all on mud bottom of the bay there and it set them back almost six months while the anthropologists decided what we were keeping and what was just something trashy. So the appraiser has a real problem in defining not only the price, as reported publicly, but how many units did the buyer think he was actually going to obtain in terms of net usable acreage. The last element to talk about, and then I'll quit, is that in many bypassed infill sites in urban areas, the laws have been liberalized to present what are called Transferable Development Rights (TDR). People buy the land not for what you can do on that particular

site but what it will do for another site, either contiguous to, or at some distance from the subject property. It becomes a trading chip not desired for itself but desired for the increment in value it will bring to something else. For example, San Francisco has subdivided all of its buildings into A, B, C and D classes, with A being untouchable specifically from an historical stand point and D being won't you please tear it down sort of category. And the developer buys a big chunk of vacant land which is immediately adjacent to one of the A class buildings of relatively low density but fairly high development density potential. He buys the building that is underdeveloped, then under San Francisco law he can transfer all of the density allotment that was unused on that site to his parcel. So the value really has nothing to do with its own intrinsic income power. The value really has to do with transferable development rights that come as part of it. And quite often in vacant land sales today there are very significant transferable development rights that come as a result of either no develop--allowing it to be green space or park or low density the development with the balance of the presumed intensity of use, actually going to another site, sometimes contiguous and sometimes not. Different laws have different degrees of float in them as to how far you can move the TDR. In some instances the land may be bought simply to create parking for another parcel which otherwise wouldn't meet parking ratio requirements or similar density elements and the state or city codes will allow you to treat the two noncontiguous parcels as one. That by the way is a two way street. If you're in an eminent domain situation and somebody condemns the vacant site, but its providing parking for the industrial workers down the way and its a totally noncontiguous parcel in the next block over, you have to compare in your eminent value the before and after of the total parcels--the one in which the workers are working as well as the one in which the workers are parking and then what's the value of the factory if the workers have no place to park? Not any different really than what we talked about last time in terms of the farmer who

has so much corn land and if you take the corn land, its not the average price per acre, you've really taken the farm as far as the value of the dairy farm is concerned. The principle of balance is such that land can take on significant values because of its relationship to other parcels which are not contiguous to it but which with it works in some form of interactive way. Parking being the most common. In some cases open space requirements being met. In other cases simply some place to hold storm water on site until you can release it or whatever. Okay, with that I quit, I'm running out of gas.

(Announcements of employers visiting). The appraisal--I believe all of you who are

December graduates and so indicated on your appraisal report, got your appraisals

back and as a general observation most everybody was making one mistake that did in common. Most of them are reasonably good. Some of you have more trouble with English than others and some of you had a little problem with appraisals or one

of the problems you really have in trusting your associates so that when they give you a list of building construction details, I don't think you bothered to read it necessarily so that the small technical problems. For example, post and beam is a wood construction, Lally column and light I-Beam steel construction. Lally is spelled with a capital Lally, named after the guy who some how figured out how to put concrete in the hollow pipe. The construction out there is technically not post and beam, its Lally column and light steel beams with bar joints or what are sometimes called web steel joints supporting the deck. Small technical problem. All of you believed what was on what ever sheet that was handed out it had post and beam on it. Also on the gas line I think there's five hookups of which the major tenants had one of their own and the other two units I think share one, something like that which some of you had wrong--minor problem. The major problem is a basic inconsistency. You sit down and you say

okay, what I am appraising is a legal interest encumbered by certain leases and a land contract. Right? That's what you said you were appraising. But there's no way to tell from your letter of transmittal what number you gave me. You say the value is \$895,000. But when I start reading it, that that's the total value of the shopping center at least that's what you said it was. There was no statement that the total value of the shopping center encumbered by leases is x dollars and then I subtracted so many dollars for the remaining balance due on the land contract. That basically what you said you were appraising was the andying interest right? And by the time you were done you forgot there was a difference between appraising the shopping center and appraising the "andying interest" in the shopping center. So you defined the legal interest correctly, when you identify the encumbrances and so forth that were on the property. But when you got to the letter of transmittal where we're looking at the back end of your report and your conclusion, you didn't go back and relate what was the net interest that I said I was appraising. So far so good? Now that brings you then to the other critical issue of fair market value for eminent domain. Several of you mentioned quite correctly that eminent domain values the total fee, which is correct- it does. Fair market value for eminent domain would begin with the market value of the property unencumbered by leases. It would require that you run your discounted cash flow model again, assuming that Kroger and who ever else is at a nonmarket rent, was at market rent, and then subtracting from that one, the present value of the leasehold interest to the benefit of the tenant, because they would paid out of the eminent domain proceedings the value on their real estate interests which is the difference between the market value for their space and what in fact they are paying. So a number of you pointed out that larger spaces went for say \$3.00 a square foot or whatever you concluded, and then Krogers was at \$1.65. So that's \$1.35 leasehold advantage per square foot or whatever the remaining terms on the lease are including options that go out to they are 2,000 and umpteen 7 or something

like that. And then you had to subtract the present value from that, the key to that issue which nobody has addressed it yet but I'm sure you will if you see it on a test, is what discount factor to apply? You applied the same discount factor to the leasehold position as you did to the real estate. In other words if you said 13% was the discount rate for equity investment in real estate, then 13% is the correct discount rate for leasehold, generally not. Generally there will be a higher discount rate for the leasehold because that has a certain risk factor: will the business survive long enough to take advantage of the all of the months in which it still has an advantage over the market place. So then in effect you would have to take market value as though unencumbered by their leases, minus the present value of the leasehold interest of the tenant minus the land contract balance, to get down to the eminent domain awards. Now eminent domain says essentially that the sum of the real estate interests cannot exceed the market value of the property. The right space can be bought at 100%, but its the market value of the property that in the classic sense, that rents are at market level, everything is according to the market, not necessarily a contract that existed that was there. So you have a little reconsideration. But notice the difference between the two is in the first case most probable price, you start out with the contract rent in place and arrive at your value accordingly. And in the fair market value you ignore contract rents, go directly to market rents whether they're more or less than the contract, doesn't matter, and then subtract the value of the leasehold position, then subtract the value of the land contract position. The other error that was quite common and understandably so because you tend to go along with 25 N. Pinckney which was a somewhat different situation. You remember 25 N. Pinckney concluded that most properties sold subject to terms. Most of the deals were seller financed, right? Yet all of the deal that you looked at were in fact conventionally financed, there was no seller financing involved. Right? So you arrive at using the market comparison approach the centralized value plus or minus so many

dollars, right? And the same thing is true -- there's a sensitivity study on the discounted cash flow approach. You generally use the higher or lower rent, you know, if its worth \$6.00 a square foot its worth so much, if its \$5.50 its worth so much, and you arrive at a rate. At no time was there any suggestion that the rate was due to financing. Yet in the letter of transmittal you always stated the central tendency value is such and such, and it will sell for more or less depending on financing terms. Where did financing terms have anything to do with it? The range was due to either the error from the data because that wasn't very exact, that's the closest you can fit a curve or something to arrive at the spread, or it was do the sensitivity relative to the income. But in none of those cases was the range do to whether the seller was willing to provide financing or not because you had already determined that the seller was going to sell for cash. So you have to be careful when you're talking about contemporary appraisal that the range is not necessarily attributable to financing terms, particularly when you've already excluded in your report the fact that the seller was going for cash and all your comps were for cash and your discounted cash flow generally didn't explore what would have happened if the seller would have done it for 6% financing on 50 year terms or something, you know you would have gotten a different number with it, those weren't any avenues that you had to explore nor did you explore. Therefore, you can't conclude that the range in values had nothing to do with financing income. You forget that appraisal is an exercise in logic consistently, is almost more important than reliability. So that's an error which was almost in common to everybody. Don't feel badly about it, its a very common thing you all get trapped into that because you don't necessary--by the time we get to our conclusion we forgot what the beginning was any way. Now that certainly answers one of the questions. So the mortgage goes on that ultimately. We'll keep chugging along. Does anybody here who is a December graduate, who didn't get their paper back because it wasn't so labelled. Okay, I'll have another batch

hopefully back for a few of you anyway on Wednesday and we'll proceed to have the great majority--all the on term papers should be back on Monday. And those of you that were a little late, I reserve the right to be a little late and should get them to you towards the end of the next week. Question--For recording the appraised value, something very specifically comes to me to subtract the lease value from the land contract in supporting the fair market value as it stands. Chief--Well it goes back to what did you perceive the question to be, how did you define the interest to be appraised? Was the question, what's the value of the shopping center or what's the value of the underlying interest? Okay? The value of the shopping center is whatever the contract rents produce. Now, talking about the market comp thing. One, some of you of you simply did it on gross price, that's a very bad idea because there is no sensitivity to size obviously. You're much better off to adjust the price per square foot of something or other or GLA or whatever. Some of you did what you were suppose to do in terms of an exercise which I realize is going to probably beat the GLA anyway, but you ran a regression to the price against maybe the GLA, frontage, lot lines, and a couple of other things, and obviously GLA, you know jumps right out at you because that's a critical element here. But you missed really in all these reports so far, and I have not read them all, but certainly looking at many I can see schools of thought shall we say.

(laughter) None of the "schools of thought" that I had looked at are so far. I'm going to tell you what I did on the same one and we got a pretty tight fit. Because the real difference between the prices isn't just size, its price. So the first thing that came in at 30% weight is the relationship of site size to gross leasable area and 5 was a site to GLA of greater than 4.5. In other words you've got plenty of land relative to the Center. Otherwise, 3 to 4.5 and less than 3 times the GLA. Position the shopping center at the time of sale--most of us had that although we had one additional schedule at 5--well maintained, less than 10 years old, the majority of space was renovated or finished in the last 5

years. More than 10 years old--some space renovated. More than 10 years old--no renovation. And zero in need of complete renovation which of course is the Middleton project. Then we looked at population density within a 2 mile radius, we got 20% weighting. But then the critical one that nobody is picking up is, average rent at the time of sale. And a 5 was \$5.00 per square foot of GLA rent, 3 was a \$3.50-\$5.00, and a 1 was less than \$3.50 per square foot. Because that's really what price is moving with--is the profitability of it. And what you do there is you pick up the presence of bad leases. You know what the average rent was per square foot, either gross or net--depending on which number you got. You have some sense of how much that value is being held down by the existence of a bad lease on a big area. And certainly our particular Center is one of those which has a big chunk of space under a bad lease at \$1.65 a sq. ft. Now nobody tried that and as I result nobody gets that correlation, and that really fine tunes it. The other one, and this is not dissimilar to several titles, it's essentially the same thing, was something called drawing power to attract consumers. A couple of you had that like maybe had my seen my report, but what you did was you said was strong, average, weak. Highly subjective call. No way can the read know how it was that it was strong, average, or weak. Now we have a drawing part that attracts consumers who we had very specific rules. We got a 10% weight ultimately and we said a 5 had all five of the following attributes: one, visibility; two, stop light at adjacent intersection; three, adequate landscaping; four, strong attractive graphics; five, balanced tenant mix. Then if we had a four had four out of five, a three had three out of five, etc., and a zero, none of the above. Now you made explicit rules. If you leave it too subjective you're obviously forcing the issue, you had created a dummy variable which is helping you zero in on whatever number you wanted or reducing the variance, but its still pulling it off a sky hook. Whereas if you create a specific set of conditions then anybody else would presumably arrive at the same conclusion--an objective statement. Now its



objective to the degree that once you had figured out which five of those things you want to decide whether you've got three of or four of or whatever, people can reproduce it. A lot of you used something really kind of subjective and vague. Good looking, 5, 3, 1. Well, you get in a court room and they're going to hammer at you in terms of the subjectivity of that. So with my point and that's guiding the lily because Jean did all of the work and I admit that behind every good man is a woman who made him that way, and it doesn't come easy. I think we fussed around with this one for three or four hours by the time we figured out what was going on here. But at any rate, our predicted price was \$40.37, the actual price is \$40.44. And we were off by 2/10ths of 1 percent. And on this sale we were off by 5/10ths of 1 percent and on our former Eagle building we were off by 4/10ths of 1 percent. We've got eleven ten, they paid eleven fourteen, obviously they didn't cancel the bill and day good-bye. And as a result of that our price per square foot, our low was \$21.10, or middle range \$21.20 and our high was \$21.29. So we went from \$8.81 as the central tendency to \$8.77 to \$8.85 on our market approach. And a lot of you had \$200,000 plus or minus which is a useless number. Your client is going to say, to you what's your variance level? On a \$800,000 shopping center I can move \$200,000 one way or the other? and that's not the government working- Feeding your brain. At any rate I thought that you might find that useful and instructive. Question--on recode. Chief--Well the interesting problem with that is first of all which method did you use. Do you rely primarily on the market comparison approach and that requires that you know what the average rent is order to get a fairly tight distribution. You're going to have to go back and create a new average rents at market rents for the grocery store. If you use the income approach, you're really getting dragged down on that lease going to year 2007. And the other problem as we mentioned, what discount rate do you use? Typically the discount rate on a leasehold should be slightly higher than on the real estate. Question--Logistically though, in lieu of taking a proforma discounted cash flow

model, can't you just look at one particular legal interest? Chief--Well, I think that's dangerous. I think that either way you look at it--sure you can add back, if that's what you're talking about. Here's my value as it is and I'm going to add back present value of the leasehold. You can do that, but none of the rest of your appraisal really supports that very well. So that's the short circuited way to do that. You are much better to arrive at market value, however, you arrive at market value--market comparison, or discounted cash flow, or cap rate, whatever one you use and then work back and discount from there. It is much more parallel with what you do for the most probable price which in this case is the contract rent value-less the interest of the land contract. Okay? From a paralleling standpoint you're better off to it that way. You may arrive at the same answer, you're quite right. But, compared to presentation logic, the American Institute in talking about fair market values says tell me fair market value first \_then\_ start deducting or adding for other interests that may be involved. So you end up with kind of a grocery list of the impact of financing, the impact of leasehold, the impact of personal property including real estate tax. We had mentioned at the end of the exam, the bank board's forthcoming capitulation on R41C. In May they have proposed a 41Z which tighten up a little further on what an appraisal should obtain and how it should be presented, and so forth. And of course, there was a great deal of grumbling both within the savings and loan industry because none of them knew how to go out and make an appraisal anyway and so they were kind of miffed that they had to go through this extra work and actually be accountable for it. And of course, the appraiser were raising a big stink about it because my God, you know, only 10% of us could do a real appraisal--you know, you're putting the rest of us out of business. So all of a sudden on October 2 the Board withdrew its limited fee proposal and issued a draft of a new proposal that shifts the burden to the lending institutions to develop and implement their \_own\_ \_prudent\_ appraisal policy they have done this very intelligent so far. The

argument for the reason they did that presumably, was the result of something called the Competitive Equality Banking Act which the banking lobby got to initiate in August which required the bank board to "promoting an appraisal standard which is consistent with the appraisal standards established by the federal banking agencies." Since the federal banking agencies had no appraisal standards, the result obviously, was that they threw out what they had. After all the savings and loan people were going to make the banks bad. If they had appraisal standard their equity might be less flimsy and that could ruin the banking business. So in renewing the May proposal the Board concluded, "specific modifications to its structure and content were necessary to accomplish the CEBA mandate (whatever that was--mandate of the Competitive Equality Banking Act)". This shows you how strong the banking lobby is, probably even stronger the automobile or the oil lobby which has taken quite a bit. The Board's action was just the direction its been taking from a position of issuing detailed instructions to insure institutions that wanted to place the responsibility for appraisal quality practices squarely on management. Notice how well they've done so far squarely in the hands of management having lost about \$25 billion which is encouraging. Appraisers should note that 41C remains in effect until the bank board finalizing action on any new proposal. But I love some of the language in here. The Post-Pope rule would not: set forth specific indexes of acceptable appraisal, rather it would instruct the management of each insurance institution to develop, implement and maintain appraisal policies and practices. A statement of policy would be issued in connection with a proposed rule which would serve as a guideline. Institutions however, " Must adopt appraisal policies different for those set forth in a policy statement as long as they have to do with principles of safety and soundness. In explaining this shift the board stated that because the new proposal emphasizes the exercise of discretion by management rather than individual components of an acceptable appraisal it will promote flexibility in

achieving compliance with the Board's appraisal policy and with foster both cost efficiency and competitive equality with the banking industry." Now that's gotta be black humor at its best in terms of government language. Cost efficiency now relates back to the fact they have lost \$25 billion. I don't know if you just saw, they just closed a savings and loan in Dallas that cost them \$1.7 billion--just for the one savings and loan. Now what could they have saved if they had appraisal standards? Now "cost efficiency" has got to be incredible black humor. And finally they're talking about "competitive equality with the banking industry"--what does that say? Essentially, we can now be as amoral as the banking industry because we're both covered by federal agencies which can write blank checks indefinitely to cover our losses so let's not have appraisal, Louse up have a good business operation. You can appreciate that there is over 500 savings & loans which they cannot afford to close at this time. And the FDIC has another 300 banks which they can't afford to close because that would bankrupt FDIC. And in the meantime, the boys go whisking through and knockout 41C in which a great number of people labored very hard to put in place and establish some idealism about the appraisal process. Absolute disaster! But classic American politics at work against our self-interest. Anyway I thought I would pass that along to you which is something of a despairing note. Okay, the studies that I want to look at is eminent domain and condemnation appraisal. (laughter) One of the major areas of activity which really hoists appraisal into the forefront as a significant business enterprise, was the significant expansion of both federal and state takings one, as a result of the interstate highway program, of course, which required broad strips across the landscape and two, of course, the urban renewal program which leveled acres and acres and acres, parcel by parcel, of real estate. And in that process it became apparent that our eminent domain laws were anachronisms which certainly favored government at the expense of property owners. The constitution guaranteed, of course, that you were entitled to compensation for

the property taken but the indemnification was very narrowly construed would be that only of the land and building or real estate interest and not of the consequential losses. You could take the little Italian butcher shop that paid \$100 a month rent, or whatever it was, in an Italian neighborhood and compensate them \$60,000 for their leasehold and their little butcher shop, but that was the end of it. The fact that he had now to find another location that perhaps he couldn't find another Italian neighborhood and that he would end up as a butcher at the local IGA because there was simply no other set of situs factors that would allow him to operate an ethnic butcher shop, was totally disregarded by the eminent domain laws. Cost to move, relocation, the fact that you lost your business identity, all of those elements were simply not compensated for by the eminent domain process and you were to measure only the value of the real estate. As usual the voters and the common vote were ahead of the government in perceiving that this was a gross injustice that consequential losses were as significant or greater than the real estate losses. And so most of those that fought the taking of their property did so in order to arrive either before a condemnation board of local residents or the jury in circuit court and presented what appeared to be outlandish appraisal values which the juries readily granted realizing that unless they went to fiction of a rather gross and distorted appraisal of the real estate interests, there was really no way that alternative losses and consequential losses were going to be compensated. And appraisal, of course gained, quite a black eye in participating in this general obliteration of the folks on the firing line versus the government bureaucracy and the Constitution which it defines eminent domain so narrowly. Ultimately Edmund Muskie led a campaign to reform federal condemnation procedures to provide for at least reasonable statutory recognition of consequential losses. This was to be applied to any type of taking where federal financing was involved--urban renewal, highways, schools, etc. The states were free to have their own rules relative to nonfederally financed items. And many states still do and many

states are still harsh relative to their ultimate award, particularly those in the South where they have the double standard of course, when you get discouraged as to whether you are a minority or one of the white power structures and a good many close to the South have gone to jail for the frauds perpetrated through the condemnation courts, including the governors of several states who happen to have farms located in half of state projects. Wisconsin was quite different--Wisconsin under Governor Knowles setup something called the Goldberg Commission and Mr. Goldberg was a delightful Dean of Condemnation Appraisers here in the state. A philosopher and a fine lawyer and he said it made no sense at all for the government to have a double standard, one, in which federal monies were involved, they were reasonably sensitive to the need to compensate to relocate the property owner and a state law which said if the federal money wasn't there we're going to stab the poor bastard to death and take his property as quickly as we can. We may still have strict foreclosure, they go in 30 days, bang you're out. And we can fight with them for the next 5 years about how much money you're entitled to but in the meantime you're still out in the cold and they just paved your front yard with concrete. Such as Alaska, for example, that's what they call a quick take procedure. And Goldberg in effect said that the state of Wisconsin would give everybody, everything the federal government would provide and probably a little more. And the basic law in Wisconsin and at that time Michigan and no other states; is that the property owner is entitled to the difference between the value of his property immediately before the taking and the value of his property immediately after the taking. Pretty radical stuff. In most states you've got the average prices--the average price of the barn at .22 a sq. foot--that's what you got .22 a sq. foot or whatever they took. Whether they put the corn land or the swamp land didn't matter very much--that was the average price of the farm. Here as in the illustration that we used earlier in class, if you take that portion of the corn land which is critical in maintaining a certain balance of

power through the barn and so forth, you can destroy the whole value of the place as a dairy farm by taking the critical 20 acres even if you still had another 200 acres left. The before and after value would measure that. However, the thing that the citizens had a little trouble with was the fact that it was possible and it occurred in many situations that because the highway had now gone through the corn field and maybe there was an intersection there as well and now they owned four gasoline and motels sites as opposed to some fairly nondescript farmland. The after value was higher than the before value and they got nothing. And that was a little hard for the citizenry to accept. They might deal with the law when it went the law with the other way: if after values dropped more than proportionately below the before value. But they weren't too keen on the special benefit being assessed against the taking in essence. And so as a result the Wisconsin law was modified about 3 years ago to the effect that you have to measure the difference between the before and after value and also measure the value of the piece taken in which ever is higher is your basic award. In effect, not giving a credit to the benefit of the state for the special benefits that are enjoyed by the property owner as a result of the "improvement"- whatever it is. With the exception of a total taking, every eminent domain appraisal is really three appraisals. One is the value of the property before the taking and before any cloud of taking has occurred. There can be a situation in which the announcement of the public project will precede by some time the actual execution of it. The properties that are realized to be in the path of that project maybe depressed in value because most people are not going to buy into trouble and know that they're going to lose the property in a short period of time. For example, when the University announced its expansions to move South of University Avenue, to Regent Street, all the property essentially between Randall and Dayton Street fell under cloud of eminent domain. Therefore, the sales prices that occurred after that point were no longer relevant. For it was presumed the price perhaps to be depressed by the

fact that not everybody wants to be in a situation which would be at some point in time voided by the taking of their property--not knowing exactly when that would occur. So that's why we say before the value and before the cloud of taking has occurred. Second of all, you must do the after value subject to the rather interesting fiction that the after value occurred immediately upon completion of whatever public project is contemplated, but you now have to visualize where is this house going to be relative to the embankments going to the intersection bridge or how is this going to look when its now clouded by this huge monstrous convocation center that stands nine stories high on a corner and in the shadow and so forth. What is the status quo immediately after completion of whatever the project is that's proposed. Obviously sometimes beneficial, sometimes not so beneficial. The house is now 20 feet closer to the highway, the highway is now four lanes and you've got semis roaring down at 90 miles an hour. Obviously, there is more than a taking of the property, there's a loss of privacy, etc., etc. In fact in New York there was one case in which they barely missed the property but the grading of the highway stripped all the trees away from the side of the mansion so that it had no sound and privacy barrier between it and the traffic stream and it suffered a very significant deviation in value as a result of being at the bottom of an embankment and the trees were gone, etc., etc. So the appraiser has to visualize that, what's it going to look like when its completed--is this good or bad. How will that affect the value. It may significantly change the use. Indeed many eminent domain appraisals really get down in the trenches once they get to the court room as to whether the impact or the improvement is such that the entire situation in terms of best use is changed. For example, in Milwaukee, one of the major car dealers--a Chevy dealer up on Green Bay Avenue, and when they expanded Green Bay Avenue into essentially a limited access road, and so forth suddenly you could go right by the Chevy dealer, not only did you knock off a few feet on the front of the site, but in fact you now had to go a mile down the



road, get off at the new intersection and then double back on the frontage road to get there. Ultimately they successfully contended in court that the inconvenience of being able to get to the car dealer had changed its character from that of a retail car dealership to essentially an industrial warehouse site so that the after value was a whole new appraisal. And a brand new car dealership of all the latest widgets and whistles and wheels and so forth, but the locational obsolescence essentially had negated all of those features and what you had was a chunk of industrial warehouse space which if you bricked it up and got rid of all the stuff for cars it might be useful for storing butter. He had a significant change in use and therefore, the after value was quite, quite low. That often occurs from just a violation of leases, for example, right past LuLu's there's a little green concrete block building that survives from yesteryear and that was leased to the University for many years at a very very favorable rent--it was a little money machine. But the clause in the lease stated that they had to have room for 5 or 6 trucks that were part of the geology boring and drill research team and the new University Avenue came and took the parking off the back end of the site. That violated the lease because there were no longer 5 parking places for their truck, therefore, the University could leave and instead of getting \$5.00 a sq. ft. for their space they now get \$1.00 a sq. ft. for their space although the building is essentially exactly as it was at that particular point in time. Just that little taking makes a profound difference in the before and after value of the property. The classic one which I don't think West Virginia really meant to do, was that they had a steal mill which had two routes of egress for the trucks coming in and out with materials and tripping of steal and so forth. One was coming off a street in which they were going to build an overpass and the other one was over the railway tracks to a highway. Problem was they took the one under the overpass, or where the overpass was to be built and there was no way to get up to the overpass from the steal mill site and then they discovered after the taking that

there was no right for the steal people to drive over the railway tracks. They simply had been doing that at a matter of convenience but they had no easements, they had no right of access from the railroad and the railroad said we really didn't want that to happen because we can hit one of those trucks and as a result the before value was a going steal warehouse and the after value was zilch because there was no way to get to the site. So the before and after value can be rather dramatic. The third appraisal is what was the value of the piece taken--that gets a little messes particularly if you take a sliver out of the middle of the property or you took 3 ft. off the front of the property or you took 2 ft. off the back of the property--what was that little 2 ft. piece worth or 5 ft. piece worth or whatever--just on its own? And sometimes its very hard to figure out what the best use of that piece really was. One may say highest and best use was to keep the rest of the world together and now that it is gone and the rest of the world in two pieces and how do you figure out what that third value's worth? So essentially then an eminent domain appraisal in Wisconsin is three appraisals where ever you have a partial taking. Obviously, the taking of a total parcel you're after value is zero and the intermediate piece is of significance here. So where ever you have a partial taking its three whole appraisals and you may or may not be blessed by such a minor difference between the before and after best use that you can use your same comp, use your same adjustments and so forth, or you may simply change your adjustments. Quite often they're not too dramatic. Question--on stand alone property. Chief--No, its treated as a stand alone property. That's dumb, but what its really saying is that in no case will you get less than that. You will always get paid something for what was taken, because we had a lot of situation in Wisconsin where the property owner got paid nothing--the presumption was by appraisers, the after value was equal to or greater than the before value of the total property and therefore, they had wonderful you suffered some losses in land but with the special benefit of the new road and

the intersection or where ever, it was such that on net you are better off than you were before. Okay? And that's what the voters didn't swallow, so they said nix on that, its going to be either or under the statute. Question--how much time can lapse between the taking and the completion of that project, is there a statute of limitations involved at all? Chief--No, you simply have to imagine what it would be like. Now the state can get itself into fairly deep water if it never goes forward with the project. In other words, if it goes into court, as we'll see in a moment argues why there should be a taking and then never goes forward with that project, its vulnerable to some pretty heavy suits. A good example of where the City got themselves into difficulty on that is that cut off the goes from Williamson Street to Atwood and bypasses 5 point, that originally was to be a Boulevard--2 two lane strips--and I forget what the exact logic was about but they decided not to do that and just have a one way road which goes out to Atwood and then you come through Atwood, 5 corners and so forth. A number of property owners sued the City quite successfully because they thought the taking was unnecessary. There was an excess taking of the property more than necessary by the fact that they never an access to a boulevard. So if the public entity takes it and then there's a change in plans and they don't go forward with it, there are some very serious ramifications. Question--What about the block on University Avenue where they were going to build condominium and they leveled everything, except having a parking lot. Chief--There you have some further complications. (end of side one) (side two) Now, to go into eminent domain proceedings It requires obviously the constitution which says no person should be deprived life, liberty, or property without due process of law. Nor should private property be taken from public use without just compensation. So the first purpose of the first problem is that for a condemnor, do they have authority to take property in this particular situation? Now that generally requires a legal opinion. Communities obviously, cities, states, and so forth, all have rights of eminent domain, but they're not all powerful rights in

eminent domain. For example, the City of Madison's and the railroad's had equal power in eminent domain so the City could not condemn the rail lands even though the railroads were ready to part with them. They simply indicated a vestibule limit of the days in which the railroads were extremely powerful politically and they could condemn anything. By the same token the State Highway Department could not condemn the Arboretum land without working out an arrangement with the State of Wisconsin. So the first question for condemnor is do my powers of condemnation fit this particular situation--in terms of a hierarchy, if you will of control. Not only do public authorities have it but obviously certain private elements have it for specific purposes--utilities can extend pipelines and electric lines and easements and so forth. We can have public urban renewal and redevelopment authorities and we can have in the State of Wisconsin specific instances in which a private corporation recognize that doing redevelopment and stymied because one property owner won't sell to that. They can be given eminent domain authority for that property. Relatively unique. Very common in other parts of the country--Missouri, for example. If you become a redevelopment company privately and you get approval of your redevelopment plan from the city council and the other agencies that have approval, you now have the right of eminent domain to take out any recalcitrant property owner that is unwilling to go along with the larger neighborhood plan. In effect redevelopment is being treated in part like a public utility. Different states have different rules as to the degree of power that the various agencies have. So the first question is what kind of agency to I have here? Do I have authority in this specific case to the use right of eminent domain? There are two very fine points on that as well, particularly in the federal courts. The federal courts relative to public authority of any kind states, cities, parks service you name it--distinguished between the latent power of eminent domain, meaning that you are eligible to use those powers under certain circumstance and effective powers of eminent domain which means that the budget has already been

approved and funds are allocated. And who ever would sign has already signed. For example the Governor must sign the certain elements for the State Dept. of Natural Resources before they can use eminent domain. Now why is that important? Well, for the appraiser in particular, he's looking for comparable sales. He cannot use a property that was acquired under eminent domain. Now the question is, was the property really acquired under eminent domain or was it simply negotiated? For example, in dealing with the Forest Service out on the West Coast in our outlying wilderness case--there were many examples of where the Forest Service had negotiated purchase of remnant pieces of wilderness and they were arguing that we could not use those as comparables because they were taken under threat of eminent domain which means i.e., no arms length transaction, where not a negotiated transfer other than one in which one party had the upper hand. Counsel for our client successfully argued that, wait a minute, at the time the Forest Service acquired that they were not funded for that, they in fact used funds from another program to pay and then later brought the records up to date with it. And therefore, while they had latent power of eminent domain, they had no specific powers of eminent domain relative to that property at the time they acquired it, therefore, it was a market transaction, and therefore what they paid for it was a legitimate benchmark for the takings that were at issue in the outline sketch. So you have to look very carefully, first of all at the condemnor, what are his specific powers of eminent domain and are they in fact enforced relative to whatever it is he's suppose to do. The IRS is also interested in that because as you know under the involuntary conversion if a property is taken under eminent domain, the property owner need not pay capital gains tax if he reinvests in real estate in I think 24 months. Now it makes a big difference to the property owner to be sure that if he operated in that procedure, maybe he's settling for a little less than he would have otherwise, because he realizes that gee I don't have to pay the capital gains tax of thirty-umpteen percent on this baby. And he finds out later that

the taker didn't have the right of eminent domain. It was presumed perhaps by the seller of the property, but that in fact technically it was a negotiated acquisition he had the no tax event. But quite often the property owner to be sure--would have to go right down to the court house steps and build an audit trail of legal proceedings that indicate that in fact the condemnor was proceeding under the rights of eminent domain and those rights were in fact in place, and not just latent, at the time the transaction occurred. Okay. What is the public purpose for the taking? What is the public purpose for the taking--is it consistent with my powers of eminent domain? Am I taking just what I need for my purpose or is there an excess taking here? Because the property owner can challenge one, the public purpose of the taking if he feels that there isn't one, or is it justified that taking of the property; or two, he can argue that they're taking too much. Good case in point. A good friend of mine, Bill Tennyson, who was at school with me in Marquette, he's a good appraiser over in Milwaukee and his brother worked his way through school running a filling station for motor cycles on the corner of Hampton and Silver Springs, which as the city of Milwaukee developed, because its highest traffic intersection in the City. And the State decides to enlarge Silver Springs to a four lane boulevard. And initially come in with eminent domain and they are taking their entire corner site. Now Bill's no dummy and he does a little research he finds that the single family home immediately adjacent to his property, on what I think is Hopkins Street, is owned by a dummy who is representing Standard Oil. Now Standard Oil knows that if the City takes the fee that the City will now sell them the 5 ft. they didn't need, and they will now have a corner for a filling station site on one of the highest traffic intersections in the City. So Bill comes back, sues the City and says oops, I object to this condemnation for the purpose of your taking the widened Silver Spring you need x number of feet of my lot, I'm going to keep the piece 5 ft. wide and 300 feet long for my very own. The City says, you gotta be out of your gourd, he says, so I like to raise corn.

So that's the only thing they were allowed to take. Now, there sits Standard Oil, 5 ft. from paradise, because they had to buy the strip from Tennyson for more than the City paid him for the rest of the lot. Plottage value. So you gotta be sure that you understand the purpose for which the property is being taken, and therefore how much property is duly required to do that. Purpose sometimes is very subtle. For example in the Ahtna case, if the power company is taking the land for what is essentially a balancing function, an intertie line rather than a power transmission line, they do not have to comply with federal environmental codes, but if in fact they take it for transmission of power then they have to meet environmental codes which in the case would have required a much wider swath on the Ahtna's land. They gave themselves away by setting up 165 kv. lines with 365 kv. wire. All you had to do was change the transformer at either end and they're now transmission lines. It changes the whole ball game. So you have to look at how the condemnor is looking at the land, what's his purpose, and hey, what's going on here, do you really need all of this land, or what do they have going on? Once he decided what the public purpose is, the next thing he has to identify is every piece of property and every ownership interest in that property which will be affected by the take. Once that inventory is completed he then goes into circuit court as a petitioner indicating to the judge that he would like to take and that he identifies the property, identifies the specific pieces that he's going to take, ownership interest and says, judge I need the following: 1.) I need a hearing on the public purpose of the taking; 2.) I need you to establish an eminent domain commission which will review these awards to be made to each of these property owners and make the initial decision as to who gets what. That commission is to represent the property owners in the County in which the property is located and so if you're going across Counties there are multiple commissions; and you have to give them a date at which time they will start and a date at which time they will report back to the courts after the awards. Following that the statutes

take over and there are so many days in which the property owner can appeal, or the condemnor can appeal the award of the commission. And at that point it goes into circuit court. And it goes into circuit court in what is called Denobo. Denobo means full trial, with or without a jury, depending on the elections of the party. Typically the judge will establish the rules of game. For example, each party may present three appraisals and whatever other experts are necessary to support their position. There will be a pretrial hearing in which the judge decides what are the issues on which you guys differ and if you can find testimony in the trial to the issues that are presumed to be causing the difference of opinion. Following the pretrial then you go through the whole ball game. Okay, now. Traditionally the property owner almost never wins or even challenges the public purpose of the taking. At one time public purposes were very narrow. It presumed that whatever the project was would be accessible to the public, a school and all the citizens would have the benefit, a road in which all the citizens would have the benefit and so on. Very narrow sense of public purpose. When we moved into the 20th Century and we began to look at urban redevelopment, public purpose was very quickly expanded to be a very broad concept of what was good for the health, welfare and general benefit of the community. But what was a complete subversion of the concept of public purpose--you could go in and acquire 17 lots of 17 owners, put them all together into an individual parcel and now has considerable more value than before and then sell them to a private owner and that's a redevelopment. And what's more he maybe bought it at a tremendous discount. The government went in bought it for a million dollars, sold it to \$200,000 because that's the maximum you could have paid to do whatever the government wanted to do on that. The idea of taking private property from private property owners and assembling it and then selling it to another private property owner for his profit was a pretty drastic move from the concept of public purpose contemplated by the constitution. Now occasionally you still get challenges to public purpose. Particularly if the



public figures--"why we really don't need that." For example, we followed a clear cut case out here when they were doing the loop road around the new hospital and some planner swung his compass and it went right through the house of a professor of Spanish, who at that time was retired, they were about 80 years old, a lovely couple, and they had developed a very elaborate garden/arboretum in their back yard of Spanish flora and fauna and so forth, and they lived there up from the corner of Farley and University Avenue. In fact they could walk to the market, and in fact they didn't own an automobile and so forth. The new road went right through it and they offered them like \$36,000, or something like that on an eminent domain award. So that became our 856 project for a couple of our students and it was really, the Chancellor and everybody said there were going to be no encroachments on Shorewood, no taking of homes and so forth in connection with the hospital, and here they're going just because they want symmetry in their damn street fare, right through a guys house. He's retired, and whole situs element was designed for retirement and so forth. So we had a great time. We got it up to \$115,000 is what they owed him for his \$38,000 house. That tells you how gracious the University is for a retired professor. Some of the residents said wow, \$115,000 for my house, I'll take it. And rightly so I lost the opportunity to try a public purpose taking case, but there's very few of those around. It's almost never argued. So then it gets down to--Okay, what is this thing worth? At the Commission level it is a relatively informal procedure reminiscent of a tax assessment appeal in which the property owner can represent himself or he can have a lawyer, or he can have a battery of appraisers, and its the good old guy approach. The premise of Jeffersonian Democracy said anybody who owns land in the territory must know about values of land and therefore, if you're going on to farm land with highway there's nothing better than 3 farmers to sit down and figure out what its worth. Which may or may not be true, but if you're running a federal highway through northern Wisconsin and the only thing that you've got to give the federal

government that you don't want is land, some of those awards are right off the wall. Boys figure well, its a good way to get our tax money back from Washington. This old salt lick is worth about five grand an acre as far as we can see, and we must be experts because the judge said so. In other cases of course, the government is very sharp. Our State Highway Dept. of tough to deal with and I think they reward their agents with how much less than the perceived value they can get by with in terms of taking of the land. In any event we'll come back to that in the second round on Wednesday.

Wrap up appraisal report items. There were a number of items that were common if not universal to the various reports. Number 16 and 17 of general comments-- item

16 starts at the bottom of the page that you have. You can use DCF to establish a

more probable price you can use to establish the ranges by setting up a sensitivity

table with your critical assumptions, have a best case worse case example to establish a range. A good number of you are having a real problem understanding the concepts of a range around the central tendencies. Now, once you've said that

what you're trying to do is estimate a value which is cash for the seller, then its invalid to argue that the higher price on the end of the range is because they're getting financial terms or the sellers getting terms and the lower end has got the seller's tail feathers in a sling, etc. That's really not the reason for the range at all. If you use the market comparison approach the reason there was a range is because your data is impure. By the very nature of it or whatever, you're going to end up with a range, its simply inherent in the fact that the data is never a perfect fit. And if you recall Ratcliff was saying there's nothing wrong with being slightly wrong. From the scientific standpoint there's a little error and its not from arguing that I can get more

from certain people or less from certain people because I changed the deal. Because in appraised there is only one set of interest, you said there was cash to the seller this is it. Now if you had determined that in fact all sales were made on land contract, in this particular market on a land contract terms vary and such and such. Then you may argue that the range may be due to the terms that you're getting, but you're changing the definition of the interest that the seller is selling if you change the definition of the terms which he is willing to give. So the range is inherent in the data problem not in terms of negotiating strategy at this point. Now, if on the other hand, you decided that to use discounted cash flow as your primary method of valuation then what you're really saying is that I'm making certain assumptions in my DCF which may be a little generous or may be a little low and so you may want to set up a best case, worse case. Rents are \$5 to \$5.50 a sq. ft. or the financing is going to be %11.25 to %10.75. So whatever you think is the critical jumping off point, that becomes then a sensitivity table which gives you your upper and lower range because you've depended on the DCF method as your primary method of valuation. Its also invalid to take as a range, in contemporary appraisal different approaches. Several of you took the cost approach and said gee, that's the upper end of the range, classic traditional appraisal institute sort of thing, and at the lower end of the range, what ever the lower end of the numbers you've got are not valid, no fair. The contemporary approach says I'm going to choose one approach and live or die by it but I'm going to test it with the others and suggest that the pattern is reasonable or supported, but it doesn't determine the range. The range is determined by the nature of my data and the inherent error in terms of the problem of forecasting and so don't confuse them. What was the externality that says gee, this guy is going to do worse than investment value. You'll have to ask yourself: was I wrong about my assumptions about my investment value? I'm relying on DCF and then pull a number off the wall, that doesn't line up with anything else, then you really have to examine either the

reliability of either the overall method or the reliability of the critical assumption in there that may not be taking into effect the risk as perceived by others, on this type of property or the financing terms that would be available or some other set of variables. Okay, its a warning signal that says oops, patterns don't confirm so that says there's something wrong. Okay, you have a varied sense of range, you all tend to be off into various errors of trying to explain to yourself, most of which weren't right. So anyway as I said the DCF method, sensitivity analysis, you want one market comparison method, it's inherent in the QP method. One of the reasons is that a lot of you didn't do that, is that I think all of you used the same Fin-Sim (a computer financial simulation model) method. One guy figured out how to load the leases into Fin-Sim and supplied everybody else with the output, that's what it looked like to me today. Saw an awful lot that looked an awful lot similar. Its a pretty happy coincidence when you get within a dollar of everybody. Obviously if you'd run Fin-Sim yourself, you'd have less trouble doing the sensitivity study so that now you are going to have to go back to your source in Fin-Sim and get him to make a couple more runs for you. The last note a lot of you used the linear regression of point scores against price. I thought I emphasized in here that while that's what we did with 25 N. Pinckney, that was really obsolete and relative to where you only have maybe two good sales and a maybe sale, as you do in this case, its totally invalid, because by the time you take  $n-1$  to compute your standard error you only have two degrees of freedom - two degrees of freedom means the standard error blows up - and then you can have standard errors that were terrific. Now there were more than 50% of your price per unit per point. And then you had \$10 per price, 2 points per unit and then you had a standard error of 5.5 points. And your client is not going to get a real good deal out of that, in fact he might have done the appraisal himself for less. What we want you to do is use QP, and I though we made that clear in class, so a number of you will have to go back and do that. And if you use QP, make sure

you do it on a sq. ft. basis because one of the things that is different about these centers significantly is the range of size from 50,000 sq. ft. down to 20,000 sq. ft. So make sure you take price per sq. ft. of GLA. Now the second thing is just in terms of thinking about it, I mentioned this in class the other day, one of the real true elements of the income property is one, is how much space do I've got to lease, right? And the other is the average price in which I'm leasing the space, either in terms of gross or in terms of net. So if you have sq. footage as your unit of comparison be sure you have average rent per sq. foot as one of your attributes. Now some of you dreamed up proxy stuff like, more attractive, less attractive, no draw at all or something like that which sort of roughly parallels the nature of center given their respective ages when they were built, when they were leased. So Fitchberg has roughly little range per sq. foot, the old Eagle building I think maybe the highest rent per sq. foot on a re-rent but has none at all at the time you buy the property. And so in many cases you dreamed up variables which were highly correlated to the average rent per square foot, gross or net which ever you have as I recall you do have the net income in the case of two of the centers and the net income on the case in Midvale was zero at the time that it was purchased. But I think you'll find a much tighter distribution if one you use sq. footage and two, one of the attributes that you use is the rent per sq. foot then it makes sense. Obviously, that's what you buy income property for is income. So you should have one of your attributes reflective directly of the income character of the property. Okay, so much for those elements. Going back to the front page on the general comments. Your client is Alfred E. Anding, Jr., but he is not the owner as many of you said. Anding Enterprises is the owner, its a Wisconsin partnership of which Alfred Anding is the operating partner. Many of you never defined a specific interest to be appraised and that is critical. Don't ever confuse the property with the interest. In this case you weren't don't a fee simple position is what most of you priced was what would the shopping center

sell for encumbered by the existing leases. You're really doing what will it sell for encumbered by one, the existing leases, and two, a vendor interest in a land contract that's outstanding. And what's left is what belongs to Mr. Anding and the Enterprise. We talked about most probable price, we've talked about one other kind of, one thing that you have to be virtually repetitive to the point of being boring on is the letter of transmittal statement of conclusions, definition of interest, date and conditions that are attached to your value. The conclusions at the end of your appraisal and the certification of value all have to be identical. So if you're talking most probable price and you're giving it a range they have to appear in all three places. If you have a date, they have to appear in all three places. The interest appraised has to apply in all three places. It gets to be a bore after a while I realize that, but they have to be interrelated. And in a couple of cases you changed your mind between the time you got to your conclusion and the time you write the letter of transmittal. In your conclusion you said well we'll let them assume the land contract, if one they don't pay it off, that's worth half of the present value differential of say \$10,000 and therefore, you can get \$10,000 more for the property and then somebody mentioned that in the letter of transmittal that says, hey we're selling the real estate plus the assumption so that the value is x plus \$10,000 for the financial premium of the 8% interest contract. You gotta link those two together. One was a piece of history that apparently never got clarified in the data. The building was actually expanded in 1968 to Borman's Dress Shop. Borman's had a 15 year lease which expired early in '83, which is why in '83 it was then subdivided into the pizza shop and the card shop and the cleaners. If you say encumbered by a land contract, doesn't tell the reader any thing, they're not sure whether the present owner has \_sold\_ it under a land contract or \_bought\_ it under a land contract. Its much more point to indicate that the land is subject to a vendor interest, which in this case is the Zevnik. And remember that that land contract applied only to the land

portion then as many of you rightfully pointed out the default by the owner, the Anding Enterprises, does not affect that position. Its subordinate in terms of the mortgage but it is not subordinated to the note which means that the guy that advances the first mortgage can't sue Ms. Zevnik for performance, I don't think she'd be sued for damages but she could use the land contract balance that is subordinated to her mortgage. One other piece of information which is floating out there, that nobody knew what to do with, is the fact that Anding reported in class which I think was prior to October 1st, that he had bought out the Coast to Coast thing for \$25,000. He paid Coast to Coast \$25,000 to go away. He said that in class, I recall right he was here at the end of September. I'm pretty sure he said they had that one made. Those of you who were looking for buy outs. On your construction detail--the store fronts have what are called knee walls. They come up to about the height of the knee with the masonry and then the window frame sits on that. Walgreens and the new tenants in the west section have insulated glass. The old tenant has single sheet glass and then there is wood paneling over some of that to reduce the heat loss on the Franklin store and so forth. Another area that you had problems applying or using was the section called application to subject property. What you really want to state in there is just a little statement to your reader, what am I going to do about all of this. And then you're going to say okay, most probable price is going to require that I either look at the market or the income and I've choose to emphasize the income approach or I choose to emphasize the market approach and then once I price the total center I have to subtract the Zevnik interest to get to the Anding interest in terms of the value at least. But to do fair market value you have to appraise the whole thing at market rents, subtract the leasehold value, subtract the Zevnik interest, and get back to the Anding interest. It does not necessarily follow that the value under eminent domain is the same as the value under most probable price. The condition that you have to add in that case is that the rental advantage net

enjoyed by Kroger's or whoever, and I doubt whether the others are at very a significant advantage. We can argue that they are probably not worth more than \$3.50 or \$4.00 even if the better centers are getting \$5.00 and so forth. In summary, Krogers is three years at \$3.25 for what that kind of space is worth and there's a leasehold advantage. But before you can equate the two you really have to say that you would discount that present value for the full term and it may well be, and I've been in cases where in order to get the largest split for our fee owner we had to argue that the tenant wasn't capable of lasting long enough to get the benefit of this leasehold or that you had to discount this leasehold at a higher discount rate because of the risk that he wouldn't be there. We had a case in Appleton in downtown Appleton in which the tenant, when we got the Dunn and Bradstreet was slow paying on everything, had just shut down the two other stores in his chain because he was having real financial problems and was just hanging on to get the condemnation award and he as going for a very substantial leasehold interest. And we had to come back to circuit court and prove that the chances of his surviving for those remaining 15 years of his lease, were zilch, that he would likely to survive another year and therefore, the leasehold advantage that was really realizable was significantly less than the current mathematical one. So you have to make the assumption that you're going to add back. That's why you really should go back do your DCF again on market rents, however you wish to define them, and then subtract whatever you feel is the leasehold advantage of Krogers and so forth. If you use the same discount rate on the shopping center and say why-fine. But here you have a tenant who has been loosing sales steadily. You have to ask yourself would he last to year 2007 or whatever the year was. Any questions on that? Question-- on whether you should be using a lower discount rate. Chief--well, that's fine, that's what you're getting paid for as a appraiser is to make the call. I'm saying that you can't work the other way and add back. You start out and say, okay here's the value that was available on rents today, however you want to



define market rents today. Then you have to subtract something for the leasehold advantage of whomever you think has the leasehold advantage. And then you subtract the definite interest and now you've got an eminent domain award. Now there's a basic rule in eminent domain that they will never pay more than the full value of the property under fee simple. Okay? And that has led them into a lot of problems where you had creative financing and the fee simple value was less than the creative financing that was out there. Land contract nominally for let's say an old boarding house or whatever was actually higher than the fee simple price or value of that. So the courts will come in and say we're going to ignore the nominal interest rate on the land contract and realize that one of the things that was sold there was financing, we'll discount that land contract at whatever we feel is the appropriate discount rate is on it and they will in effect level out the interest so that the sum of the land contract plus the sum of the leasehold interest plus the equity interest cannot exceed the fee simple title. So eminent domain has to begin with what's it worth if we had it all to do over with today and lease it at today's rate. And then we'll allocate that value for its interest, of which there are three major interests here--the leaseholder, the landlord and the vendors. Okay. Question--Do you look at market rents being subject to the condition of the shopping center versus say another new shopping center coming in. Chief--It's on an "as is" basis. Otherwise you introduce a whole new variable, you say, gee if we only spent a million dollars on this baby, in fact we'd get \$8.00 a sq. ft. for it. So it has to be "as is" at this point, except there might be some minor deferred maintenance so you want to deduct, it's basically as is. Otherwise you get into an eminent domain proceeding and your scenario is as good as mine and I can paint Camelot onto the site with just a little remodeling and we've got Marshall Fields and so forth. Buildings codes and that type of thing you really want to put in the appendix because you bog down the reader with that much prose. You're trying to present him the argument in as many forms as you can if he

wants to go read the codes i.e. the signage code, the landscape code, the parking code, so forth, have it as at his convenience in the appendix otherwise you tend to detract from the continuity of the reading of the report. Again, the lease abstracts and the CACI data should be in the appendix. But you should do a better job of integrating the CACI data into your statement about the nature of the neighborhood. Some of you had one little table that said hey these cats are double the money more than most of us. 120% of the average retail and they spend a lot. Read the appendix if you really want to know about it that sort of thing it was kind of a cop out saying that I've got the date here, so I've only analyzed on or two other than that it was sort of a passing reference, that was it. Okay, I think the other notes there are self-explanatory. Most of you will have to read in your fair market value they'll say its not impossible that you come out with the same number, but the logic of how you get there is considerable different than the way most of did it who simply said I met the five or six conditions of fair market value, but never said what the interest was that you were appraising. Eminent domain starts with fee simple title and then allocates down to the various interests in the property. None of which can add up to more than the fee simple title. So let's the Zevniks had sold them the whole shopping center on 6% interest, and came up with a number that indicated the whole things was worth \$1.5 million. Well, under eminent domain they wouldn't get \$1.5 million. They would get a discounted number which when added to the apparent value of the equity position and the leasehold position would add up to the fair market value under fee simple and that would be the cap on it. Okay, any questions on that? The handout today is the most recently published Congressional record which I would like you to bring to class next Monday we will be about that. There in the congressional record is a report the Douglas Barnard has interviewed the proposal about regulation which is long in coming and it gives you the nature of the enterprise of the legislation. If you want a copy of the legislation, I'll

get that to you, I know you're all excited to read that. Finally, this Friday is 795 at the Edgewater at the Ball Room, our guest is John Robert White the Dean of Real Estate Counselors and Chairman of the Board and President Emeritus of the Landauer. And as you recall in this course you had both of his articles--one that came out in July which is part I and one which I handed out more recently which was the October conclusion of that article and he will be discussing that and you may want to bring those two along with you. For those that are not in the appraisal class I will furnish additional copies and I will have those at the session, because its a relatively long article I don't want to bring too many of those in addition. Be forewarned or prepared. Okay, now we're back to eminent domain. The appraiser's function aside from simply measuring before and after value and the value of the taking can serve a number of ancillary purposes relative to compensation of the property owner. One, there may be what is called severance damages to the property. Severance damages have to do with costs to repair or replace items that are lost. You may have to put in a new driveway from a new approach ,retaining wall to keep you from sliding into the highway, you may have some brick work and so forth to replace if they shaved off a corner of your building and so on. The appraiser obviously assumes that these elements of site control and restoration have been completed when he's looking at the after value. So now you have to find additional funds for the property owners to accomplish for these adjustments to his property which may be shaving off a corner of a store front or whatever and quite often this gets to be a very major item of contention. For example, Phillips out here on the beltline as you know had an entry coming off that fun street so you could spin off of the beltline, go straight ahead and then turn in to the center at several points on the parking lot and then you could get off on the east side on to "oh dear what is the name of the road now? They changed the name on me." Well at any rate, along comes the new beltline, shaves off the entire front of his parking lot for just a couple of feet but its now the off

ramp which now dumps people on the new boulevard and because the highway department doesn't want the off ramp to conflict with a on apron in to his parking lot, the only access point to the retail store is now the very far southeast corner of his lot which bring you in up against a blank wall which was slated for future warehouse development as part of the liquor wholesale business. So once you get on the site you now have to drive all the way north and around to get a point where the front store is even visible. So in this case it was argued that the severance damage was essentially that the front of the store now had to face east instead of north. What would it cost to turn the store around as it were and create an entry point which is visible to someone now coming off the road, and so forth. That correction of severance damages is significant item if the highway department is otherwise going to argue that there was very little difference before and after, because we didn't take all that much land. They may have nicked them for 15 feet of parking lot or 400 ft. for the land which may have cost them 30 parking spots. So they want to say we're going to pay you so much per square foot for land. Commercial land today is worth \$2.50 a square foot and so bang that's what its worth--that's the before and after value. Well that's not quite true the store doesn't operate as effectively if you can't find the front door when you drive on to the property. Retail property tend to have that other characteristic. You may also be able to argue and the highway department anticipated it so they had a guy standing out in the parking lot for a while during a business evening to find out how many parking stalls were actually being utilized. And their study indicated that they never sited 70% of the capacity so the fact that they lost 10% of the parking stalls on the taking did not effect the potential retail volume of the store during the peak seasons. But you could argue in the case of a super market and there are many cases indicating this that to have taken so many parking stalls will have reduced you sales volume by so many dollars per stall. There are some fairly exhaustive studies which say given your basic ratio of

four parking stalls for a 1,000 sq. ft. of GLA or whatever it is and you lose one of those, you will lose so many dollars in sales per parking stall. And now, what does the loss attribute to do to the rent paying ability and the money and so forth. So you need to begin to look at the severance damages in terms of how well the property operates functionally and what physical corrections and repair and replacements need to be made. There are also the possibilities of temporary easements for construction and sometimes temporary awards for being unable to get to the business at all. Now the State of Wisconsin does not make awards for interruption of business, but certain federal projects do. And its quite often hard for the appraiser to get comparables for that. There are a few, for example, again Phillips is going to be interdicted by construction pretty well and its only those with four wheel drive and the mental toughness to explore that are going to be able to get there for several month. So Middleton thought out on the Westside when they were expanding Odana Road, what happened to the sales at Cubs, what happened to sales at Shopko, what happened to the sales of retail outlets along that strip of Odana, I mean Mineral Point Road, excuse me, as it was widened to six lanes going out to the beltline. And you can find fairly good measures of sale reductions. During that span of construction time so when it was gravel and mud and whatever and again, what is the nominal conversion of sales to rent. On an owner occupied building its a relatively hypothetical to relate back to the real estate but if the occupancy costs of the real estate are ordinarily 10 percent of sales, and you loose 25% of your sales for a certain number of months, than 2.5% of that loss is potential rent loss in effect because you have the fixed cost of the occupancy without corresponding return in terms of the sales and so forth. And again that might be a compensable item. In addition the federal law provides a number of consequential loss awards where the appraiser may be involved. Let's say that the business has a total taking and has to relocate. The federal law would compensate for certain number of months for the difference in rent or bargain

that was enjoyed by the displaced business. For example, it had a very capable contract where it was at \$200/mo. rent, and now the little store is going to have to pay \$500/mo. rent in its alternative location. The federal government will want you to one, know what is the market rent at the new location of the relocated business--how does that differ from where it was and compensate them for the difference--generally up to 36 months for the difference in the cost of occupancy at the new location versus the old one. You may have to compensate individual tenants as we talked about earlier, for their leasehold then and that you're now allocating a fee simple award between the real estate interest of the tenant, the real estate interest of the land lord and whatever other interests there may be in the property such as the mortgage lender and so on. You may also get a lost profits situation and the appraiser may be asked to determine present value of that. Its one thing to compensate them for lost rental bargain or maybe lost interest rate that they had a 7% mortgage in the good old days and now they've got to pay that off and now they got to go into the market at 10.5 and so forth, you can compute those. But now even then the new location isn't as good as the old one. If they have an Italian butcher shop and the entire Italian neighborhood is now relocated as it was in South Madison and they put you into a Jewish neighborhood, you're Italian butcher shop isn't going to do very well, or at least not as well as it did for a while and therefore, you'll have a lost profit in addition to the lost bargain on your rent or your mortgage or whatever. And again, the appraiser will have to compute that for the stated period of time. Question--if you can prove that you have profit year after year. Chief--You will compute what the average profit lost was relative to the previous three years to the taking, for the enterprise in question. And then they will compensate you for the short fall in terms of those profits at your new location. Okay, and you'll try to estimate those out in an appraisal. Now, these all relate to the consequential losses that are compensable either on a statutory basis or because they can be classified as severance damages. Indeed

the federal government was not involved, loss of bargain on the mortgage, for example, you loss because you had to pay it off and find a new location would be severance statement. I've got a wonderful 4.5% mortgage after the last earthquake, and I've had to pay that off and go to the market at 10.5% and in a federal case of its a substantial loss. So the appraiser can be involved in a number of items or charges if you will in terms of the eminent domain action other than the basic real estate questions and the land owner will receive not only direct compensation for the real estate taken, but in addition, cash payments for the consequential losses as defined by the statutes which are either parallel to the federal statutes, where federal monies are involved the project, or which reflects specific state statutes for certain kinds of damage. There still remains traditions in the eminent domain area that some kinds of damages are not compensable. The classic circuitry of travel for example. A farmer now had to go a mile out of his way to get his tractors to the other side of the highway, tough luck Charlie you can't compute the present value of additional time and gas so you can drive the tractor back and forth and so on. The folks regard that as speculative. In the process of doing the eminent domain the appraiser will also look at a couple of different types of contests. One would be called excess condemnation. In reviewing the partial taking he may decide that the remnants or one of the remnants anyway no longer has an economic use and therefore recommend in his appraisal and you'll probably be considered by the judge that they should expand the eminent domain to take that additional piece of property. That would be the excess condemnation--taking more than they need. Remember you can go the other way and say hey, you don't need all of that property for what you are going to do and therefore, I won't let you do it. But on the other hand you could request that they take that fragment which no longer is useful. And this quite often happens where you have a highway cutting across diagonally across a U.S. Survey grid and you end up a little triangles on the other side of the highway left over from your forties. The highway department

picks those forties or those triangles up and gives them to the farmers or sells them to the farmers on that side of the road and in turn compensate the farmer for the triangles left over on his side of the road, sorts it out, why is it obviously a more efficient land ownership. Well, the appraiser may be involved in deciding whether those trade-offs are appropriate. The second area would be what is called inverse condemnation. Inverse condemnation occurs where the public goes and does something which is later determined because of a petition by the land owner to be a taking. Notice ordinarily it is the condemnor who petitions the court to go forward with condemnation. But it can occur that the public does something and the landowner petitions the court and says hey wait a minute, this is a taking. This commonly occurs for example, where you have a sanitary fill operation and it starts to leak. And the leaching chemicals and so forth come under the property line on to your land and now you can't use it for what you're going to use it for or you can't sell it because it comes with a liability that goes with the toxic wastes what you have is inverse condemnation. The public is now using this for their benefit and you should be compensated. Some of the most intricate cases has to do with airplanes. At what point does the plane flying over your land take your property value, and if so, to what degree. There's been a number of major cases in which subdivisions which turn out to be under the landing zone of a run way have a class action suit against the community and say okay, here's another subdivision just like ours which isn't affected the airport and those property values have been going up at this rate. A house sells for \$100,000 and now our houses which are very similar physically and so forth are now selling for \$80,000 and haven't appreciated at all in the last 10 years. And they can go in under inverse condemnation and say that the over flight represents an encroachment on our air space, our privacy, our right to quiet possession of the property and we're entitled to 25% of whatever our property value would have been had it not been for the runway. Here the landowner is petitioning and says the taking occurred which was not



recognized by the court and they would be compensated for that. So that would be an inverse condemnation. The public done you wrong and now they owe for devaluation of your property value. Its very hard to establish clearly what was the cause of that loss remember when you distinguish between damage by police power which is not compensable and the taking of property. Now flying over your house low to land at a runway is a taking, not as a result of police power. And we did one case like that in Columbus, Ohio, using regression analysis because they had a perfect situation in which the runway opened up after the subdivision had been established and we had the exact number of take offs that were occurring as they were building continually as they shifted the airport's approach and landing zone for this new runway. And we could correlate that directly where the decline in the sell prices of those homes. And nice clean regression formula indicated that there were three factors which determined the price of the home, the size of the lot, the size of the house and when it sold relative to the runway by month by month. And we were able to arrive at a class action award which was about 35% of each home value and then appraise each home as though the runway weren't there using comparables from two controlled subdivisions not affected by the airport and then say here's the value now, what's the difference and that would be the value of the taking. Inverse condemnation is another area of concern. In the reading you have a series of chapters from a study done by Dick Ratcliff and one of the attorneys at the Wisconsin law school on what is admissible and permissible evidence in an eminent domain trial. Probably no where does a judge have discretionary authority than in an eminent domain trial as to who is qualified to testify as an expert, what kind of information can be introduced in the court and more over what kind of information can be taken back into the jury room. Most people, of course, try to allow the jury or to have the judge bus the jury out to the property so they can get some personal sense of the property. But so often the trial is taking place after the actual taking has occurred, after the public

improvement has been built that there's really no way to take you back to yesteryear. Assuming therefore, today threatened by eminent domain and you have a property that is particularly attractive or represents state of the art or for what ever reasons, what you want to do is do a video tape so that you can preserve the before status quo image for the jury which may not see the property until after the fact. The second thing, of course, that you want to do is to, if you have any sense at all that eminent domain may be coming is begin to look at your piece of ground or property in terms of what its highest and best use might be, and to begin to create an audit trail that suggests you were in the process of realizing that. This has got to be a fine art form in terms of farmers hearing about the highway coming along doing some fairly elaborate master plans for resort communities and so forth which got smashed by the interstate going through the middle of the facility and so on, so some of those pictures painted in Camelot destroyed were a little excessive and so on, but nevertheless its well to at least be able to understand what your property was capable of before the taking actually occurs and indicate that you were capable of realizing that opportunity. The judges authority goes further in terms of deciding one, what issues the trial will focus on as the result of the pretrial as he perceived the differences between the respective parties and their value conclusions. And two, he may even decide how much time you have to make your case. He can decide this gentleman is going to be a three day trial and the property owner has so many hours of trial time to make his position clear and the defendant has some many hours to make his position clear and that's it. Now, course that works rather niftily for one side or the other because you have a really good expert witness and you can be terse and quick in delivering his own information, but when asked a question on cross exam wonders along into something of an exposition on that subject area and then wait and then wait to see whether the judge cuts them off. I did that once in Milwaukee and it was really fun and they said, how can you stabilize on their income, and I went off

into a long explanation of the arrival of cam and pass throughs and so forth and in essence made the base rent and base expenses stable even though they were in fact rising and tended to wash out and I went on some length and he tried to stop me all the time and the judge is saying Sir, let him complete his answer. But judge I asked for a yes or no answer. He kept saying Sir, you know a yes or no answer is perfectly improper in this case and they have to be qualified by the experts opinion and after I wasted a half hour of their time I concluded my statement on Whitehead, Wisconsin and the guys still arguing and the judge looks benignly over to the jury and says, we all know the professor likes to lecture a little bit if given the opportunity, Ho, Ho, Ho. The other attorney, by the time we finished only he got about half way through his cross exam and I had used up all his time. So when the judge says it's time-it's time, he's very controlling of the material that gets presented, how it gets presented and so forth. The same thing with evidence. What is legitimate evidence? Many judges don't care about the income approach, allows too many assumptions, too slopped the numbers mean anything, can't use an income approach. "But sir, everybody buys it on this type of cash flow." Show me only a sale, without a sale it is not objective or empirical. "But sir, sale prices aren't necessarily empirical." Well then you'll have an opportunity to dispute their sales by naming a few later. And therefore, you can do anything you want as long as you come up with comparable sales. Others are convinced that the cost approach is the only objective method and he has a pattern because admires Marshall and Swift and he thinks American Appraisal Company is the greatest thing since white bread, you're in real trouble, that's the way the things gotta go or he'll start chopping off every other kind of evidence as not objective or hearsay or whatever. Just some judges, for example, would not allow an appraiser to state what the terms of sale were who argued that it was hearsay evidence because he had learned it from somebody else. Other judges will say he's an expert, he's entitled to use information which he has gathered in the process of becoming and

expert and therefore if I qualify as an expert witness I can use hearsay evidence and somebody else can't. Why? I may have to go out and find the buyer or the seller of the property and he'll have to come in and testify that these were the terms. Even if I know that. Now the problem with that is, of course, that as an appraisal you're asking somebody for what the terms of his sale was and he says what's it for, and you say an eminent domain action. That owner is going to say oh hell I don't want to go to court. I don't want to be an expert witness. And so suddenly he clams up because I don't want to share that information. The IRS will hear about it. So the practice in various circuit courts which can vary county by county if the judge makes up his own rules, part of his stock and trade as an appraiser for litigation. You have to understand what the judge will permit, what he doesn't, what his little hobby horses are in terms of methods, and is he going to require that you trot all these people out or can you get away with it. The differences are just incredible and quite often it represents really whether you're an outsider or an insider and so on.

If he deals up in Vilas County, all those big city folks are coming in to beat up on one of his local constituents, his rules are going to be really tight as to who can testify and what they can talk about and you can't talk about some deal in New York that worked out this way and this way, unless you bring the guy in and then establish clearly that it is adequate and then the judge can throw it out and say "I don't think that a resort sold in upper New York state is comparable to a resort sold in northern Wisconsin" and pull it out. There goes your whole case. So the judge has a tremendous amount of authority and the appraiser does well to understand what the nature of that bias is before the trial. The second type of information, of course, has to do with what kind of evidence can I present. Can I use photographs, aerial photographs, slides, can I use drawings, if so how do I make sure that the jury can understand the drawings. You can have some super incredible diagrams that are so complex the jury just goes cross eyes and tunes out and so on. At other times come in and

there are three primary colors illustrating two basic points and it just blows out, it's like looking neon, you know, it completely distorts the picture they take. Nomographs are one of the popular tools. Does everyone know what a nomograph is? This is when you have three guys standing side by side and saying, employment in 1947 was so many people, and then employment in 1984 was so many people. What you're really measuring is a single dimension, vertical height bar graph but you draw it to look like a house or you draw it to look like a person, and as a result the total area portrayed by the figurine that you're using to make the graphical equation is growing expediently so it really looks like there is a hell of a big difference between employment in 1984 and in '47, but there may be no difference at all, or any significant difference other than that the drawing of the worker now is bigger than the one in the previous figure photo. A wonderful way to present that with a kind of putting the emphasis on whatever goal you're trying to put across to that jury in support of your decision. The judge may see through that or he may not. Many eminent domain cases involve fairly complex representations of the before and after. Let's say you're dealing in an industrial process which is now intercepted and the whole thing has to be rearranged and create longer material handling routes. Some of these trials in which millions of dollars are involved develop very elaborate models to demonstrate the before and after situation. First of all the judge will look at that and decide whether they're going to let it into the court room. Then the second question is is he going to let it into the jury. Well if you create a model which doesn't fit the jury room you just wasted a lot of money because your ability to have that message there trying to subliminally be reinforcing your argument is gone. The smarter attorney thinks of exhibits which can be easily entered into the jury room and won't clutter it. He may be using three dimensional drawings, or he may be using a fairly simple graphics of one form or another to put his point across and those will get into the jury room, whereas the much more elaborate difficult to manage kinds of

models and so forth will simply not be allowed in because the deputy sheriff doesn't want to haul it in. He doesn't want to get a hernia, they'll say fine, we won't let that in the jury and you just wasted \$100,000 on a model which they're going to see once, if you're lucky in the court room and then its gone. So to answer the side how am I going to communicate graphically to the jury and kinds of things can I get into the jury room which favor my position which underscores the point that I'm trying to make. The next type of evidence, of course, really has to do with what do I do about asking price, will the judge let me use an asking price as evidence either for a comparable property or what if I had an offer on my property that I refuse a week later they come in with eminent domain. Was the offer that was made on my property is that legitimate evidence of market value? Can I show that it was an arms length transaction. Never met the guy before in my life. You know, the other side is going to try to say gee, is that a put up job? etc. The third element is what do I need to know about either the offers, the options, or the comparable sales that I have with which not only to reinforce my argument but what do I need to know to rebuff the sales of the opposition. Once the appraiser is on the team and once the parties have exchanged appraisals that they must do before the pretrial hearing, now you can say gee the reason we're so far apart is they selected these three appraisals (tape fades out) ...the values are on the comparables of the property owner. I'm going to go out and research every one of those and find out what's there about those deals that made that high a price. Now you should do that research on your own and then make sure that you don't get knocked out of the ball park, if you use comparables like that yourself. And some of them are really strange. I can remember our Cascade appraisal we had a strip of a couple hundred acres much of which was shear stone cliff in the northern Cascades and the thing sold for like \$1,200 an acre. Totally inaccessible, virtually so. So we went back to the history of three different mining companies. We contacted every mining company and asked them what did

they find on the site, was the tract laid out and so forth. Everyone of them wrote back and said it was zilch. There weren't gold, or silver there or lead there, just zilch, therefore, the mining patents were nothing and yet here we had this reasonably recent transaction at this fantastic price which our client says wonderful. So we took a helicopter and went out there. There was nothing out there. So finally we came down and saw a little old shed down near the bottom of the creek that came down off of the cliff and so forth. And there in the shed was a wheel generating electricity and one thin wire going down the mountain side four or five miles to the nearest electric line and that little wheel was just generating electricity 24 hours a day and in the 1978 Energy Act the power company closest by is compelled to buy that electricity at whatever their marginal rate of production is. That's the law. So here you had this totally deserted god forsaken piece of cliff with hardly any timber or anything else on it producing money like that. If you don't go out and look at it and find out what's going there, and you couldn't see it from the air photos and you couldn't figure out by talking to the previous owners, you just don't know and all kinds of sizes of properties have that little surprise in them. You gotta find out what's behind the deal. Now when you're on the attack on a cross exam its a wonderful way to blow somebody else's case out of the water. If he's got three low appraisals, why were they low appraisals? It turns out your Dad sold it to his son Charlie which didn't show up or Century 21 represented General Motors and they cut the price 5% a week until the executive house sold and so after a while it sold for 35% less than the listing price. That's a forced sale, sorry. Was it an arm's length transaction. Does it meet arms length transaction? It's out. So you have to research those in order to get the opposition sales as with your own. The other element that the judge has a great deal of control of, is of course the cross exam. Obviously the basic facts in the case, the other attorney's are trying to get at--bet there's a lot of sleazy war involved in eminent domain that often is irrelevant but it simply decide to

either create a barrier between you and the jury or design your impugn your integrity and your honesty without relevance at all to the appraisal report. They're just trying to attack your credibility or at least raise questions about it with the jury. For example, a judge may allow or not allow if he wants questions on what your appraisal fee was. Well, Professor Graaskamp what do you usually charge for an appraisal. Well, I get \$150 an hour. Get the same thing in the court room. No, I get \$225 an hour in the court room. He looks at the jury and he says do you folks get \$225 an hour for just talking? He said why would they pay him \$225 an hour? And the jury says ahah--he's a liar that's why!. The judge can decide whether that type of question is legitimate or whether he's not going to put up with that kind of greasy kids stuff in the court room. Have you ever met this client before? Well, yes I've done an appraisal for him before. How many appraisals have you done for him? Oh, maybe seven or eight he's in the real estate business and there's a lot of appraisals to do. Oh really? What do you think your total fees would have been from him over the last four or five years? Well, maybe \$10,000. Oh, he's a good customer isn't he? Obviously he's leading me in favor of his customer. That kind of thing the judge can either tolerate or just tell him right up front guys the price of the appraisal and so forth and so on doesn't count, after all in the State of Wisconsin the price of the appraisal is paid by the state, therefore do you canter to the state or do you represent property owners it is irrelevant. So those kinds of innuendos the judge can either sit on or have a wonderful time watching the two attorneys embarrass each other while the whole thing wonders off track and in the merit of the valuation or the merit of the appraisal isn't discussed while they try to slander each other's witnesses. In some cases you can slander the witness. In many cases the witness is off base. As we mentioned the other day the real estate trust officer of a bank testifying as to the value of the real estate in the trust. And you come back and you say gee how does the bank trust department charge its fee? Well a percent of the



dollar is management. So if you get a larger award for this property you'll have money to manage, you'll get higher fee, that's true. The judge throws him off the stand. You signed a statement at the end of the appraisal report says your fee isn't contingent on your value, but it is in this case. So there are legitimate issues relative to fee structure and so forth, contingent fees and that type of thing. But by and large the legitimate judge sit on that and some of the small town judges just delight in watching, they cut and slash that goes on with the attorneys without regard to merit of the case. The other area that the judge can have significant influence on is the charge that he makes to the jury. In some cases each of the attorneys writes a preliminary draft of how they think the case should be presented to jury, what points the jury should decide, how they could come down on the various conclusions and then the judge assimilates those and provides the charge to the jury. In other cases the judge doesn't want to hear from the attorneys at all. He's probably already made up his mind on the case and writes the directions to the jury in such a way that they tend to slant the jury in one direction or another. It can be very subtle but nevertheless very effective. And he may tell them to disregard certain kinds of evidence as hearsay, speculative, or for that matter irrelevant to what he perceives the value of the property to be. For example, in several of the Alaskan cases one of the potential uses for the land is a pipeline that would be coming through for gas. And if you build A you can't do B. And the property owner could make a good argument that his award from the gas company would be better than his award from the highway company. The judge could say, simply disregard the possibility of the gas line because it hasn't been funded yet or the legislation for its final approval hasn't been determined yet or congress hasn't decided whether they can sell natural gas in Japan or not and simply argue that use is speculative and there goes half your case in terms of what the alternative use may be. On the other hand that particular case has been a factor of what do you call those studies where you ask 50 people what they think

about something and they you work out the probabilities, oh what's the name of that--delphi. There had been a delphi study of Alaskan business men that had specifically addressed the issue on several different things whether a certain damn would be built or the gas line would be built and so forth and the building of the gas line had the highest probability, like 80% of the businessman in Alaska said that would be built. But we introduced the delphi study as indicating that while it was still uncertain, the general consensus was a high probability and therefore business men would have acted on that premise and therefore proof that the jury take note of that fact into their conclusion. That case judge let it in but he didn't have to. He could have argued that it was speculative and thrown it out and out would go a significant part of the case. So judges have a great deal of discretion. Most judges don't like real estate. Its got too many little technical problems and not as juicy as a good murder case or for that matter even a good divorce case and so as a result they tend not do very well in formulating. Some states have specific courts that deal with eminent domain, real estate tax assessment and other similar real estate matters. So that the judges deal with nothing but that and are very knowledgeable. New Jersey for example, has a tax appeal court for real estate taxes in which the final supreme court as if it were a real estate tax appeal, that's all the guy deals with and he really knows his law. He's like 40 years old, really hip, and as a result you can go into a very sophisticated argument, you can have a dialogue with him and instead of having any just cross exam by the other witnesses, the judge jumps in and asks questions of the witness. And will go back and forth you and so forth. And very knowledgeable. He has half the cases that are germane and at his finger tips and carry brief forms of debate between the two attorneys and the witness. In other cases the judge is obviously snoozing, he lost his place and could care less. At the appeal at the supreme court level there's no jury. There's simply reviewing the facts as presented at the junior court level. Most eminent domain cases are tried before

juries because juries historically have been reasonably sympathetic to the property owner. But it is a choice of the litigants and if both choose not to go for a jury it could be tried just before the judge. Now for example, in the Cascade case we would have gone only before the federal judge, there would have been no jury. The reason we didn't under the Forest Service didn't elect to do it either, and therefore, you can make a more complex presentation to the judge than you could of to the jury. Which is another variable in the appraisal. Finally, as I think we reported earlier, the appraiser is in a position where he not only has to sell his argument, the facts of the case on how he put something together to arrive at his value conclusion, but he must maintain at all times his credibility with the jury. He is in fact a teacher of the jury in a way that is neither patronizing nor irritating to the jury because the jury is a very sensitive critter and can tend to tune out very quickly where they feel they're either being patronized, talked down to, or horn swaddled. The American jury generally knows when all those things are occurring. So the number of appraiser that like to do litigation are limited in number. The great majority feel uncomfortable in that role and most of them get insulted when the other witness or the other attorney gets on their case and start to bore in on what he perceives as either irrelevant or an attempt to trap him into something which on its face seems illogical or which seems to be bias and no longer independent in his judgment and so forth. Those that do best seem to be the ones who are very fatherly gray haired, low key and talks very deferentially between the judge and the attorney and so forth. Whether that's good for appraisal in the court room or not I don't know. Most prefer to stand on their credentials for their creditability rather than on the merits of their presentation and appraisers tend to over simplify the case and take not necessarily what is the most appropriate appraisal methodology and take one instead that they perceive the easiest to present and teach to the jury, with the result being that appraisals for litigation are considerably less quality than the appraisal might have been

for. Equity investment or a mortgage loan or whatever and overly simplistic. Okay I quit.

We'll talk a little bit about the economics of appraisal and the appraisal business

as the date to the current reorganization and hopefully reform of the appraisal process. Obviously there are multiple appraisal societies of which best known are

American Institute of Real Estate Appraisal, the Society of Real Estate Appraisers,

there's a third called the American Society of Appraisers (ASA) which really grew out of personal property appraisal including everything from gems to machinery to various types of rolling stock and so on and eventually managed to slide into real estate as well. But primarily its still known for being on a personal property aside. There is another group called the International Association for Assessment Officers the IAAO, which is a very sophisticated very strong educational group they have their own designation for assessors and probably publish the most sophisticated of all the appraisal journals. The Tax Assessment Journal which comes out four or five times of year probably has the heaviest dutiest stuff around in terms of physical techniques, in terms of economic issues that have to addressed by the appraiser in sorting out which components of the project are creating real estate value as opposed to non-tangible values and so on. And then after that it becomes alphabet soup in terms of a whole series of appraisal organizations almost all of which were designed to give you a designation by mail in order to give the less talented groups an opportunity to compete in terms of certifications after their name as if its a major group. The functions of all these groups were always one, to provide some professional standards of performance, two, to provide enforcement of ethical conduct by ultimately the sanction of either defending or terminating your designation. Third, to provide educational system for spreading the word

on advancing and evolving evaluation techniques. Fourth, they were to provide political representation for the profession and for the specific interests of their particular professional niche. And finally of course, to provide public education as to what the certification was all about and why it was in the public's best interest to use someone with that particular certification or label. They also have a PR group. The American Institute has obviously done the best job of PR, most people recognize an MAI as real estate appraisal and there are many laws and many corporate policies which require that the appraisal be done by an MAI and that has not happened by accident, that has happened as a result of a very careful postulating of both the legislatures and the corporate framework in which the bank industry to favor the MAI. The Society of Real Estate Appraisers has been less successful in accomplishing that for several reasons (1) Their origins were essentially that of residential appraisers in the savings and loan industry, though they were not regarded as a full service kind of appraisal organization and the savings and loan industry wasn't taken very seriously in terms of their appraisal talent twenty years ago, nor is it taken very serious now. The Society, however, did grow up as an independent organization and created a second and third designation so that they began to try to legitimize their organization by having an RM designation instead of a SRA designation or a Senior Residential Appraiser allowing you to grow out of that into basic income property which was SRPA or Senior Real Property Appraiser. And finally a SREA designation Senior Real Estate Analyst and the Society began to really move toward legitimizing the Senior Real Estate Analyst designation as a Real Estate Consultant which could be granted not only to appraisers but to someone who did market research, investment analysis, a broad gamut of problem solving empirical research functions relative to real estate. And they are relatively tight fisted on it. They had the revolutionary idea to require statistics like regression and time series data as a prerequisite of the SREA. Its still a radical idea as far as appraisers are concerned. And not

only that they had the radical idea that you had to be recertified every five years and indicate that you have done so many hours of continuing education and that you had moved forward in your progress as a professional and they actually send out audit committees of two people to your office to read the reports that you had done in the last five years to find out if your quality was appropriate and whether you build the sophistry or were trying to do a legitimate objective analytical job. Pretty radical stuff. Not only that they took the position that a group that was represented by the brokers such as MAI obviously had their position compromised professionally since the brokers had a vested interest in pretending to be appraisers from time to time and therefore, while the National Association of Realtors had one standard of appraisal for the Institute, they had almost no standard of appraisal at all for the brokers and the brokers, therefore, chipped away at the appraisal business when their business was slow. In any event there was a great deal of cross referencing of members that were in the Institute and in the Society and the cream of the Institute was also in the Society because intellectually they felt in many ways more at home in the Society than they did at the Institute. The Society was the first to put out links to the University to develop education programs which had one real estate professor and one practitioner teaching their appraisal courses. They worked intensively to bring the content of their courses to a college level of material and employ professors to actually write the courses so that Kinnard, Messner, what's his name at Richmond, Whiten, I did the feasibility course and so forth. They took their function very seriously. And ultimately it left the Institute in the dust as far as intellectual content and so forth was concerned, although the Institute had the membership and had the economic base. And the Society had a bigger membership than the Institute they had about 35,000 members as opposed to 7,000 at the Institute but the great majority of them were associates who were not leaning toward a designation, had no intent of doing so they worked at the savings and loans and the credit unions and mortgage banking

houses and so forth and regarded as a luncheon club or a dinner club depending on when their chapter held their meeting and sort of took a gee whiz and thank you to the speaker, approached to it and went home and forgot it. Then came the federal government and the federal government came along and sued the Institute, the Society, the Mortgage Bankers Association of America, the U.S. Savings and Loan League, ASA, and I don't know who else, and said, hey guys one of the reasons we have red lining, one of the reasons we have discrimination in lending is that among your own teachings and in your own practice you indicate the racial character of the neighborhood and suggest that an integrated neighborhood and so forth, property values are level or declining and you have as a pretext in your own appraisal text that one of the sources of value stability is a homogenous neighborhood. A term left over from the National Association of Realtors Board of Ethics from the late 1920's which the Realtors were quick to take out of their code of ethics as some racial sensitivity came into the real estate business. But the appraisers and particularly the Institute were asleep on the switch and the federal government really slammed them with a suit and said "Guys hey, you're all guilty of tort here and its going to cost you megabucks." and so forth. During this period of time or just prior to this suit, the Institute and the Society had realized that they were really kind of duplicating each others functions, that it would be cheaper for them to merge and that one of the benefits of the merger would be a much bigger base for dues paying members so that they could afford the costs of enforcing sanctions against those that did poor appraisals. The Institute and the Society had discovered that it cost \$30,000 to \$50,000 to proceed legally to yank somebodies designation for malefeance, that you were talking about somebodies livelihood, they tended to fight back, there tended to be defamation suits, that had to be liable slander suits, many witnesses of course refused to get involved in the whole mud slinging game and pretty soon it got to be one chapter versus another chapter. It was very divisive at the Madison Chapter had one of their good old

boys that was on the pan, the rest of the Madison would politically try to intervene in the review process to look after their favorites and so forth and then pretty soon somebody would probably come in and tell them what to do and so they found that if they were going to hold their group together, and it was critical that they hold the group together to get them to pay dues that they had a great deal of difficulty enforcing the sanctions on one of them. So they thought through a merger we'd have more power to do that and it was actually talked about withdrawing the Institute from the National Association of Realtors. And they investigated and they found out that they could do that and take their money with them which at that time was maybe a million dollars of accumulated reserves and dues and so forth, and so on, but the Institute didn't own the title to MAI, rather it was the National Association of Realtors who owned the designation MAI that they (the institute) couldn't take that with them, and they felt that they had a tremendous investment in the public relations of that and second of all, the Institute said, you guys leave, that's okay, but we're going to create a new appraisal institute immediately and start issuing the MAI under our own set of rules and of course the folks in the MAI who took a great deal of pride in the designation and many of them had put a great deal of time and their life's energy into the Institute, were very reluctant to get muscled by NAR. So very reluctantly they had stayed but they saw a merger with the SREA in the way of perhaps muscling back that after all put both groups together who was left to join NAR's new group particularly if it was accredited by the fact that everybody had left and now they were just lining up what ever bunch of brokers wanted to sign up to be appraiser, they could pretty well squash that and the SREA was beginning to be a legitimate designation so you could swap your MAI for an SREA and so on. So as I say that was going on in the background and the cream of the MAI's were all members of SREA and most of them were Senior Real Estate Analysts at the top of the thing they were the officers and essentially the two organizations had the same power



structure and the merger was proceeding along pretty well because they were talking to each other. Then came this federal suit. The Institute decided that one, what could they do their text book said exactly what the federal government said it said and so forth that the cost of dealing with the federal government in that type of suit would be astronomical. They estimated \$500 to \$1,000 a member to start and that the government can wage a war of attrition once the attorney general decides that he's going to hassle you, they just keep coming at you and keep coming you until you're economically exhausted so you're better to settle. So the Institute did settle. They settled essentially on what is called a No-Lo contendre. A No-Lo contendre says: "I didn't do it your Honor and, I promise not to do it again. The Society was furious along with the Mortgage Bankers and the U.S. Savings and Loans League who decided to take them to court and they won. It made the Institute look now only silly, the Institute by that time had already signed an accord that was going to require fairly exhaustive educational and brain washing treatments throughout the country to bring their cohorts firmly to center and so on, all of that was rescinded, rolled back and so forth, and as a result of the win by the other group. And now there is considerable hard feelings. The Society went out and represented their members as they're suppose to, and the Institute had welched. Members of the Institute were sore about that, not to mention those people in the Society and so now you had some bad blood going between the organizations. So what happened was initially as the Society began to give the needle to the Institute that when they voted for the meager the Institute voted no, the Society voted yes. Disaster time. The heads of the organizations went back and they said well okay, let's try that again and regroup and rewrote so that an SREA and an MAI were essentially equal. The thing that came out of that however, was that if you were an SRPA, you'd have to take one additional exam to be an MAI. And the SRPA's were upset because they always thought they were equal to an MAI anyway and so that incremental step really kinda bugged them. However, by

unfortunate coincidence the power structure for SREA moved into the hands of a real right wing red neck group and they realized the last time their membership had voted yes, they didn't want anything to do with the Institute because obviously they would loose some of their prerogative and so forth, so they made an administrative judgement that associates could vote also instead of just those with designations. Well a large portion of the membership of the Society were made up of associates who had no intention whatsoever of ever going on for designation or doing anything intellectual and the proposed group was going to have a period of time in which it became a member: you had so many years to advance to the first level of designation and then so many years for the next level of designation and so forth, and that would have meant that the guys that were along for the ride in the Luncheon club would all be squeezed out ultimately and that was made very apparent to them by both the Milwaukee chapter and members of the Chicago chapter of the SREA and when it came to a vote, the Institute voted yes and the Society voted no, with all the ringers representing the associates voting no. So that did it that put the frosting on the cake the war was on. It still is on between the Institute and the Society so there's no strong political base additionally to serve as a work group and that's where the professional societies sat. They decided a little bit like Mr. Krushchev vs. Mr. Nixon and "you know, we'll beat you to death" they both went at developing their own educational programs. They canceled reciprocity so that you couldn't take exam number one with the Institute and get credit from the Society unless you paid some ridiculous fee and they stopped talking to each other and most of the MAI's that were SREA's dropped out they went back to the Institute, they had been actually dual membership, dual dues, going to two meetings, doing all the network on two sides because it was their dream that they could merge these two groups and get one voice for appraisal and it didn't happen. In the meantime, the SREA's and ASA's tried to work out a merger and that didn't work either. And so there it sat-the two groups kind of snipping at each other and regrouping

their forces and their educational programs and so on. For a time the Institute talked about creating an educational institute which would design courses and materials with professorial assistance and go out of the educational business all together and allow the university to do that and so on but then they realized that two thirds of their budget and their profit came from the educational system and so they had to stay in the education business, but they did at least start taking a little bit more care on who they let teach their courses. Now comes along congressman Barnard. Barnard comes and says gee, when you start to look at the banking industry and the savings and loan industry and it turns out a large portion of their problems came from appraisal problems and when we look at the quality of appraisal work these people should be de-certified they shouldn't be allowed to have an MAI or an SREA. Either they're incompetent or they're fraudulent and nobodies doing anything about it. Now the Institute's position was always: there's nobody that is bad, they're just sometimes not as skilled as they might have been and they just need more education. There's no such thing as an individual whose depraved, remember in West Side Story, you're only deprived. And, therefore, the Institute's basic approach was that in the worst cases you'll assemble the evidence and we'll go down and talk the guy into resigning, rather than being embarrassed because its cheaper to the degree that he wants to put up a fight we'll help reeducate him but we're certainly not going to take that fight out in public, its too expensive, its too divisive and therefore, there was very very little response to the appraisal disasters and in the banking and savings and loan industry by the professional society, which was appalling as far as the government side was concerned. And if a CPA had made those kinds of mistakes the professional accounting people would have yanked their certification immediately and with very little thought. So as a result Barnard started to make noises that he wanted to introduce federal controls on the appraisal process that were very similar to the accounting process and called for creation of a foundation which

would provide the funds and the selection of two bodies, one an appraisal standards board which would define methods and appropriate techniques for the appraisal at various levels of need and create a certifications board that would establish the levels of education, experience and practice as well as designations that would be eligible to appraise for any federal agency or bank insured by a federal agency and so forth. Wow, did that galvanize the appraisal groups in the backs. They suddenly formed a committee which represented the eight major appraisal groups however defined and they conceded that there had been weaknesses in laws in the past, etc., but that could be remedied by a stronger program of self-enforcement and it essentially adapted the Barnard proposal and the first thing they did was issue a rather watered down statement of ethics and principles to be followed by all eight organizations in improving the general performance of their membership and second of all they have signed and created a foundation and are in the process of deciding who is eligible to be on the board of directors of that foundation. The foundation would be supported by an assessment of the respected memberships of the eight organizations somewhere between \$1500 a year and that foundation would then set-up the the two bodies, one board to determine appraisal standards, a second board to determine certification standards for anyone eligible, that wanted to choose certified appraisal. The certification group would be one, administered by the state in which the appraisals were located and would require each state to set-up a sub-board under it and if the state didn't do it then the appraiser's within that state would be subject to the federal group. They would write and establish the examination levels. They would determine the education levels required; did you go to college, or get a college degree or whatever. They would determine what the administrative process was for reviewing your work if there was a question about it and what the sanctions would be once the group had determined whether or not you had met the standards that had been established by the board of standards. The problem, of course, is

money. If you read the congressional record article that Barnard is proposing setting up the same thing, and doing it as really a device to protect federal agencies, transferring all appraisal responsibility for standards, methods and certification of people that will dealing with federal agencies to a single board. Now notice he's saying I don't care how guys run a business outside of an area where the federal government has a vested interest, but within the purview of federal interest, this is the way we're going to do it. He can control a large purchasing power relative to the appraisal industry that way. When you consider that all FDIC and FSLDIC insured institutions fall in that category, as well as all of the other federal agencies like General Services Administration, Forest Park Service, The National Parks, the whole nine yards, there are at least eight major federal agencies which are involved in real estate in one way or another and that's a large segment of the appraisal business. And says Mr. Barnard, what we're going to do is we're going to give that foundations \$19 million to start in terms of this particular task of setting up standards, setting up certifications and getting it introduced around the country and then we will provide successive amounts of cash by assessment on all appraisers who wish to be certified to do work for agencies which have some federal involvement in it. So its a fairly powerful threat to the appraiser. And the one thing that Mr. Barnard has, of course, is the U.S. Treasury to finance the effort which the committee of eight and their project doesn't have. So that is now in the fire. The appraisal societies fighting for their life to retain control of self-policing by creating a program which virtually duplicates what Mr. Barnard is proposing to do; but with something less in the way of objectivity and considerably less in the way of resources. So there may be some appraisal standards and certification standards worthy of the name. The hope of course, is to ultimately create a public relations program that makes the federal certification equal to CPA and accounting or other professional designations that you want to talk about in terms of the actuaries or investment

managers, or whatever. Certainly that's not the case presently. In the mean time, the appraisal industry itself is facing some rather serious internal problems simply because it is evolving so quickly from being a cottage industry in which a single individual could be all things to all persons to a highly specialized series of niches. At the very top you have the major appraisal companies that deal with large investment properties and major litigations, pension fund money and so on and in one of our studies, interviewing and so forth, there probably weren't more than 250 appraisers in the country that all of the major players could agree on, were in fact suitable for those kinds of assignments. That's a pretty big niche. They certainly had all the work they wanted and they certainly had all the fees they wanted. But 250 is pretty thin. So the basic attitude of the Institute and the Society when you said gee, what kind of standards do we have for them in terms of courses to teach them how to structure a cash flow statements, doing some of the other things that are required of them in this area, they said we don't care, that's their problem we can't deal with the problem that involves only 250 out of 10,000 members or in the case of the SREA's maybe 50 out of 35,000 members, they don't represent a significant vested interest to professional training and management. On the other hand in the residential area is a fairly major meat and potatoes area. There they are very much concerned with what their membership is being forced to do by Freddie Mac or Fannie Mae and so forth, and so the residential people are highly organized and interfaced regularly with Freddie Mac and Fannie Mae and that group to develop a uniform residential appraisal report form to be very careful about defining the terminology and the methodology, careful about defining how they will research the comparables and which methodologies are appropriate and how the form will be filled in, etc., etc., and there's a tremendous amount of material coming out of that. A video tape and special work books, and so forth, and at the same time they invest a great deal of money in researching automated computer systems that will allow a highly industrialized

residential appraisal process. Now residential appraisal probably goes from \$150 to \$350 a shot and those that make money in it generally work for somebody who has the contracts with local lenders and so forth and they split 50/50 with the appraiser. So an appraiser gets \$75 to maybe \$150 for doing a residential appraisal and the way he makes money is do from anywhere from 3 to 6 a day and really crank them out. Many of these appraisers will do at least 120 appraisals a month and that's a fair piece of change when you're all said and done. You're probably grossing anywhere from \$80 to \$120,000 a year and from that they have expenses for their automobile and so forth of \$20,000 and their employer maintains the cost of the data base and the office and secretary and the production components and they've learned to really organize their day. Some of them actually a motor home in which the files are there with their comps and so forth, and they just drive from one to the other, pick three comps, flag them on the form and move on to the next one. They're really kind of property inspectors and do a little tape measure job, the object is to manufacture documents and boy do they manufacture documents. Yes, this is a large part of the business and therefore, they have the clout within the organizations. At least 60% of the membership is engaged almost entirely in that type of business with some small income property on the side, and the prices that they charge are ridiculous. They have to do a 24 unit apartment building for \$1,500 that sounds like big money after you've been chipping away at single family homes at \$150 to \$300 a shot. A few firms started to change that. Merrill Lynch for example has a very interesting operation. They have residential brokerage, but they are also very much involved in corporate relocation issues. In which corporate executives that have just relocated, Merrill Lynch comes in to broker the house, gives a guaranteed price at which they buy the house from the corporation who took it back from their employee, so that their employee could have his equity to invest in a new house at his new location and they realized that wow, they better not have somebody that just motors by in his mobile home appraise it.

And they'll pay anywhere from \$350 to \$500 for a single family residential appraisal. And they needed three appraisals per house sometimes. But they want to make sure that they are on the money in terms of where they are. And then if the house doesn't sell, or it does sell for or they get their offers which are not jiving with the appraisal they call you back up and send you back out and find out hey, what did you miss, what is there that we don't know about that property because you said it was worth \$120,000, but the best offer we got was \$102,000. One of us is wrong and we think its you and therefore you go back and do it. They have some other idiosyncrasies which they've been allowed to get away with. They define market value on their terms. Market value is essentially net of what it will cost to bring it up to their standards and their standards are essentially vague. If they go in the house and they don't like the wall paper and think the kitchen linoleum is outlandish and so forth, that all has to be replaced. They want to neutralize any element of the past ownership which they think is irresistible or obnoxious elements of the typical market. So you figure out what the property would sell for if it didn't have that decor and then they give you an manual that says all right, you're going to subtract so many cents per sq. ft. for the paint job and so much per square foot for new carpeting cause its worn and the dog and the cat have urinated all over the family room and so forth and all of that's gotta go. So now you're down to market value, but its net of whatever its going to take them to put that in marketing condition. Now the average person doesn't realize that market value. Most people thought gee, fair market value meant what the appraiser was talking about, it doesn't. You need what Merrill Lynch is talking about. Fair market value is whatever they choose it to be, no more or no less than the Alice in Wonderland had said. Nevertheless, the Institute and so forth had never picked up on that, have never spoken up and said, hey wait a minute guys, this is what fair market means and you don't get to define it yourself its a standard we're trying to impose on an industry. But nevertheless, they do recognize that



you get a better job if you pay for it. Now most lenders simply don't want to pay for it because the appraisal has nothing to do with their business other than putting a cap on how much money they can lend. The rules says that if it is a 95% loan to value loan and then they have to put it one risk categories; at the 90% loan to value, it goes in another risk category and that probably helps them determine what premium they're going to pay the mortgage insurer, but other than that they regard it as a document which just gets in the way. The less they have to pay for it the better. But nevertheless, critical documents as far as providing an apparent umbrella for blame and fault if it goes bad in some future point in time. The CYA and door between the lender and FSLDIC or the FDIC or the private mortgage insurer for that matter. Interestingly enough, the appraiser's in that game have some interesting pressures. If they are appraising for a builder, the builder has worked hard how to sell his perspective buyer on buying his home and so forth and so on, the last thing he wants from that appraiser is a comment that the construction quality is poor, or that it is over priced because they could have bought three bedrooms and two baths and all the rest down the road for 10% less and so forth. The appraiser gives them an objective statement like that on the appraisal, a copy of it goes to the builder and he sues the appraiser for defamation. Or he calls the lender and says how can employ that idiot, if you want my mortgage business, you're not going to use that appraiser. Any appraiser ready quickly learns after you hit them in the head a couple of times with a wet two by four from one of those buildings that hey, they don't any comment on it, they want me to go out, count the rooms, make sure the thing is standing, and the roof doesn't leak. If the buyer wants to pay that and be an idiot, that's his problem. I'm not working for the buyer, I'm working for the lender, and the lender gets his business from the builder, so I won't make waves. After all if I waste time, I don't get paid another dollar for my \$150 appraisal if I had to go argue with those guys for two hours and they get called into the ethics committee by the builder who says

I was unethical in calling his stuff what it is, who needs it, to hell with it. As a result he just turns his eyes off, he doesn't see anything other than what he thinks the client wants him to see. The second thing, of course, that he needs to know is what did it sell for because if the guy needs 90% of what it sold for my appraisal better come in on that number. That is so apparent that some of the frauds at the savings and loans are absolutely outrageous. In case it was in Wisconsin's Housing Authority who were making loans for low income families to get in the deal for rehab homes in the downtown core area of Milwaukee. Now these little babies sell for about \$7,000. The real estate broker comes in paints it up, puts in a new furnace for \$500 goes out to the local tavern. Finds a guy sitting in the tavern and says how would you like to make \$500. He says what do I have to do, he says you just gotta sign a few papers, don't worry about a thing, we'll bring them right to you. Great. The guy signs on the paper to buy this little gem for \$37,500, signs his name, apparently passes the credit check. The lender makes a 95% on the \$37,500 and now the problem is, of course, the guy doesn't have the down payment so the real estate broker picks him up at his house, says we're going to the closing, and the guy says closing of what, he says, just do as I tell you to do. First step is, we're going to give you this, and then we're going to give you that, here's the check you're going to give them for the down payment and so forth. They go through the whole charade, the house is his. You get out to the car they give him \$500 if he drops off the end of the earth. Two months later the lender notices he hasn't got payment one yet. That seems strange, let's go down there and see what's happening. Well nobody ever moved into the house. In fact the porch that on the front of the house at the time of closing is now gone having been burned in the furnace of the home next door. (Laughter) So they get the appraisal and the appraiser has a wonderful appraisal. It adds up, comparables and so forth all come out to \$37,500, by happy coincidence happens to be the sales price. You couldn't have guessed that. There was no way, 17 standard

errors out from the price of a home in the market place. No way you could have gotten \$37,500, somebody told him, that's the number we gotta have. He was pulling in comps from Muskego, and Fox Point and every other place. He really had to work at it but he got three comps that came up to \$37,500 after he made a few adjustments. It never would have met the document standard. So that is an extreme case. But in a lot of the residential business, the first thing the appraiser needs to know what are you gonna pay for it? And somebody always tells him. And now he knows what the answer is. Now all he has to do is work up there. After all, if he comes in lower, the builder is going to be mad at him, the home owners going to be mad at him and the savings and loan is going to be mad at him, or the bank for that matter--banks are just as bad. And who needs all that travail for \$150? So as a result they got their appraisal, he got his money, and everybody is happy. Business proceeds as usual. And the great majority of the people make the payments on the home as it never comes in to challenge. After all, 95% of the homes are paid for and the other 5% are delinquent, and 1% of those eventually go into bankruptcy and by that time "There was a significant change in externalities causing the home prices to fall significantly below the purchase price." That's what the banks always tell us. Now as a result, the residential business is really falling on evil times and will certainly hope that the home loan bank and R41C and their development of uniform forms would do something to correct that. But it hasn't the basic economics. The appraiser is not regarded as protecting the interest of the lender. He's regarded as an impediment to business as usual. The only person he's suppose to be protecting is FSLDIC, but they don't hire him, they don't pay his fee, they don't guarantee that if he calls it as he sees it nobody is going to come down and not pay him for hassling. The basic fundamental flaw in appraisal at that level is that the client you're trying to protect, is not the client who is selecting the appraiser or paying the fee. This has been a classic economic flaw in the appraisal business. Now there are two solutions to

that. One, of course, is to have the appraisers work for the government in the first place as they did at the days of FHA and VA. And the FHA appraisal system when it was working was working very well. And not only that it had a grading system so that if builders were notorious for doing a slop job they only got 95% let's say of the appraised value of the home as a standard factor. The builder was either on the all star list which gave him 105% of the appraised value, or he was on another list that gave him 95% of the appraised value or something of that sort, and so there were penalties or panelled sanctions against the builder for sloppy work. And the FHA was simply in the business of insuring the mortgage and the FHA individual would pay his salary and his job would depend on how well he did and so forth and so on. It was objective and mechanical, that's true. FHA had little manuals that they followed like little cookbooks and as a result there tended to be a great homogenization of residential design to meet the minimum standards in the manual. FHA people didn't know what to do about a contemporary home because the manual suggested that pitched roofs were safer than flat roofs and every house should look like every other house in the neighborhood, etc., etc., etc. There were certainly fall out factors that weren't very good but at least it was objective. Now the alternative to having the government do all of the appraisal work is to admit that the appraiser is an advocate. Its just the nature of the game that when somebody hires you, they had to ask you for an evaluation that you're going to be biased by that relationship. Now this is John Robert White's position. We'll hear more about him on Friday. He's saying we'll sell it as we see it. The appraiser is going to represent the bias of the interest of those who pay him. If the lender wants a sound appraisal for collateral value on his commercial property loan, then he hires the appraiser, the appraiser reports only to the lender. The developer lives or dies by that appraisal, so he can't muffle him, etc. Pretty radical stuff. Its a little bit like legalizing marijuana. Establish who he is working for and everybody knows where he's coming from. Those are the two schools of

thought presently not only in the commercial area but in the residential area. (end of side one). ...Objectivity and independence before the appraiser is recognized as an advocate of them who paid him, therefore, we will decide who he is an advocate of a particular situation. The third level of appraisal, once we've looked at the guy at the upper end of the line of 250. We've looked at the great majority of the bread and butter guys that are doing the single family home, we then have the journeyman appraisal in the middle some where. They fall into two categories--one, the cottage industry independent or two, the salaried individual who simply works for what is essentially a broker of appraisal assignment. The broker typically pays 40 to 50% of the appraisal fee to the individual who does it. So many of you who might go out into the appraisal business if you work for one of the local firms, and they have anywhere from 8 to 15 appraisers on the staff, might get a base salary which is really a draw against their active production billing and when you start out making 35% to possibly 40% of that as you get more efficient and build your professional designation so that you can do more kinds of things, can make it 50% of your fee. The other 50% goes to the house to cover your office and your telephone and the commission for bringing you work and production costs and so forth. If you figure that out, roughly 20 hours of that you work and so forth, typically an appraiser today probably bills somewhere between \$80 and \$100 an hour. That's his gross billing rate. So he would make about \$40 an hour. So if they're really hitting on all cylinders and all 40 hours a week were billable hours, he could make maybe \$1600 a week times 50 weeks is \$80,000 a year, not bad, can run a little profit. Not all of your hours are billable. You're lucky if probably 4 out of 5 days are billable, probably closer to 3 1/2 days out of the week are billable, the rest of the time you're doing, one, administrative stuff in the office, which isn't billable, two, you're probably going to seminars or going to research one thing or another which isn't billable to any body and three, there's always some pro bono work. You spend time soliciting--

selling, letting people know you're in the business. Being seen at the right kind of meetings. Or if the bankers have a lunch you go to the mortgage banker's lunch in hopes that you'll come across somebody. Chuck Clettenberg says whenever his work back-log gets down a little bit he goes down and sits in the park in front of the court house in Dallas and he will invariably trip over a lawyer along the way in the morning and he'll say oh, by the way I have an estate, I need an appraiser and so forth. So there is a certain amount of marketing time that's involved even though you are working for somebody else, you're out trying to generate some base of continuous employment. So if you're lucky four days out of the five day week are filled. Now the alternative is, of course, if you have a really good reputation and you're good at supervising people and editing people you get now a bunch of people working for you and if you've got ten folks working for you and producing \$2,000 a week on the average for you, of which \$1,000 goes to the house, now you've got \$10,000 coming in for overhead, 50 weeks out of the year \$500,000 gross with a couple of secretaries, word processors, maybe a couple of folks chasing down to city hall for the latest comps and so forth, well you can make a fairly nutty living that way, going nuttier than a fruit cake as you try to maintain the quality of those appraisal reports. If they're going out with your signature, you better read them. Guys are getting paid \$50,000 instead of \$200,000 tend not to check their numbers quite as well. They're not the ones being sued, that's one of the reasons they're working for you. Its your firm that gets sued for malfeasance or hence go down with your hat in your hand and explain to the client why you're a million dollars off and do it over for you by Monday. You should be compensated for that. It happens to everybody eventually particularly if you've got ten people cranking out reports for you who are obviously paid on the amount of production they get not on quality of production, at least in the court room. In the long run if the quality doesn't hold up you're back working for somebody else again or back in the residential business. Now again, intellectually you

have a very interesting problem. Those things that you would like to do the best on and are intellectually challenged by may in fact reduce your production so you get paid less. So you tend to boiler plate. And some make a speciality of that. Kinnard down in Chicago, if you went to work for him, he would say fine, here's a couple of areas where we get a lot of business. You can become the expert on condominiums on North Michigan Avenue or industrial plants in the Northwest sector or some other particular property and all you do is industrial buildings in a particular zone. And you'd be surprised how fast you can begin to knock those out. If you have all of comps at your finger tips and you figured out what all of the adjustments are and you can write well and so forth, wonderful, you really crank those out. The guys that really do good on the computer have all the boiler plates in and they just type over their master and change the dimensions and change the address and they go right on through it -- Chuck Clettenberg has a great little system for He just lets the screen roll as he fills in the blanks. He has another master template just set up for apartment buildings or vacant land or whatever. Comparables are on one file and your master is on this one and you merge them as you go and the production is extremely high. And you can make a lot of money. But intellectually its not too challenging. Its how do you hold that kind of thing together, or you can say gee what I'll do is I'll put a group of four or five people who really enjoy this business and like researching and so forth, and all we'll do is esoteric litigation. We'll go out of our way to find goofy vacations in Alaska or wherever else and hopefully, each case is different. But the problem with that is that most people don't realize how many people hours are involved in doing that. So you end up working for a variable rate per hour. You never loose money, but more than once you'll be working for about .65 an hour. The worst of that is that I had a guy working for me a couple of summers ago who was doing his research internship at the medical school and he got \$4,000 or whatever it was for the summer on an assistant ship and you'd see him having coffee at about

9:30 in the morning, and he'd roll over on his back for lunch at about 11:30, after a little nap he was back in the lab at 2:00 and one day as he was strolling back to the lab he said what I like about this job is you can set your own hourly rate. Well the principle works pretty well in appraisal but in reverse. The more care or the more craftsmanship you put into the project, or the more you're setting your own hourly rate because people are willing to pay x dollars for the project unless there is a good amount of money involved in terms of the output or the result. Appraisal therefore, has a very real problem in that it is essentially a service industry which traditionally was billed by the hour directly or indirectly. The client may not recognize it when he sees the fee, but essentially the fee is conditioned by what you perceive as the number of hours its going to take to do the job or maybe two or three different strata in your office and what's that work out to be. And there's only so many hours to deal with. If of course you want to assist on some for of balanced life, if you want to work to midnight every night on an appraisal, give up your weekends and so forth, there's more income involved but much of that is lost of course in divorce courts later. (Laughter) The appraiser, therefore, really needs a way to try to find how his knowledge about real estate can be converted to capital value rather than just income. That's what the real estate broker is doing, that's what the developer is doing. How does the appraiser do that? And Frank F. put it best, he said the small appraiser operating independently is in the appraisal business so that all of his overhead as an investor redeveloper is covered by his appraisal client. What you're really doing is the market research to find the good deal at somebody else's expense. And at the same time your appraisal fees are paying for your office space, and your telephone and your copy machine and your secretary and maybe a couple of associates that go out and scabble on things that you're not really interested in things that you're not really interested in doing anyway and then at that basis you're living and you're breaking even and you can therefore, be selective and find



good buys in the real estate market which you then purchase and develop. And gradually you'll move out of the appraisal business and into the investment portfolio business namely your own. Its the only way really to capitalize what you know about a given market and create value, capital value in the long run through the appraisal. Then it becomes a life style and the life style that is more likely to put you in the path of opportunity in real estate investment, management, development, if you will than any other. After all if you were working for a major company and you came across a good buying opportunity you're obliged obviously to point that out to your company. Its one of the things that you are doing for them. And if its your company, obviously what you know is what you can act on and proceed accordingly. So appraisal becomes the gateway if you will for a life style which represents independent investment, property consulting and so on. Frank has done very well at it. After 15 years out of the program he can spend 6 months on his hobby which happens to be Russian and go over to Leningrad and study for three months and decide gee how can I get into the antique business selling Russian artifacts in the U.S. With the real estate he stays at home and he makes money while he sleeps. So the object of the appraisal business today for the independent is really to move into a position from simply selling time to a point where his income cash flow is coming from assets and then he makes money while he sleeps. Appraisal does offer that as a very significant offering as it were to the independent investor when in fact you didn't have any real money of your own to begin with. Again, if you simply marry the money, it's alot easier than doing appraisals. For those who are socially inept but technically capable. Question on conflict of interest--Chief, conflict of interest, yes, a number of appraisal firms have been sued on conflict of interest because they have either owned a property adjacent to the one that they were appraising or in several cases actually eventually purchased the property they had appraised which was really dumb.

(gap in tape) Roulac says okay, the fact that we appraise the property and the

investment banker can sell this property to any where from three to five percent more than he could have if the people didn't trust the appraisal and therefore, our firm name on the prospectus is worth one or two percent of the value of the property. So he doesn't cite the appraisal fee until he takes a look at the property and says gee, it looks to me like I'm going to have a million bucks or two millions bucks for the deal so if you want me appraise it its going to cost \$200,000. \$200,000 doesn't have anything necessarily to do with the actual of people hours or the cost of production for the report, it has to do with the respectability that that report has when added to the rest of the financial package and advancing the interest of that particular party. By the same token if you go to court with an attorney. The attorney has no compunctions at all about charging \$200 an hour, \$300 an hour or more for his time. And yet in many cases the appraiser is really making the case. Its the appraiser who tells the lawyer gee, now here is your position, here are the cases that back your position, this is the issue and what's more this is how the other side views it, here are the flaws in your appraisal, these are the questions on your cross exam and so forth and so the appraiser says hey, I'm going to charge on the basis of what I bring to the case. Now, an attorney get you know 25 to 30% of the award that he wins for his client in a real estate deal. Why doesn't the appraiser get a percentage? Well, the argument has always been in the past, gee, um, the appraiser's fee cannot be contingent on its conclusion and so forth, which is one factor, but the other factor is all right, what if I don't come in as the appraiser of record. What if I come as the consultant of the attorney? I help him choose an appraiser. I have to do the research on the legal cases that support his position. I do the market research that help the other appraiser along and so forth, at that point I ought get a percentage of the award. If I have valid arguments for why the appraisal should get done this way and know how the other side is going to view it and what the flaws are in their appraisal report, I oughta be compensated on a percentage of take just like the lawyer.

You're now beginning to find appraisal firms, well known appraisal firms in the country, that take that position that there are two charges in a trial, one is structuring the case of the lawyer in which they get paid a percentage of the award. Two is doing the actual appraisal. Many of them do not do the actual appraisal, they simply provide instructions to the attorney and the client as to the strategy of their case and then help them pick an appraiser who then goes out and implements the appraisal under that period. So again, converting what you know for capital value as opposed to an hourly value. Okay, sorry I ran out of time, we'll pick up again on Monday.

(Various administrative details were discussed) The next major item which I had overlooked, but I can remedy quickly is photos for your appraisal. I can have a

selection of seven photos for \$2. Which would consist of four of the subject property

fore and aft and loading dockside and I forget what the other one is of anyway, plus

one of each of the comparables which will of course is a result of xeroxing of Landmark's

original layout on the comp. So in any event if you are interested in that, maybe Diane can give me a piece of paper and you will sign your name and I will have those for you on Wednesday. If you want to use your own photos you are welcome to do so and for those of you fumble with a lense or otherwise haven't thought about it until now, we will provide the instant packet on Wednesday for completion of your final final version. Okay, when you hand in your final copy will you please include with it Ginnie's marked up copy and my typed note as to what your flaws were in your first one so that we can see the degree of effort made to improve. Ginnies' marked up copy and my type written note. Couple of further general comments. I think I have 8 or 9 reports left at home and will try to get those done by tomorrow night. I'm going through the pile and all of

a sudden one emerges out as 14 W. Mifflin from last year! (Laughter) Okay, first of all a lot of you are having major difficulties distinguishing between eminent domain value of most probable price but part of it emerges because we define the differences we're appraising on the digest of facts. You go on for four pages somewhere in the appraisal there's the legal interest and so forth and then you get to the front page and nothing said about the legal interest. You wanted to know the value as of October 1st but you never say of what? When you give a value, you first of all have to preface it by saying, the value of your fee simple of out lot eighty-three and your stated interest in lot 82 subject to existing leases in place is: "Boom" and then away you go. One of the things that's very boring about appraisal, but is very critical is that your letter of transmittal, your conclusions and your certification are exactly the same. Its repetitive. And each one has to be a stand alone. At the time they were doing the letter of transmittal and certification you can't say, hey, as I've told you in my report the value is and then a number. If you don't have the slightest idea what the number relates to. So define the interest, then give the date, then give the value most probable value or just market value as defined and then give the conclusion. And the most probable price always has to be bracketed by a range. Don't be afraid to round the range. Come to the nearest \$5,000 or \$10,000 or whatever. Most of you are very very bashful about that, but if you're talking about a property that's worth a million dollars or more a \$10,000 rounding factor is only one percent. So if you have a factor that turns up \$984,732 and you round it to the nearest \$5,000 that's less than a \$300 adjustment on virtually a million dollar value. That's 3/10 of 1%. If you are that precise on your appraisal whether its 3/10 of 1%, I'll give it to you. But you have to prove to me that you're that precise. So, at any rate you will have to restate the interest for the eminent domain. In essence what you are appraising in the first case is most probable price is in essentially a fee simple interest in outlot 83, a vendee's interest in outlot 82, both of which

are subject to the leases in place as of October 1st. In the case of eminent domain you have to point out that you are appraising the fee simple title and then subtracting or allocating the value to X dollars to the leasehold interest, X dollars to the land contract interest, and X dollars to obviously the Anding Enterprises Interest. Now, where you part company, there's only one person in your class who did it right, Diane Atwood, the only one who went about it correctly, from that point, you can make several different assumptions about the Zevnik interest and most probable price. Some of you said it would be escrowed and you would set aside X dollars to the fee, essentially the land contract so that you could provide a fee simple to the next buyer, that is fine. However, obviously if you do your computations depending on what interest rate you assume you may put more or less money aside if you assume a stated rate of six percent on an eight percent contract, naturally you have to set aside more than \$113,000 plus whatever dollars you do have on the land contract in order for there to be enough money to pay it off over nine years if you assume that you can earn 8% on it, etc., and pay it off, you have to allow for income tax of course, you're paying that off on the side some place as the seller, but nevertheless, then you can set aside about what the balance is due. If in fact you thought you could invest at 10% for a 9 year or 10 year term or whatever period have left lost on it, you can actually set aside less than \$130,000 and so forth. So then you would take the value of the shopping center minus whatever you set aside and that would be the value of the Anding interest. But notice that is subject to the existing leases. And if you've done your DCF or whatever to figure out your number, that's fine, anyway you simply say: add lease less what you set aside to the fee. If you on the other hand you decided gee, while she won't let me repay it, she's indicated that she will not withhold unreasonably the assignment and therefore, assumption by the new buyer. Then 8% money has a premium. And you really have to take the value of the shopping center free and clear of x dollars but if they get the benefit of the land contract, then its another plus so many

dollars for the present value of the land contract given the fact that its at 8%, otherwise you have to borrow money at whatever you said you're interest rate was on the mortgage. Remember it is subordinated to the mortgage. The land contract very specifically says the it will be subordinated to mortgages on the property, the first mortgage on the property, but not to the note. What that simply means is that the owner's remedy is for the first mortgage addition to take the property by foreclosure and as it resold and so forth, but that Mrs. Zevnik is not to be sued for breach on the note, not to be sued for damages on the note. In other words its the same as saying it is none recourse. So if it subordinated to the mortgage, a number of you made a big deal about the fact that it would be hard to sell this property because of the land contract being in the way. I don't think you read the land contract. It is subordinated to the mortgage, its not subordinated to the note. Now its a much cleaner deal, obviously if you've got the full fee to apply to the mortgage position, but it isn't very threatening to the mortgage position and National Guardian has lent on it twice already. No problem. And they in effect are wrapping right around it and taking their interest as collateral, so your over elaborated concern about gee this is going to hurt the marketing value of the properties is to me was riding around the fact that you have to sit down and calculate what the premiums would be for the benefit of getting the financing with the deal. Now some of you took what we had talked about in class, you took the full present value of the difference between the interest payment that you need to pay versus what you would have had to make under say 11% interest and split it in half, that's fine, thinking it was in both parties interest. But is not consistent with what you've said on the front page which was the owners bargaining position is excellent because they don't have to sell it right away and they're not in any cash bind and so forth and so on and so on and so on, and in the next moment you say gee in order to sell this they'd have to give away the financing on it, that doesn't track, you gotta be consistent. Others of you said the market is

soft which is line out of 25 N. Pinckney which looking back on it I wish I hadn't written, but in any event, I challenge you to tell me what a soft market is and is the market soft for space or property? You get very messy about that. Okay. Now you can argue that the market is soft for the space, because they still have a couple of vacancies, although that may be more inattentive management than the market for space. But the market for retail properties and strict retail properties in particular is hot which is why there aren't very many of them available. In fact one of the little discussed reasons is that everybody wants to beat inflation and get in on what they perceive in the long run as a compression of retail areas down on the neighborhood thing has caught the transportation rise as capital prices go back up for whatever reasons. So the market for neighborhood centers particularly one as monopolistic as this one which nobody within a mile and a half of it and no likely alternative site for one either is a very good market. So you have to be careful when you use those words and throw off "street wisdom" without thinking about it. Many of you also threw out a couple of things about after tax cash flow, after cash tax flow is the not game at the moment for a limited partnership or for anything else for that matter. And if you tend to talk in street conventions and you tend to be a year and a half behind. As the street is generally a year and a half behind what the market really is. Anyway, going back now to talk about eminent domain. In eminent domain you begin with 1) fee simple title, what's the value of that and DCF would be a great way to run it run it on market rent and say how much higher that than what it was when I ran it for real reasons. Okay. Now you have to say okay, given that spread, is that all leasehold interest or is there a possibility that the tenants would realize the benefit from that?. In any event it should not be discounted at the same rate as the property because its much more risk relative to an individual tenant persevering over the life of the property than there is to the property itself as an investment surviving and prospering for that same period of time. Not only that it would be in the self

interest of the landlord to let him out cheap and we have one evidence of that-- the Coast to Coast deal. Coast to Coast, when I went back and talked to Al Anding as we talked in class, actually paid the Anding Enterprises \$25,000 on Sept. 18th to get out of their lease. If you compare that to the approximate, what is it \$1,400 a month rent that they're paying or \$14,000 a year, I can't remember the exact number. Anyway, if \$25,000 equals the present value of some discount factor times the remaining monthly payments, the discount factor on that is well over 30%. Now, obviously 1) Anding is well off to get rid of them and their well off to get out from under it. And 2) given the opportunity costs of funds to the tenant, why in effect they could take their money and they could probably use it to better higher turnover of inventory or other corporate uses and not have to pay all of those monthly payments. So notice the leasehold value for eminent domain may not be dollar per dollar. You can apply a higher discount rate to the Kroger interest for example for several reasons, one, of course, is that Kroger to sell aren't doing all that hot. Its been three or four years since they're in the overages, somebody wrote they never had been in the overages and I don't think you could have read the overage chart, which indicated they went off to overages I think three years ago and so forth. And have been in decline primarily since Woodman's and Cub's opened up, even though Al and the management may not agree exactly on how shopping center's should be run. But in any event, if you allocate to leasehold interest, X dollars, then the Zevniks are going to get paid off the face amount of their land contract. In fact in some jurisdictions they would argue they would discount the remaining land contract at whatever the current market rate is 11%. There's a classic eminent domain case that was brought about by the fact that in a series of sales on land contract of boarding house in a major urban renewal area, sold to successive buyers at ever higher prices where there were more extended terms of repayment and all of the land contract amounts exceeded the fair market value of the property. And so the Supreme Court eventually approved and ruled that the



total payments on an eminent domain cannot exceed the market value of the property and therefore, what you do is you end up discounting each of those specific interest down, so that the sum of them equals the sum of the sum value of the property. And you can take the easy way out here, and just say fine, they would pay off the \$113,000 plus balance on and it would be gone, but notice that it may be a different amount than you assumed in the first case the most probable price where there was an assumption of the land contract. Because all of that would be extinguished by their eminent domain, because eminent domain is extinguishing all interest in the property in order to transfer a fee simple to the public sector. The deduction in the eminent domain case should be the \$113,000. So now you take the fee simple value unencumbered by bad leases, subtract the leasehold interest however you want to define it, subtract the Zevnik interest at \$113,000 something and what's left is your compensation to the Andings which may be different than under most probable price. Question--Residual and notice for default in land contract? Chief--Because you can only define Anding Enterprises by what they ain't, rather than by what they is. Its a lot easier usually to define something by what it ain't. No because they all had prior claims. They all had prior claims, okay? Question--Should one use a lower discount rate for a stronger national tenant? Chief--What you would probably do is have to look around and find out what they had paid to buy themselves out or something but in any event you would still probably have a discount rate higher than on the property as the survival of the property. One way or the other. The tenant moves out they'll find another tenant to plug in his place, probably. That's the theory anyway. Question--How do you pick a discount rate for a lease buy-out? Chief--Well as I say you've got one example, you've got Coast to Coast which bought themselves out as the landlord was willing to settle for \$25,000 in lieu of the lease. Some of you get very sloppy. The original Kroger's lease was assigned to Gateway Foods in LaCrosse, which is a wholesale food distributor who likes to control outlets. They then

in turn sublease to the current manager. So the current manager is an independent business man subleasing from Gateway and therefore, locked into buying virtually all of his supplies from Gateway so Gateway makes obviously something on the wholesaling of the food lines but also picks up something on the spread, but we don't know what the present occupant is paying for rent. We only know what Gateway is paying for rent. They could have subleased for \$1.75 or \$2.00 sq. ft. which would be a better deal that he could have gotten independently from somebody else if the current market is \$3.00. But in exchange for taking their deal he has to buy their groceries. They have that all over the state, they go around and pick up defunct super markets or markets that like Red Owl and Krogers and a number of other people like A&P and they pick those up and that gives them access to the market but it also gives them a double dip generally, spread on the rents plus the sale of the wholesale food line, so technically you have LaCrosse Gateway Foods as the tenant and the present management is a sub-tenant. Well the compensation in this case relates simply to the real estate. The fair market value of the Anding interest is defined by fee simple less leasehold, less the interest Zevnik. Again, many of you in talking about the legal interest, gave me the \_description\_ of the property but not the \_interest\_ and you had a great deal of trouble talking about the property encumbered by the land contract, that doesn't tell the reader anything. Did they sell it on a land contract so that the Andings have a vendor interest or are they buying on a land contract? So its important to distinguish which end of the contract they're on. In this case they have a vendee interest because they are the buyers, Anding Enterprises are the buyers, the Zevniks have a vendor interest. So when you're adding up the positives you add the vendee interest to the fee simple in Lot 83. When you're subtracting down from the total property, you subtract the vendor interest because that's a claim on the assets. Okay? The last thing that threw me is QP is not a linear regression program. Many of you said it was a linear regression program. QP is really a

multiple iteration solution to linear equations in which for every attribute you have the score and then you have an  $XYE$  function in front of the score and you try to find that set of weights which brings all of those equations as close to zero as possible. Okay? There is on QP's output once; the weights have been determined rather than simply using it as an arithmetic mean, there is the alternative of taking the weighted score against the price per unit as a linear regression. But the weights were not determined by linear regression and therefore, the model is not a linear regression model. Its an important distinction. A couple of you used linear regression and said gee, it doesn't work very well on the market approach which is almost predetermined by the fact that you have only three observations and then you have ten minus one to determine the standard error. The standard error will be at least half the price of the mean by the very nature of it. So it blows up, and its exactly why Dilmore developed the alternative algorithm. Set theory by dealing with the universe doesn't have to work the degrees of freedom and therefore the standard error is a lot smaller, but second of all his standard error is the standard error of the estimate. What happens when you apply this to an observation that is not part of the sample. The standard error of the estimate is slightly larger in set theory than would be the standard error of the mean that was actually determined. If that makes any sense to you then you are a statistician. I want only one copy of the final report. And try to make it as spiffy as possible for example double space after you made your corrections or however you want to do it. Some of you are very very good with your apple computers and your over printing routines and your formattings and so forth, and some of you have barely mastered the keyboard in order to get the letters down let alone formatting. The object ultimately is to end up with a product that is, if you will, what the designers call a portfolio item so that you can show an employer what you're capable of doing (in which case he may gag and say "I can't afford to do that"). The last thing we want around this mortgage banking

house is the right answer. (Laughter) Double space is acceptable, yes. But look at it in terms that this is your final professional swan song as it were. Your only penalty for being late at this point is that you get your papers back last, which obviously makes some inconvenience along the way. Those that are really late obviously are the last things to be considered. Many of you are one or two days late and so that just made it easy for me to decide who go graded first. I think I've covered all the administrative matters. Okay, now we want to talk a little bit about the standards and rules. The standards and standard rules-- obviously there are a number of different elements to standards and the appraisal people are finally beginning to perceive that there is a difference in terms of terminology which helps define method and fact and so forth; behavior relative to the client and your fellow appraisers and procedure in going about the appraisal process. So finally they're beginning to pull those out and rather than simply having a standard of ethical ethics behavior and so forth which kind of mixes and matches all those things, they're trying to subdivide that. And the process outlined initially at the beginning of your brochure is extremely important. Begin to look at the definition that we set up early in the semester about your relationship with your client and what you owe to him in terms of disclosure and setting out defining what's your problem and then where you go from there. Starting on page 4 one of the things that has the most dopes going among MAI's is the competency revision. They argue none of us are competent to do what we're supposed to be expected to do. But prior to entering into an agreement to perform any assignment you have to carefully consider the knowledge and experience that will be required to complete the assignment and the knowledge needed or with regard to appraisal review and analysis as defined here in, immediately disclose the lack of knowledge and experience to the client and take steps necessary and appropriate to complete the assignment competently, which means you may have to take a seminar, you may have to bring in an associate who knows what they are doing, etc., or with

regard to master appraisal, as defined. Take all necessary or appropriate steps to insure the master appraisal is developed under the supervision of the appraiser who has the qualifications. This suggests that there will be more and more joint appraisal efforts and that the appraisal firms will expand from a one person kind of operation in which his experience, obviously is the result of doing. For example I've never done a motel but I'd sure like to do one, and so as a result I'm certainly happy to experiment on you. That would be like a surgeon telling you gee, I've never taken out an appendix but it looks really challenging. (Laughter). So in order to obviously handle that, eventually you're going to appraisers with very various specialties combining into a single office and working through it. The Porcher provision which I think is kind of an interesting nomenclature, in dictating that the appraiser may enter into an agreement to perform an assignment that calls for something less than or different from the typical market appraisal and so forth, one, the appraiser has determined the assignment to be performed is not so limited in scope, the resulting appraisal reviewer or analysis so as misled or confuse the client. In other words its no fair to say all right, if I accept the buyers scenario about how quickly the condominium is going to sell and so forth and say gee, if you buy this, you'll buy anything, you know, that sort of thing on the front end of the report which is what a lot of appraisers have done which is what the standards are trying to prevent. No sense accepting a fictional set assumptions from the client and then using that as your hold harmless agreement, saying gee I knew it wasn't going to fly in the first place but he asked me to say what would it be worth if it did fly on these set of assumptions. And the appraiser must advise the client that the assignment calls for something less than or different from the work required and therefore, the report will include a qualification which reflect the limited scope of the appraisal, review or analyses. And then it goes through and says that you're not allowed to side step and then provide a series of elements. Starting with standards one, the

appraiser must be aware of, understand and directly employ recognized methods and techniques that are necessary to produce a creditable appraisal. And they're trying to indicate that methods change and in effect arguing that you can be out of date and that the rule recognizes, he quotes "principles continue to effect the manner in which appraisals are performed, that changes in the development of real estate deals with a substantial impact on their profession and important changes in the costs and demand reflected in the that are reflected in the marketing, etc., may impact on the value and so on. And each appraiser must continually improve his skills to remain proficient." So that they're really setting the ground work to say that you have to be using the most contemporary methods, its not fair to take out Edition 4 of the Institute's textbook and argue that that was you're justification for the method. Then furthermore, under SR12 developing a real estate appraisal: "The appraiser must observe the following appraisal guidelines, A) adequately identify the real estate. Identify the real property interests under consideration (which is where you folks are having problems) define the purpose and the intended use of the appraisal, consider the scope, describe any limiting conditions and identify the date of the appraisal. B) define the value being considered. The value of the estimated is market value. The appraisal must clearly indicate whether the estimate is the most probable price in terms of one, cash or two, in terms of financial arrangements equivalent, or three, some other terms as precisely defined. That is a back down on the premise that it would be in terms of cash. But notice if an estimate of value is based on some market financing or financing with unusual conditions are extended, the terms of such financing must be clearly set forth, contributions to or negative influence in value, must be described and estimated and the market values supporting the valuation estimate updated, described, and explained. Here's where you're having trouble with Zevnik. If the number that you've recorded in your letter of transmittal presume assumption, and if it was assumption did your price include a specific

premium for the benefit of the financing, or not. Oh, one other little problem in logic that many of you had. Many of you accounted for in your income approach an allowance for renovation and restoration of the Center and had various budgets for that. You then related that to a market value of the three comparable sales in which there wasn't really any allowance for that at all. And now the question has to be, if your attribute scoring system correctly recognized the obsolescence of the present situation, then the value which you got was the points that you gave the subject property, has already been discounted for in deferred maintenance in need of restoration, right? If on the other hand, your attribute system didn't recognize that explicitly, now you have a logic flaw because on the one side you have a market approach which says you know presumably how it is and on the other side you have the income approach as to how it will be after we fix it out. So you're not really matching two things of the same parity. You have to watch your watch your logic, appraisal is a real exercise in very careful logical systems of what you're doing.

Okay. (Grasskamp quotes the guidelines) "An appraisal must observe the following specific appraisal guidelines. A) conserve the effects on the use and value of the following factors existing land use regs., reasonably probable modifications of land use regulations, economic demand, physical adaptabilities of the property, neighborhood trends, and the highest and best use of the property"--all of those things and notice its not only the existing regulations but what they might be changed to reasonably. So if you go back in the zoning readings and you find "AG-1" lands is really a holding zoning pattern until someone comes in with a proposal, you have to indicate what the general inclination of the zoning rules to up zone or possibly down zone the property. Notice the comment on SR1-3 growing out of the legal suit that we talked about before. The guidelines set forth a list of factors that effect use and value. An appraiser must avoid stereotype or biased assumptions relating to race, age, color, religion, gender, or national origin, or assumptions as racial ethnic or

religious homogeneity is necessary to maximize value in a neighborhood. Further an appraiser must avoid making an assumption or unsupported premise about neighborhood decline, effective age, and remaining life considering highest and best use. An appraiser should develop the concept to the extent that is required for a proper solution to the appraisal problem being considered. In other words, it not enough to say this would be retail, if what you're really saying is this is convenience neighborhood retail or this is specialty retail or then zero in on something less than the generic classification. It would be improper for example to say, um, the neighborhood must be in decline because it has diverted from primarily white to primarily black, or Hispanic or whatever, that would be grounds for civil action and would also possibly be grounds for criminal action by the federal government if that were going to a federal agency. In other words, the simply racial transition it would have to be ignored, you would have to provide physical evidence that the property was deteriorating or that the crime rate was up or the social factors were being cataloged and so forth. You cannot simply make a blanket statement relative to a property on anyone of those elements. SR4:"In developing real estate appraisal, an appraiser must observe the following six guidelines: 1.) Value of the site when appropriate appraisal method or technique as though vacant separately. And then collect and verify and analyze and go through all three approaches to value. No pertinent information shall be withheld and base projections of future rent and expenses are reasonable clear and with appropriate evidence. In other words, you must provide some evidence of that. Many of you have trouble with that in your appraisals. My conservative estimate is, conservative meaning anything you want it to be simply you know I could have had a higher increase in my rents or I should have got a lower rate increase in my expenses, which ever way you're looking at it, its conservative. That's not fair, you have to give some argument. It was announced in the paper that real estate taxes would be rising to 4.8% you know, this year or some other element



and go on further to suggest that that may continue because of the loss of state aid, the loss of federal aid, increase in school budgets, whatever seems to be the rising component. By the same token regarding operating expenses you may want to indicate what inflation rates you're using and your source and interestingly enough on utility costs for several of yours, if you recall the Madison Gas and Electric they were actually forecasting a decline in utility rates as fuel costs and amortization or funding of atomic power plants and so forth was declining and the energy cost was gradually shifting lower for a variety of reasons. When estimating the value of leasehold estate consider to analyze the effect on value if any of the terms and the conditions of the lease. Consider and analyze the effect on value if any of the assemblage of the various estates, or component parts of the property and refrain from estimating the value of the whole solely by adding together the individual values of the various estimates. It means you can't take your probable price add back the leasehold value and then suddenly have the right answer. I think it was John Robert White who pointed out that by simplifying the ownership of the Pan Am building, buying up various partial fragmented interests in that property they considerably enhanced the property because they made life simple. There's a classic case in Hawaii where, as you know, much of the residential land is on leasehold. The Bishop Estate which represented most of the Queen's land and most of the ownership of Oahu, at least of the Honolulu part of Oahu, was specifically prevented by terms of the clauses from selling the land, and therefore, they leased lots to the subdivision folks and so on. Well, ironically this shows you how politics works. The large mansions that are east of Diamond Head along the beach are on leased land from the Bishop's Estate. And their leases were about to terminate, the Bishop's Estate was licking its lips because they felt that as they re-acquired all of that land they would now have a new Waikiki area for commercial development. So the rich with careful concern for the poor and the injustice of this system got legislation passed

through the legislature that any given neighborhood could petition the Hawaiian Housing Authority to acquire the fee to residential subdivisions. The did it as a class action and did it for the whole subdivision. And then re-sell it to the owners on favorable refinancing terms so that eventually they could re-assemble their house and their fee. The theory was a, of course, that the poor were suffering terribly under the system as it was presently operating. Well of course, the real fact was that because the majority of voters lived on lease hold land, legislation had been passed which effectively capped the rents that you had to pay and they did not have to pay rent on the improved lot, they were paying 6% on the value of the raw land, after you subtracted the cost of curbs, cutters, sidewalks, sewer and water--all the things that made it usable. So the basic rents were a hell of a good deal you know compared to having to buy the lot and so forth, unless of course, you were rich and about to pay the interim. So now they go to court and the idea is to extinguish the fee interest of the Bishop Estate and pay them the present value of the 6% rent which they are entitled to receive discounted at current investment rates. And the Bishop Estate argued that the taking, meant there was an increment in value, so that the sum of the parts, exceeded the value of the individual parts. That if you took the present value of the leasehold interest of the home owner, purchasing the land per se, plus the residual interest of the Bishop's Estate in the land, as it was being taken, that that would produce land which they could show, when there was a fee title to be had in Honolulu, it sold for premium. Simply because it was full fee, and simply because it simplified life relative to the user/owner of the land. They tried to put that in regression analysis with Bob Foreman and Don Dorchester and got lost because the judge didn't believe in regression analysis, as we suggested earlier, but they a little later went back and were able to win a partial decree indicating that in fact the sum of the pieces was less than the value of the whole and that there was an increment surely solely attributable to the assemblage of a fee simple title, hence you

can't add back you have to deduct down from the fee simple title. Very interesting problems. There have been very few neighborhoods in Hawaii which have petitioned to buy their lots as the increment in value won't anywhere offset the interest costs to pay for the damn thing, as opposed to the rent that they currently pay their fee owner. The income from the Bishop's Estate supports the Bishop's School, which is available for only full-blooded Hawaiians--true Hawaiians. It is a very fine school because they have tremendous amounts of money to spend on it and the only problem is that there aren't that many real Hawaiians any more. They keep lowering the blood line so that now I think that if you have only 15% or 18% Hawaiian somewhere in your family tree, you are eligible to go for free as cake to Bishop's School and go through senior in high school. Really superb education and the real problem now is because they don't know what to do the extra money, they pay it to Trustees and the Trustees are appointed by the Governor, so the Bishop's Trust is a wonderful place to repay old cronies for their political support, since there isn't a hell of a lot to do in terms of managing the Bishop's Estate, other than show up at the monthly meeting, get the latest report on how much money the staff has collected and pondering on how to spend it on the damn school. They have just about anything you could possible want and just as the terms of the profits rising and the rather restricted interest they acquired too much land. And interestingly enough they felt compelled to fight the state's effort to acquire some of their land by eminent domain because of the prescription in the trust that said they couldn't sell the land, so they had to be overwhelmed in the courts indicating that they had exhausted all legal possibilities to preserve the trust. When in fact they were delighted to get some of their money out of the land and be able to have a more balanced investment portfolio however that was a kind of "reverse" English situation. Now, SR 125 in developing a real estate appraisal: "A) The appraiser must consider and analyze any current agreement for sale, option or listing of the property being

appraised, if as such information is available in the normal course of business.

B) Consider and analyze any prior sales of property being appraised the occurred within the following time period--one year for one to four families and three years for all property types." In other words this is the chain of title which you need to look at. "C) Consider reconciling the quality and clarity of the data available and analyze within the approaches used and the applicability of the suitability of the approaches used." Its simply what Ratcliff was saying all along. Sometimes some of the methods simply don't have the data to make it work. Okay, standard number two relating to special conditions "all real estate appraisal reports must one: clearly and accurately set forth in the appraisal in a manner that will not be misleading the contents of additional information that will enable a purchaser to believe or rely on the report, to understand it, to clearly and accurately extol and extra ordinary assumptions or limiting conditions that directly affect the appraisal." Integrate those even in the letter of transmittal such as what I did about ethnic thing or what I did about the eminent domain thing. I think that's all we can look at here for the moment. SR2-2 outlines pretty much the written components and the reporting guidelines. Define and describe the real estate being appraised--use the letter of transmittal to identify the address and so forth. Identify the real property interest being appraised, which some of you did in terms of the fee simple and Anding interest. Three, state the purpose of the appraisal. Next, define the value to be estimated. Set forth the effective date of the appraisal and the appraisal date. Describe the scope of the appraisal and set forth the assumptions of limiting conditions etc., in your conclusions. Set forth the information considered. The appraiser's procedures followed and the reasoning that supports the analysis. Set forth the appraiser's opinion of highest and best use. Then explain it for the exclusion of any of the usual valuations approaches, and then go through any additional information that may be appropriate and be compliant with the courts or clearly identified any claims

which the courts have found to be a requirement. And, each written appraisal under SR2-3 must contain a certification and notice the language in the certification is now spelled out for the appraiser so he can't waffle on the certification. Notice that those that help you as professionals in the appraisal report must be identified and SR2-4 "To the extent that best possible and appropriate each real estate appraisal report, including expert testimony, must address the substantive matters set forth in standard rules 2-2. So if you're going into court and somebody asks you, and then Mr. so and so, what did you do to appraise the property, you would really have to be able to clip that right off. Use terms that are virtually in that same order so that if somebody challenges your testimony later, and the recorded testimony is being turned into the appraisal committee, you will have met those particular standards. An appraiser who signs an a real estate appraisal report prepared by another, even under the label of review, must accept full responsibility for the contents of the report. In other words, if it doesn't meet all of the standards outlined here, then the appraiser who \_signed\_ it, is the one who gets hauled in for professional rebuke and review and etc. This is to prevent many of the appraisers who often have four or five young people working for them and then just simply sort of sign them--from escaping the consequences of a poor report because if you signed it Baby its your report. Interestingly enough I think appraisal is one of the few of the financial information things that still requires the individuals who did it and signs it to be responsible for it. Notice that in the accounting profession it is never signed by anybody alive, only Price-Waterhouse or Coopers and Lybrand all of them long since gone to their just rewards so the exact perpetrator is never known. Standard Three in reviewing an appraisal and reporting the results--That review, an appraiser must form an opinion as to the accuracy and appropriateness of the report being reviewed and must clearly disclose the nature of the review process under taken. That's more and more becoming a very difficult problem, there are some people

who are submitting the appraisal to be reviewed particularly where they smell a rat to another professional. The other professional doing the review, must do just as it is outlined here. In developing a real estate analysis, an analyst must be aware, understand and correctly employ those recognized methods and techniques that are necessary to produce a creditable analysis. So if you're looking at a multiple lease project and you can't do a lease by lease analysis, obviously you're in trouble. And you're going to do most motels you're going to have to understand the inner accounting systems and processes of a hotel. And know which methods are to be used and so on, I think most of the others are fairly self-explanatory, not quite so. Narrowing others then, SR4-3--more relative to consulting than appraisals and interestingly enough its really in violation of what some consultants do, which we'll talk about more in 857, but notice: "identifying alternative courses of action to achieve the clients objective analyze the various scenarios." -We have been talking like that for years! "Identify both known and anticipated constraints to each alternative and measure their probable impact. C.) Identify the resources actually or expected to be available for each alternative and measure that and then identify the optimum course of action to achieve the clients objective." Most consultants argue that you shouldn't do that, that you should identify at least two courses of action. Three, I suppose is doing nothing as an explicit decision or course of action at that time and allow the client to make the final decision because otherwise without that intervening circumstance there's a much higher liability. We said this was the optimum course of action. You've sold people on how infallible or creditable you really are, then they do it and turns out to be wrong. It can be very painful for the consultant ultimately in terms of liability. So most New York style large dollar volume buying consultants would tend to identify two alternative courses of action at the very least and let the owner be the intervening or the client being the intervening decision maker so that you can argue that some how something got factored into his "little black

box" you had not considered therefore if it's wrong, it isn't your fault. Sort of an intervening circumstance as it were. Look down at SR4.4 and 4.5--

"Market analysts and analysts must observe the following specific define and delineate the market area." Which is something you do sometimes. "Identify and analyze the current supply and demand contingencies. Identify, measure and forecast the effects of anticipated development or other new construction. Identify, measure, and forecast the effected anticipated economic or other changes in future demand. "It is a fairly tall order for an appraiser. And then coming down to the next one--"cash flow and the investment analysis--the analyst must observe the following specific guidelines: 1.) Consider and analyze the quantity and quality of the income stream analyze the history of expenses and reserves, consider and analyze financing availability, select and support the appropriate method of processing the income stream, consider and analyze the cash flow return in reverting to the specified investment position over a projected period of time." Do all those elements and be supportive of your conclusions in that. In many cases people simply--and many of you did as a matter of fact--simply provide Finsim II and leave it to the reader to figure out where that all fits together. As you use the systems like this, one of the things that they break down significantly is allowing the reader to fact through and you really have to present it in reverse order. Many of you put the conclusion first and then stuck the supporting tables of individual lease selections and integral expense items and so forth in the back of the appendix. You really have to key those together, so if you are going to provide the summary statement first, footnote each item and say all right now, revenues can be found by assembling the revenues from each of the lease analyzed in appendix bla, bla, bla whatever it is, or in successive charts--exhibit so and so and so and so. Again, if it comes out of the expenses, indicate where that came from so that the reader can track through--should be an audit trail. And models like Finsim II simply don't do a good job of that. You have to type those in on top

of the computer output so that the reader can follow through otherwise the logic would lead to results simply isn't apparent. Quite often I would really urge you to integrate that with your controls and maybe do it backwards. If you're doing it, say all right the first thing that we have to look at is the revenues--fix your revenues, right after that as your exhibit or your exhibit showing the six leases analyzed as to their base rent and their overages and their CAM payments and so forth. And then indicate, okay, the next thing we gotta look at are expenses--handle whatever the key assumptions are in the prose and immediately after that have the expense output from Finsim II. Then go on to the next item. There the real estate taxes or whatever else you want or the allocation of expenses for reimbursement to CAM and put that table in. And then get to the summary statement. Let the reader build step by step by step, and its much easier for him to follow because he just did the summary sheet and then say see appendix D for the rest. Now you look at appendix D and its all been reduced to minute size and there's a rumor around that the Chief doesn't like fold outs. Which isn't true. What I like is print that's big enough to read. I really don't know the explanation--its sort of here's my information dump! I can understand if you feel like information overload by that point in time anyway, but so does the reader of his report--give him a break. So you kind of break the news to him gently. Here's the revenue, here's the expense, here's the reallocation of those, etc., and now we put them all together and presto we have our five or ten year cash flow. Question--general question about who is your audience? Chief--Your audience in this case is Alfred Anding Jr. a partner in Anding enterprises. You have to assume that somebody is going to read this that doesn't know a lot about Middleton. Because otherwise technically Alfred says run the number for me and leave out all the crap on account of I know about Middleton. So its make believe from that stand point that you're writing it for him. Okay, otherwise if you're writing it to the vice president of the XYZ mortgage company, you would presume that some underwriter in some unknown city



would be reviewing that and this way is his of coming up to see the project. That's a good question, that really distinguishes in any way the consulting assignment from the stand alone appraisal. The consulting assigns needs to write up only that which you and the client already don't share in common. The standard five: "communicate in a matter which is not misleading" is being hoped for as a cure to the statement about a number without adequate explanation of the assumptions and so forth, or who provided the assumptions--the kinds of things that have been abused by the syndicators and in some cases Wall Street and their prospectus and whether that's really going to work or not is certainly not clear. Notice each written one on SR5-2, again it goes through to define the problem, basics and so forth and then include all information that's required to run through the study. In the past appraiser tended to either get lazy or pretend to know more than they did by saying records in our office or "previous studies which we did which are confidential" or "I'd like to tell you about this comparable sale but I promised not to" you know, that sort of thing and then they wing it. And in the name of confidentiality and so forth they really short circuited the appraisal process. This is really trying to get at the fact that: hey you were employed to teach this (whoever the client maybe) is about the market and about the deal and if you can't use a sale, don't use a \_sale period\_, you know, because its confidential. What's not fair is winking and pretending that you know and then holding back on the critical data on the grounds the your violating somebody's confidence. Obviously by not simply passing on information and so forth you're violating somebodies confidence and certainly the rule that you tell all pertinent information. You will notice by the way that these rules have been integrated with those of the committee of eight so you are now into personal property, this is value--jewelry, machinery, you know that type of thing, and they are hoping of course, the same rules will apply to each element. One element that is useful is interpretations of the terminology is indeed the definitions, I'm sure that if you go to court you'll

be asked to recite by somebody's attorney. Now really Sir, what is an appraisal? And if you get something other than that say you know a supportable estimate or achievable a value, etc., etc., etc., and you can't quote that pretty much verbatim from here, why then it begins to suggest, well are you sure you really did an appraisal, and not an analysis report or whatever?

Standards of professional conduct notice is different from the content of the report and you should review that closely. And one of the things that is going to be very interesting is the very last one. CR 13 it is unethical to say in the report to the Society, that the actions of any member has as violated the standards of professional practice and conduct. Now that I'm a candidate I'm certainly going to be writing a lot of long letters. Yes, great. Question--on special standards and conduct candidates. Chief--The Society. The Institute is the big white book, the Society of Real Estate Appraisers which is independent of the Institute is the little blue book. Certainly the first parts are the same the Standards of Professional Conduct are slightly tighter I think than the SREA than for the Institute. But ultimately like all statements of conduct, its not so much the statement as how it is interpreted and enforced by their committees and that remains of course to be seen now that the Barnard report is out. I also commit to your reading, the Congressional Report on the Barnard legislation. The Barnard legislation is finally just published but I won't hold you responsible for that. You are, obviously, running out of time. And we'll talk a little bit more about the implications of some of that on Wednesday, and a little bit more about the business of appraisal on Wednesday.

Any other questions on the appraisal report? I will have the last one for you on Friday afternoon it will be in a box in the chair inside my office. Hopefully, that will finish them all off. And all kinds of surprises in the pile. I've got two appraisals from

last year and one feasibility study from last spring in the pile, which went to the rear

of the pile. So I will get those done in time to clear up your incompletes for graduation. Tonight is Lisa Graham on Canary Warf in London. And Melissa will you get the stuff out for me? Its not locked up someplace where we can't get at it at 7:00. Okay, it will be in room 22, Real Estate Finance Course. Last subject of the semester is a private control on appraisal quality which I'm talking about is not the control the Barnard effort that-was the legislative control. Since the industry has not been able to wait for either the professional societies or the federal government to get the problem under control. What is developing quickly is something called a Letter of Engagement. There was a time when you called your local appraiser, asked him for a market value appraisal on the telephone, gave him the address, and that was virtually all the dialogue there was between the appraiser and the client. Today as we're outlined before there's generally a fairly extensive interview in which the problem of the appraisal is discerned very quickly and the various documentation to be provided by the client is worked out with the appraiser and it goes from there. That is being more or less formalized, into a letter of engagement. The letter of engagement can either be a standard form that has been developed by a specific trade group or can be a negotiated arrangement that represents corporate real estate policy. The Ph.D thesis dissertation by Robert Gibson, explored the use and extent of that in the pension area. The reaction was rather interesting initially. Upon first investigation it was indicated that no such thing was really needed, that they all understood their appraisers well enough, etc., to a point where two years later the National Counsel of Real Estate Investment Fiduciaries, called Bank NCREIF, which represents all of the major pension fund money, you have to keep managing a minimum of \$50 million portfolios that belong, decided to issue a standard format for all letters of engagement. The rationale goes as follows: 1.) The pension's sponsor of any

particular pension fund will be expected to prescribe a standard appraisal procedure for the assets in the fund. That would be true of close end funds, open end, or segregated account. In that they will one, define the frequency with which the appraisal will be done. Two, the selection process--who is eligible to do it and three, they are concerned with the potential conflict of interest issues in the selection of that appraisal entity, and we'll get to each of those in a moment. One of the readings in the last of your hand book, is in fact the second draft of the NCREIF proposal, the minimum requirements of that. What they discovered was that while every corporate entity has certain policies as to what kind of insurance would be required, how it should be purchased, what procedures would be in the event of a casualty loss, and so forth, almost no corporate entities had any written policy statement on what would expected of the appraisal process and how that would be administered relative the funds involved. So the first thing that you really needed is a statement of policy by the pension sponsor. That statement then is matched to the procedures of the asset manager. The asset manager, if they are operating a funds in which someone is simply a partial interest, can conceivably have a conflict between the appraisal standards that the investor wants and the appraisal standards that they are applying to the fund. And one of two things can happen, either they're going to bend the appraisal policy to match that of the fund, and type them up accordingly, or obviously the money is going to withdraw, and that's something they can't stand. The last thing the asset manager wants to do is loose the account and so as a result, there's a great deal of sponsor interest in how we're able to go forward, and what standards control the procedure by which they're done, and the assumptions that are made has forced the industry to come around. And the lesson was taught to them very quickly when it was perceived by the industry that PRISA I was generally over-valued, that the appraise value of each quarter and each year were insensitive to what was happening in the real estate market and people started to withdraw from the PRISA I or they'd call

for their money, feeling that one thing you don't want to be in an overvalued bottom is the last guy out. So you're much better to stake your money and run while its overvalued and your coming out ahead at somebody else's expense. At that point Prudential decided to regroup the whole group with a much more thorough appraisal process of all of the properties in the portfolio, which they are now working on with Charlie Wurtzebach and Jim DeLisle being primarily responsible for that effort. Now one tends to suspect that if they had an appraisal problem, Cardinali was one of the great foes of this study and he is the director of appraisal at Prudential and he's come around 180 degrees in terms of how he's going to approach the appraisal process. In any event, once the appraiser's pension sponsor and asset manager agree on the appraisal procedures to be followed, then obviously there is a significant matter of the implementation. One of the real problems of implementation relative to appraisal and accounting is the fact that in the accounting there's going to be--there are three elements in the certification, while there are only two in the appraisal certification. The appraiser says well, I have no interest present or conflicts in the real estate and two, my fee was contingent on my conclusions. The accountant nails one more element in his statement of certification. Yes, I have no vested business relationship with the client. The question now is what is a vested business relationship? If you're an appraisal firm that does a million dollars a year in volume and \$250,000 is from Aetna, you are dependent upon Aetna for your general well being at which point you have a business relationship. Currently, that's acceptable in appraisal without violating that independence rule, in accounting its not acceptable to have that much dependence towards your firm if you're doing the audits or your doing valuations and so forth. The accountants are having a terrible time wrestling that problem. Some of them have kept their appraisal agencies as separate corporate entities filing unconsolidated statements so its not immediately apparent how much volume is dependent on that and so forth. Others have assimilated the appraisal firm into

the accounting firm, but now have to choose as to whether they're going to do the appraisal work or the auditing work. Interestingly enough when they make the choice they almost always choose the appraisal work because its more profitable. There are significant break downs on the hours that are billed by accountants for auditing in order to remain competitive and to hold the account. Whether its not that good a price in comparison to terms at this moment. An appraisal was therefore the margins on that side for the Big Eight. But the client can't wait for them to work that out so the client has to decide how often do we change appraisers. Typically a pension appraisal, for example, you appraise the whole property the first time and then you're required annually to update your last report indicating any significant changes in the market, changes in the tenancy, possible improvements or declines in the character of the property and so forth and then modify whatever set of assumptions you're operating on a year earlier. How many times are you permitted to update it before you change appraisers? Not only the appraiser but the appraisal firm, becomes a critical element in the negotiations. At what point do you want, to eliminate economic dependence as far the appraiser rendering his opinion is concerned and also his vested interest in smoothing the results, after all the specific building is worth \$100 million this year and next year it says its worth \$85 million, something looks wrong somewhere, but how could it go down \$15 million a year. Now either you were wrong last time, or you're wrong this time but in any event there's going to be considerable explanation to your client and likely as not, even if you're right the client's gonna say, well let's smooth that down a little bit. Let's take \$7 million dollar hit this year, and another \$7 million dollar hit next year and we'll kind of coast in and it won't be quite so obvious that our fund has made a serious mistake or its in an environment that isn't very supportive in the moment. Now that kind of smoothing is exactly what lead to, of course, the Rosenberg fund making some very drastic revisions of their appraisals in Denver, and Houston, and several other market, you've

probably read about that, where they took a \$50 billion hit on several of their funds that were invested heavily in Denver and in Houston even though their appraisers had been gliding down gradually to reflect the situation there. That's very unfair. Particularly where you have investors who can either request their money at their annual valuation on unit value or other people that are putting their money in at that amount, you're appraisal has to be current it can't be gradually sloping in the right direction. It should reflect what is at that particular point in time. So as a result one of the elements in the letter of engagement is one, how long before you change appraisers just to change bias and second of all, how do you distribute the appraisal business to prevent that vested economic interest which violates the independence that is presumed for the appraiser? That is a matter of policy as I say by the sponsor, and then by the asset manager. Some asset managers try to side step the issue in part, if they are operating closed or segregated funds they, indicate that what they'll do is an in-house discounted cash flow, to let you know how you are doing and then every five years bringing in an independent appraiser to confirm the performance and the value of the assets. In other cases some pension sponsors are now hiring appraisers to go purely independent of the asset manager and appraiser the property. The sponsor, the employer, General Electric Company or whoever is funding the pension plan, independently hires an appraiser to say, go look at this real estate in our pension fund and tell us what its worth and then compares that to the value being carried forward by the asset manager. Simply to begin to try to control a natural bias that was there to show a regular profit. Now, the letter of engagement has also attempted to standardize the way which pension people, for example, measure their asset values, so that there is some longitudinal comparisons. That grew out of the Frank Russell index which as you know tried to monitor the performance of property, both in terms of their quarterly income and in terms of their quarterly change in property values. They use appraised value to determine the change in net worth

of the portfolio by region and by property class. And it became apparent that there was almost no wriggle in the line, that the appraised value was a constant up line when all other financial instruments were obviously vacillating and vibrating a little bit. It was the only financial instrument in the country that only went up and made people suspicious and its finally started to have little clumps in it and come down as well as go up, but for a long period of time that's all it did. And when they did an audit with Mike Miles and myself, they found that appraisers were making all kinds of interesting assumptions about the property. Some thought their job was to appraise it fee simple regardless of how was firmly encumbered with leases. Others saw it their job to appraise encumbered by existing leases but they didn't really look at any other encumbrances that were on the property nor did they report the leasehold values and yet the leasehold values as far as those that want to understand performance and judge that performance are one of the real critical sources of the upside. You know in your own shopping center that how well Park Plaza will perform really depends on what happens to Krogers. If we just bump that Krogers space from \$1.65 to \$3.25 that little investment will bloom, right? Now rents aren't going very far in terms of retailing in Madison, we're over retailed. The properties upside really depends on how quickly you can recapture the leasehold interest, right? So aggressive management was essentially getting Coast to Coast to pay \$25,000 to get out of their lease, and now you can bring that one up to market. For the investor looking at a property and looking at it terms of the upside on it and how reasonable a forecast is on a discounted cash flow lease by lease on the upside. He's as interested in the leasehold value, that are there to be recaptured as he is in the encumbered value as he finds it. Right? Most appraisers weren't reporting that at all. So now when, next year they come at it, there's lets say one of those leaseholds is expired and now is re-rented at a higher number, the property manager looks goods no matter what. There's no way to tell whether he got the optimum value for the property. All



you know is the net income went up from the last time you evaluated and would have gone up simply because one of the leases rolled or one of the old bad leases got replaced. There was really no way to monitor performance. So one objective of the appraisal is one, obviously to say how are we doing at this point but another is to say what's the potential on the upside of the property and the third is really to monitor the asset manager in terms of how well did we in fact recapture the leasehold values. How quickly are we running that off and moving our value as close to market value, unencumbered as possible. That's really the measure of good property management. So they begin to look at the appraisal there was obviously a certain kind of information which they should get on every property and every asset manager should also have the same information, so you can compare from one property management or asset management firm to another, otherwise the pension sponsors and pension asset manager have no way of evaluating how their hired guns are doing relative to the use of the capital. But the appraisal should have more than just a function as a point estimate on a quarterly or annual basis. So they began to look at these elements, it was obviously not traditional or typical of the arrangement between the client and the appraiser to do those things. And so a letter of engagement is developed by which you specified here's what we're trying to get at, here's the decision for which we need this as a benchmark and here are the elements of the appraisal which we're going to have to provide to do that. The second thing they found is that most appraisers really weren't up for doing the level of detail of lease by lease analysis. More than once I can remember being called by the appraiser of the opposite side of the case and one case in Seattle where the appraiser was absolutely furious because when he told me he said now that you're on the case I will have to read the leases. Appraisal fees were generally so low, their idea was simply to take whatever the accounting income was and if some accounting firm had signed off on it and said last year's net income was \$101,233 that was their point of departure, they never read the

leases. The idea of coming in and having to read the leases and go back and read the covenants that came with the deed, the restrictions that may be in the zoning and so forth as to nonconforming components to the property--is there an engineering study that says there is asbestos on it and so forth, requiring the owner to disclose environmental issues and so forth that may come with the property. It was really a whole new ball game for appraisers they had never done that kind of thing before. The letter of engagement laid it right out for them, said here's what we want you to use, they said we either want you to use the cost approach or we don't and so forth. Here are where the documents are you are required to read the following and they list them and they're available for normal working hours at this address, etc., etc., etc., and they moved right on through it. They laid it out for them, and said if you're going to do the job, here are the rules and regs and its all part of the letter of engagement. They then would incorporate by reference the standards of performance, codes of ethics and so forth, of the American Institute of Real Estate Appraisers. They would then black out also in fact some of the earlier letters of engagement had most of their time on the fee and what would happen to it if you didn't make the deadline. They had gotten such bad service from appraisers to really didn't respect the fact that on a certain date they had to file the value of their portfolio with ERISA and with their client and with the investors in the fund and the appraiser would kind of slop it through and certainly not have the reporting on time. So they would have long involved paragraphs on here is the fee and then if you don't have the completed report, or at least a rough draft of the report to us by such and such a date, we'll have ten days to review it and then you have to have the final report to us by this date, why your fee starts to evaporate at the rate of 5% a day so that if you're 20 days late bingo, nothing. These kinds of transfer provisions really put the pressure upon the appraisal firms to deliver. Then of course, deadlines are deadlines, right? (laughter). Now, another area of difficulty with the appraiser was essentially

what would be the premises of sale. The pension fund, of course, is not planning to sell the property, but on the other hand, an open ended fund has to be prepared to sell the property at any particular point in time. Are we appraising the price at which it would sell if we had to liquidate within six months, or are we pricing it at what its worth as a long term investment, sometimes those are two different numbers and they would have to give the appraiser instructions on that. One of the more recent issues that has come up that is driving people nutty but the appraiser is arguing that he's only doing one property at a time, is the fact that in cases where pension funds or real estate trusts have liquidated, the total portfolio sells for more than the sum of its parts. If you have eight shopping centers to sell, you can sell them all for a premium that exceeds the appraised value of each one. Obviously, who ever purchases it is one, avoiding the search costs and the delays in the process. It doesn't take any longer to negotiate for eight than it does for one. Closings may take a little longer, and if that kind of property is in really short supply and seven of those units are really dandy and one is a stinker, following the old retail trade you put them all under the same cellophane and you gotta take the seven good tomatoes or take the bad tomato in order to get the seven good ones. And you may not know its a bad tomato because you didn't roll it over in terms of the way it was wrapped up in the first place. And so as a result you now have an interesting further portfolio valuation problem. Is a portfolio of a selected number of let's say industrial or retail property worth more? For example, the gain right at the moment for asset managers is to assemble a package of say a dozen to 18 industrial buildings which may selectively total a million square feet. By the time they assemble that, and turn it around and sell it as a package, the cap rate will drop from say 9.25 to 8.50 which is good kick in the value, simply because they now have the assembly. The appraiser may have that assignment. He may be paying five shopping centers to value individually and then indicate, how the portfolio value might be.

After all if you're trying to measure the liquidating value, that would be liquidating value. Now, letters of engagement will go further and specify the methodology. They may say you can't use the Ellwood approach, you can't use the cost approach and what's more we don't like direct capitalization. That you must do a lease by lease analysis and a discounted cash flow and now we get to a really touchy part. Many funds tell the appraiser, okay what we're going to do is provide the proforma and you will appraise whatever that set of numbers you think it will sell for. It's not clear whether that's an independent appraisal or not. Certainly the standards which we looked at the other day made quite a point of the fact that if you're doing a standard appraisal and you're working on a set of assumptions which has been in some way prescribed by the client, you have to make a pretty big deal out of that in the limiting conditions and in the letter of transmittal and so forth. The argument was at least when that practice began that the appraiser wasn't really trained to put together a cash flow model, pick it out on lease by lease basis and that their accountants were or that their property managers were. The second problem with whether there's independence there when you use somebody else's proforma, was that typically the proforma was looking at the property, if they went ahead with all the property management plans that they had. Let's say you bought a battered, banged up old shopping center and you're planning on getting rid of one of the weak anchors, replace him, and you're going to remodel the mall and you're going to do this and that to jazz it up again and so forth, they would make a presumption that all of those things had been done and that it even worked into the proformas so that the rent structure is presuming completion of a two or three year rehabilitation plan. Does the appraiser buy that as the given or does he appraise it as is? What will it sell for in its current condition, allowing for whatever incremented value is possible as the result of rehab plus a development fee to go to the next buyer. And the one case you're going to liquidate value, which is what you need to do to a per unit share, and the other case you're

really rendering the investment potential, the upside that's possible on the property. And the appraiser pretty well determines that the first thing has to do is value as is. The as is value becomes the benchmark value, then if they want to ask you how much more would it be worth if we follow this proposed redevelopment plan that we have and so forth, that's fine. So from a professional ethics side you gotta begin with the as is value and then measure the increment. If I gotta bail out now, what's it worth if I can complete all of these things in the future, what may it be worth? A third problem with that information provision thing was who did the accounting? Is the appraiser an auditor of the internal operations of the property? And it was pretty well determined that he's not. That the appraiser is trained to be an auditor of the \_external\_ market \_phenomenon\_ of the property. But he can accept the accountings sheets provided by a CPA or a professional designated individual, because if he isn't telling the truth there are ways to settle his hat without a involving the appraisal. So once the appraiser becomes an auditor, certainly in a number of cases that we have done, in which we went all the way back to the general ledger by the time we went through the general ledger and rebuilt the books, of a hotel or of a major office building, why gee we ran into all kinds of stuff that was buried in there. In one case we found embezzlement going on in one of the hotels here, where the amount of the light bulbs they were buying was phenomenal it was like they had a Broadway marque out there with thousands of light bulbs on it. The janitor was selling them by the case out the door to students that needed light bulbs and so forth, it was a neat little side line for him. Again, that's really not the appraiser's function, its not suppose to be an internal auditor of the operation. By taking the operating expenses of someone else's account was a legitimate element to rely on. Taking the rents was something that is generated externally as well as by the leases in place and that is always the appraiser's responsibility. Now, the final element of course is then if he has a rent structure and an expense structure and so forth,

what set of assumptions does he make about the future and as you know one of the critical elements is all right, "What do I do about the fifth year or the tenth year, how long a forecast do I make, how do I convert the last year's income to a potential resale value and so forth?" And again, this was legitimate for the client to define as long as it was not off the wall and misleading. Again, that misleading phrase that permeates the code of ethics comes into play. That it was legitimate, for example, to use today's cap rate on the tenth year income. But probably not on the eleventh year income. To use that next year's income was simply a way of hiking it just a little further and pushing it a little higher as far as resale value was concerned. Once those elements within the trade association are worked out, their letter of engagement then begins to standardize methodologies for that critical resale value element. Standardized methodology as to whose operating expenses you're going to believe, construction costs, etc., etc. The final element in terms of the letter of engagement really has to do with the need for the appraiser to document the evidence. Many, many appraisers had gotten into the habit of referring to a market transaction and then taking the position sometimes by innuendo that they were on the inside track and it would be a violation of ethics to reveal the real data but "take it from me, that having looked at this sale adjusted for the differences between the properties, etc., etc., etc., that the overall rate was .085." Total black boxing. No can do. The market comparison transactions must be detailed. Not only must they be detailed but the appraiser must indicate in his letter of certification, that he did admit in fact visit those comps. No fair painting the picture and the count out of somebody else's file, and no matter how legitimate and reliable your associate may be and then use that without any source to site. Now that does two things. One, it takes a lot of appraisers out of the ball game. Because if they're doing a regional shopping center, and the only one they've seen is the one in their town, how much money can they spend going to the sales that are in other states, in other towns. You know,

you've got three comps that you want to use that are really a great deal like your property, well one's in Pennsylvania and one's in Utah. They're going to run up a lot of money running out there to look at it. Obviously, the firms like Ellwood and Leventhal and Horwath and so forth can always argue that they have seen the comparable. They don't have to say that they saw it specifically for this case. They were there they took their picture, they talked to management, they got whatever measures were available and so forth, and they gradually build up a repertoire of comparables that they can apply to the next case. So that there are obviously economies of scale if you specialize in particularly the larger properties that are typically one of a kind in a particular community. But nevertheless you are not permitted to simply skim the top and allege confidentiality. You must provide all of the market data. That after all is one of the primary reasons the good man hired you in the first place was to get information on those externalities, evidence that your appraisal is--while it is an appraisal--is nevertheless market based. And in terms of the pension funds in particular, this is one of the really nervous elements about those that invest in real estate, that they don't have the same pricing mechanism in real estate that they do in the stock and bond market where on a given day they can look up the price of a security, therefore, even more they can have real prices from real transactions that have been confirmed and validated and adjusted for whatever other aspects of the deal may have modified the public price. Obviously the more value they see in the appraisal, the more creditability the valuation has. The trend in the appraisal process is to separate the costs of the appraisal from the expenses of doing business. More and more often you will see the appraisal quoted as specific fee let's say \$40,000--I had to do this regional shopping center and in addition, an expense allowance of either 10% of that or 20% of that or a specific dollar amount like \$7,500 which will be assigned just to travel and incidental expenses of that sort for instance drawing topography, ordering air photos, that type of thing.

Possibly bringing in an engineer to sticks a pencil in the asbestos, or whatever else is there. And in addition, the letter of engagement is not only trying to tie down the appraiser, but it should also tie down the client. For example, one thing that you would want to have to a letter of engagement is your standard set of limiting conditions. You're letting the client know right off the bat that here are some of the limitations on how you can use this and how you can reprint our reports of the findings and what we regard information as confidential and so on. The second element, of course, is reminding the client of his duty to disclose so that in matters of hazardous waste, environmental flaws in the property in one form or another, that the client is expected to tell the appraiser, that gee, I think we have a spilled out problem or a gasoline problem or asbestos problem here,, and here and here are the engineering reports that we have that already validate that. And that becomes then part of the input as far as the appraiser is concerned. He is not expected to be an environmental specialist. The appraiser is not expected to go through the building and find the asbestos or do soil borings in the back yard to find out if the oil tank leaks, and so forth. So the client has a duty to disclose, which he needs to be reminded of. The client also has the duty to provide the information in a timely fashion and generally identify someone in the organization whom the appraiser can call, find them generally in the office, and who has the clout to get him the lease or the survey or the other piece of missing information that's needed to complete the appraisal in a timely fashion. So what we do in our office, being just a little office, we have all of our limiting conditions in something we call addendum A, we have all of our requirements on the client in Addendum B, and our current price list in Addendum C. So when we send out a letter indicating what we're going to do, etc., etc., we incorporate everyone of those by references right into our agreement and when they initial the letter of agreement and send back a check for 50% of the amount, they're bond by all three of those addenda, they're on notice that



they're there, and as an appraisal firm we're pretty well covered. As a contract, a letter of engagement will work, although is not a full contract form. We developed a contract form which Rod Matthews helped form which does pretty much the same thing but it puts more on a formal contract much like which a builder or a home buyer or something of that sort would use. So there are several ways to do it, but they both arrive at the same point which is a letter of engagement. Question--has there been a case yet where the appraiser has been held liable on a faulty appraisal on any environmental issues, and also maybe land an EIS?? or an EIR??. Chief--Ummm, I don't know of a specific case where the appraiser was held liable. But that doesn't mean he couldn't be. The question is whether he is guilty of negligence in looking for that information or not. By requiring a client to disclose it, the burden of proof is now that he was negligent in getting the client to provide the information, he is not obliged to go forward and do that because he could have expected to oversee the client, just the burden of proof, I'm sure there's a gap in there some place somebody will sue him sooner or later. Question--Will the courts allow him to say I used this CIS or CIR engineering firm or whatever. Chief--That would be fine. Then if that report was an error then the professional that signed that report had his own problem. And the professional liability insurance right now on environmental consultants and engineering is incredible. It probably represents a third of their income. You know its head is gone. Because they're talking about big numbers. I don't know if you recently where the old Armour Meat plant in St. Paul was partially redeveloped into an industrial park and the city of St. Paul was going to buy the balance of it. I forget the name of the company that bought it from the Armour Company, they had only mediocre suggestions of converting the old building into public warehouses and so forth. Now the City had come on and they did their environmental testing and they found out that the oil and gasoline tanks on the property that had been leaking for years have encroached into the aquifer below it and oh a \$2 million purchase,

they're looking at \$500,000 to \$1 million to clean up and they're not quite sure how much to clean up because the soil test was on a random basis and they haven't found out how much oil and gas they got. So now you have a really interesting problem--whose going to pay for it? The Armour Company, that was the original owner, the developer who bought it and was not doing very well anyway, the City if they choose to buy it, or has it reached the point where the state super fund will come in and clean it up. But nevertheless somebody will clean it up. The appraiser who didn't look into that when looking at old industrial property and didn't ask the client either would be negligent. He had asked the Armour Company if there was any evidence of any chemical spills and gasoline and oil spills and so forth and they had indicated no, why the appraiser's probably off the hook and the Armour Company will be on the hook under current environmental laws. Those kinds of mistakes can be extremely expensive. There is more and more of a trend to move past the privacy of contract protection that appraisers have always had. Traditionally growing out of accounting law in the 30's the courts ruled that accounting was such an important profession and it was just starting to come into its own, that if they were liable to everybody that relied on their numbers, that they couldn't afford to business and therefore to put an umbrella of financial liability over the accounting profession the only people they were liable to were those that paid their fee--who did they contact with, what did they promise to do, and did they fail to do that, as a gross negligence? Then there was a liability. In the late 60's a number of the courts began to move away from that indicating the reliance on a CPA report, particularly in security presentation and so forth, really said the accountant should have responsibility for that and so the law was modified that you either you had privacy of contract or had someone that the accountant should have known was or was told would be relying on the accounting report, would now have the right to sue the accountant. We've now had a number of class action suits by share holders or investors in new corporations based on

a prospectus, so that the definition of who he could have expected to rely on a very broadly and where there was no privity of contract and are being held for it and nailed pretty good. The interesting aspect of that is that the liability insurance for malfeasance relative to appraisers typically written on a discovery basis. And what they do is if there's any hint that the appraisers' gotten into a great number of prospectus, they cancel his insurance before anybody can sue. So that by the suit comes in which then defines the discovery date there is no more insurance. If they insure on the current basis, going to make a mistake, its probably because they found out. If they insure on the discovery basis and if the insurance company gets nervous that they might be found out or he has his name on a great many prospectus, they just pull the insurance out from under him and he's sitting out there free and clear. So the liability for appraisal is changing which is why some appraisers won't do work for security prospectus and won't do work for certain government agencies and so on. Also you'll notice the IRS has changed its rules so that there are sanctions against appraisers who over value property currently by 200% I guess, and the American Bar Association has very much drastically audited all of their ethics which are also in the readings so that an attorney who knowingly accepts an appraisal that he knows to be out of sink with common sense and puts that in as evidence, can be disbarred for introducing a faulty appraisal as part of his program of pretense or whatever. And that has cost several attorneys in New York their license already and it represents quite a departure from the days in which the attorney felt he was above ethical complaints if he could get somebody else to do the lying for him, namely the appraiser. Now he puts a Charlatan on, and knowingly puts a Charlatan on, he could have reason to believe that those numbers were baloney. The attorney can be disbarred by his fellow attorneys who could prove damage by relying on that presentation of the report. All right, the letter of engagement, therefore, is really a private system of control on the appraisal product and it has three major objectives: 1.) To define the

understanding for which the appraisal is required and therefore, the components that must be in the report. 2.) Standardize that report so that there is at least in-house comparability from one property to another which allows them to measure relative performance of property and also contain enough information to measure relative performance of the asset managers or property managers. And the third element which is still a dream in many cases, a grail to be pursued is that the standardization be sufficient that you can now have cross fund comparisons. That we can that PRISA and compare it to Aetna and compare it to whatever and have some sense that we're talking about the same thing which currently is impossible. There are only I think two major funds that maintain the rule that the value reported for the asset can never be higher than the independent appraisal that is available on the property. Otherwise the values that are being reported are those values which the investment committee has decided are appropriate after they have reviewed the independent appraisal. So they're not bound by it, other than the fear that if they get too far ahead of their independent appraisal, somebody will want to cash out at that fictitious price or two, if somebody does cash out at that price, and later its determined to be too high, the remaining investors will sue for damages because it was obviously some of their assets that were paid out of to the individual who left the fund. So there is a check and balance there, but not one that proved a real deterrent up to this point. So those that are in the plan are left over and we'll talk more about that in 850. People like New York Mutual that says you know if the appraisal comes in the shopping center at \$27 million its \$27 million max until we get the next appraisal. The investment committee cannot go above that, the investment committee can roll it back on a quarterly basis when they find eight line conditions deteriorating that were not anticipated by the original appraiser. You're not allowed to roll it forward in advance of the next appraisal and that makes quite a difference as compared to a fund that's consistently rolling them forward a little bit to be able to report consistent

capital appreciation on their portfolio. Okay, I gotta quit.

Ginny Mittnacht (English writing lecture) Administrative matters, name, office phone,

and what we'll be talking about these next two weeks. Okay, I'd like to make your class

meaningful and productive for all of us including even though Chief calls this an English

Class, I prefer to think of it classic reading. In that regard just yesterday I heard from a former student who graduated last year. She sent me this example that I have put on the board. She said when she saw it she immediately thought of this class and thought of me in that her consciousness has been raised here. This sentence has got nine commas in it. I think that's probably some kind of record. And if you're not really thinking about how you're writing, that's the kind junky stuff that you're going to come up with. She says it amazes her that the reports that come through her office most of them have to do with real estate but she did the term real estate correctly, so I was really thinking of her. So that's what we're going to try to do. I would also like to clear up that it looks like class schedule says that we are going to be together forever. I will be here for today and the following four Tuesdays. The first four including today are formal classes. The fifth week you come back and return your last assignment and do any kind of mop up stuff that we feel you need. So five weeks of this folks. After that, I think you have written writing lab into several more Tuesdays but I'm sure that Chief has those time for him. Okay.

Like so many things having to do with education this class seems to be a good example of the kind of things a lot of people would rather not do and some even hate. They hear English or they hear grammar and they say hey, I did that in fifth grade. We'll try to put across some special kind of tricks for ways for you to think about your writing. Since this is our first class I'd like to urge you to comment at any time. I'd like to keep it informal, and our community. I

would like for you to carry away from this part of 856 a sense of confidence in your ability to write because you have a good grasp of what constitutes good writing. A good base of grammar and an underlying understanding of the principle that form and substance are related--Form and Substance are related. What you say, substance, is as important as how you say it or vice versa. Its an important thing to be considered. I'm not an English teacher. I have never been. This is more an avocation for me that has sprung from an interest and a love of words and language for more years than I really want to know. I had the fortune or misfortune of going to school in the dark ages when a lot of grammar was part of a good education. When I came to Madison about 20 years ago, I worked for a woman who ran the Wisconsin Union Theater and she had a great influence on me, not only with my skills. Let's talk about the fundamental reasons for learning techniques for writing. This poem is from a book called Modern Technical Writing and seems to me that it has particular elements for 856. To practice by a study technical writing you will find it necessary to recognize one fact at the outset. Writing will be a part of your work that can do most to advance your career. If you now have a job, and certainly being a student is a job you may already appreciate the importance of writing. Skill in writing must be regarded as a professional tool. Ranked equally with your other professional skills and knowledge. If you think of writing as something to do on a job rather than only in the classroom, a skill to convey information for practical use by an employer or a client rather than just to demonstrate academic proficiency, you will have motivation for improvement. And if you're motivated you make a genuine effort to improve your writing you have reason to expect that the time you devote will contribute to a successful career. The Wall Street Journal also has rather lengthy article, the headline said, "Firms Seek Fewer for Elementals, Find Would Be Writers Hard to Curb," but I thought what was rather there was a more general concern to businesses is where any type of writing instruction will stick. That depends on the student's willingness to

learn. The extent of the training and whether the lessons are put into practice, that's what we're going to do. Okay, for some time now there has been a great deal of talk about the poor performance of high school and college graduates in the area. How you speak has a great deal to do with how you write. In preparation for class I have been rereading everything from Ed Newman's Strictly Speaking to books from humorous authors like Erma Bombeck even Ann Landers has addressed that problem but I won't bring that in today. A journalist from AP quotes this from an article similar to the kinds of things we had here before. "The proper of functioning this component is critically dependent on its maintaining dimensional integrity." What you were saying was it won't work if its bent. We're going to do a lot of work about simplifying. We have three main channels of communication, the fine arts, speech and writing. Each person needs appreciation of all three and then skills of the last two. Certainly appraisers do. They recognize the importance to impart clear communication will play in their professional lives. The purpose for this part of 856 is to help you to learn to communicate clearly through the written word. There are two basic kinds of writing--creative writing and exposition. Creative writing appeals to the senses and the emotions. Expositions only to the intellect. Exposition is often also called ethical writing. In exposition we have no ambiguity. That most important person you may well hear about now again this next week--the Reader, has no margin in which to interpret or misinterpret what you wish to say because you have already clearly stated your meaning in your writing. Here's Fran Larson's definition of technical writing--The art of using precisely the correct word to transmit a fact or idea to a fellow scholar or lay person in a straight forward manner and with a minimum of words. Fran's book, as you know, is the primary text for this part of 856. It seems to me that the title Techniques for Writing Business \_Reports\_, has a crucial word, reports. Exposition is reporting what you see, what you have researched, what you have learned and the conclusions you have drawn all put down in clear and

concise language. I'm sure you know by now how demanding 856 is. It takes a great deal of time and concentration. By the time you finish it you will feel like a much more competent individual. You all already know that you have to write in a an appraisal. Its much harder when you have limited knowledge of grammar and little experience in writing. Many academic tracks today require very little writing, and so there may be a small percentage of students) that have done little or none. My principle job here is to read your assignments--an appraisal, carefully, for form and style. Chief reads them for substance. How you say what you say and try to help each one of you with any individual problems. It was recognized early on in this program that business students needed something concrete to work from. The result of that in 856 was Fran's book. Okay, what could we say so that we don't get bogged down. So one of the assignments for next week while we are speaking about this workbook is study especially, read over carefully, chapters one through four. Concentrate especially on elements essential pages 14 and 15 and elements essential to a paragraph. Fran Larson use to teach this class over several years. So that's a big part of your assignment for this week. While we're talking about it after each chapter in this book there are exercises. I do not require you to turn in the exercises. I urge you to give them a shot. They're designed to reinforce what you have just gone over in the preceding chapter and they'll perhaps commit some of these principles in your mind. So don't just skip them. Okay, it impossible to learn all the wrinkles of technical writing in a few hours. It takes a great deal of study patience, practice. We hope to help each of you to reach a higher rung on writing than on the one on which you now stand. I'll welcome any suggestions as we go along. Effective written communication is made up of a great confluence of detail. Let's begin with a few details about the basic fear of writers. There are two categories--physical equipment and basic reference books in which writers can find the answers to any questions they might have. We'll ignore the obvious things like pens that write and



papers that work. How many of you have typewriters and/or computers? Everybody, just about everybody. One of the important things for writers so as not to have too many constraints while you're writing is probably fairly obvious. Keep your equipment in good working order. Does any body have just a typewriter? We're all talking computers around here. Does anybody have to hire their typing done? Okay, I'm glad to hear that you all have computers or access to computers. I really have felt for many years that all of you should know how to type. Physical equipment--paper. For your rough draft of anything, if you're just handwriting, any old kind of paper, but write on every other line. Do yourself a favor. Anything that you have to work on more than once which almost every assignment and report that you do, you're going over a first draft. And not turning in first drafts. Did you write on every other line? It's easier to read, it's easier to copy, and it's easier to correct. If anyone is heading toward being a scholar, train yourself to write. Once, in the course, you get to turning in your final appraisal and we're talking nice paper--any kind of rag bond at least 20 lb. weight, I think anything over that is pretentious. But good paper lends itself to good reproduction and nice sharp copying. Looks count a great deal and in your presentation. On some of your smaller assignments, if you're just banging them out on the typewriter, don't use onionskin and don't use erasable bond. It's awful paper to work with--both for the writer and the reader. Okay, reference books--Samuel Johnson says knowledge is of two kinds, we know a subject ourselves, or we know where we can find information about it. One of the few things I didn't bring along today to hold up for show and tell--I assumed everybody had a good recent dictionary. Besides the obvious spelling and definitions you know what it will do for you. Dictionaries have obviously also a pronunciation, Greek symbols, even a short style and a copy editor page of symbols. Formal work such as research reports contain involved reasoning and often an endless parade of data. At best it's heavy reading but without strict regimentation it would be totally

incomprehensible. So we come to the style book. Business schools around the country almost universally use. This I think is probably a third copy that I've had. It comes updated every three or four years, you throw the old one away and you go get a new one. It has everything of a technical nature that I think a student would wish to know. Mechanical rules for writers deal with consistent use of heading, punctuation, italics, and capitalization, footnotes, bibliography, the footnotes and the bibliography I'll mentioned again when I talk about the assignment for next week. Basic illustrations. Anything that has to do with physical style you can find. This book is called Students Guide to Writing College Papers, and the woman's name who wrote it is used to be the librarian at the University of Chicago. The woman I told you about twenty years ago that I started working for when I told her some years ago I was going to read this, the first thing she said was be sure to tell them about this. She also said be sure to tell them about Elements of Style. This is not strictly speaking a style book. Its a style book but its written in such charming manner that I think probably you can probably sit down an evening and just sort of keep on reading--its that kind of book. Just to impress you, this is my first copy of Elements of Style. And I looked at the publishers space and its 1956. My favorite thing in Strunck and White (authors of E\_\_lements of style). Due to the fact that--how many times have you used that phrase in your writing or your speaking for that matter--five words. We're going to think about tightening our writing. "Due to the fact that"--five words--important principle. Okay, how about if you are fairly nervous about lots of errors in your writing. You need a good composition book. I don't expect you to run out and buy all these books. But some of you may read in and be interested in this particular subject and its an excellent book of words of this type and its by Gay and Gibbons. And is somewhat of an authority at the University of Wisconsin Press. Anything that you've ever wanted to know and more about grammar, rules of grammar, different kinds of situations in grammar. I found the only problem with using this book

is if you don't know what to call what you're looking for its difficult to find it. If you don't know those kinds of terms sometimes your answers are difficult to find. But its a valuable book. Certainly a thick book. We're talking vocabulary here. Educated people use their vocabulary. A.B. White made the comment in another context, at least not in this book, "is the comment right with nouns and verbs?" On the surface that seems to be an incredibly obvious sentence. We write with nouns first. But on second and third and fourth thought, its a very profound statement. That list over there as you see is all verbs. Verbs are your action words and give flavor to your sentences. Any work that you can do towards enhancing the colorfulness or provocativeness of your verbs will make your writing that much more pleasurable and informative. So we will write that down in verse. Any I'm crazy about verse. So we'll try to do away with is and was and a lot of the really standard ones that we use day in and day out. The shelves in the bookstore are filled with just incredible amounts of reference materials. One of the things that I found that I liked quite a bit is a little too much book to be a text book in this class but the relevancy of many of the examples of the things that they talk about are really valuable. For instance, they have examples of resumes and letters of introduction which this year or next year become fairly important issues. Modern technical writing I found to be a really good reference book. I just found this little biddy book down on the bottom of my bag as you see is really old. Its called a word book and all it has in it is words spelled correctly and hyphenated correctly. It doesn't tell you what the words mean, it only tells you have to spell them and hyphen. Educated people do not misspell words. Educated people do not mishyphenate words. There are preferably no hyphenations. I finally gave up several years ago and just took the hyphenating out of my word processing book. And its amazing to me how tiny that was and surprisingly enough the aesthetic value of your pages is not lost by just forgetting hyphenations you may want to know. But if you do use hyphenations,

you just do it correctly. Okay let's talk about it our assignments. I think in the class schedule it says everything typed double space. For all the short assignments that you get in this writing class I will need two copies. One for me and one for Chief. Name and number upper right hand, stapled in upper left is all. One of the things when I told you about the reading part of your assignment, the writing part of the assignment--a reasonably substantial paragraph on a type of architecture. Chief would like you to be cognizant, at least superficially of style of architecture so that for instance at a cocktail party you can say such and such. So we have not only a writing exercise. One of the things that will help you. There is a whole bunch of pieces of paper that have buildings on it. Each one has the name of a building. This is your assignment--a paragraph on that building, what kind of architecture you recognize in it as and how it relates to that building. Now the focus of this paragraph is not the style of architecture, its the building and the architecture comes into it as it relates to the subject of your paragraph on the building that you pick out. If just don't know anything about what you pulled out or if you would rather trade with your neighbor I have no objections so long as you have a building. One of the books that I found a couple of years ago that might help you with this assignment and it seems to me a charming invaluable little book that you may wish to buy and keep in your library. It's called Identifying American Architecture and all it is, is an example of different kinds of architecture, the salient features of each one and a short descriptive paragraph and it will surely help you with this recognizing what your building is going to be. The author is Blumenson, John J. G. Another resource for this particular assignment they are equal modifications into historical mansions and I can't imagine that researching in their library file might not be helpful for your assignment. Isthmus Annual had a big section on famous homes in Madison. The Madison Magazine from January, 1987, this Guide is the 1984-85 Guide. Its only a way to give you some idea of where

to go to look for information for this assignment. Air Waves Magazine, 1985. Last Sunday's Wisconsin State Journal had several buildings mentioned, what comes to mind is Bascom Hall and certainly one and may be even two of you have managed to pick up that building. Lots of resources namely the library, at the Elvehjem Art Center if you're interested. When you're finished with your paragraph and you've done all this marvelous research and make your paragraph meaningful and interesting, I would like to see one footnote done correctly. Plus two bibliographic entries done correctly. Be sure you all are familiar with using libraries and you know that Memorial Library has directories and hand books for everything. I'm always interested to see after this assignment is turned in, how resources have been used in your research. Now, we're almost through. Are there any questions? None, good. But it should fit on one page unless you have so much information you can't stand it so your paragraph goes on one and your footnote on another. Everything double spaced always. Okay one of the things that we're going to do that I would like to emphasize so I'm going to give you a start on it today. Trigger words--what this means is when these words that we put on the trigger list in the next few weeks, when you come to writing them down, I would like to see them trigger a mental stop so that you either fix them delete them and make some decisions about what to do with these words on the trigger list. They have over the years discovered they are all implicated some how in mushy, imprecise, unclear writing, ambiguous writing. So we are going to have, one or two each week, and I'll just wet your appetite with one this week. Our first one is this. It may mean multiple things. We never leave our writer in any quandary whatsoever. You should never have to read of this and try to decide what that it means. So if you must use a work and its certainly usable, it must be modified. This idea, this concept, this drawer, this notion, it must be modified. I will hope in the next general weeks that I never see a sentence that starts out "this means that." This what? Tell me what this means. Okay that will give you a good start on your paragraph I hope,

but that's our first trigger word. Unless you have any questions, that's all. On your way out of class would you be kind enough to make two piles of your assignments? One for me and one for Chief. How to start your appraisal and I'll be interested to see if there are any special areas that we need to cover. Does anybody have any questions about what we talked about last week? Nothing. Okay, in your reading this past week for your assignment, you read mostly in Larson's

book the Chapter on grammar and punctuation of communication. Will you take a piece of paper and write down that parts of speech, there are eight. How about the

part of speech that is probably the most important. Its probably on the top of your list.

Noun, verb, you all know what a noun, it is the name of a first and a verb, your action word in your sentence. That's what we covered briefly last week. What gives your sentences flavor. Please try to remember when you're writing to use your vocabulary as far as verbs are concerned. Not too many use. Okay somebody got another one. Adjective. An adjective defines a noun. Descriptive word for a noun. Another one? An adverb. The same thing, the adverb describes a verb. Another one? Connecting word to cause this. Another one? Conjunction.

Another word? And, a connecting word between say two causes. Another one? An article is not really in the list of the eight major parts of speech. Do you know what an article is? The predicate of a sentence Interjections. We should really put an exclamation point because that's what interjections are. From your readings that all of these parts of speech break down into lots of little subcategories that I don't think that we need to go into in this class like relative pronouns and proper nouns and such like. You might keep that from former students when I first started this class I wrote to about a half a dozen of the people that I knew and asked them to give me some idea of what they thought was important in these few weeks that we have together and what they

thought was unimportant or they hated but they found out later that they were glad they had. Diagraming sentences was at the top of the list of "I Hated". One of the young men said it made him feel like an eighth grader. I agreed with that. I think we're long past a time when you have to really learn how to diagram sentences. Did anybody try to do any diagraming in Fran Larson's book? As I said last week I think I must have spent, in eight grade, a year diagraming sentences. We're going to do one just to give you an idea of the different parts of speech how they hook up with one another and where they belong in sentences. This sentence is in your book on page 31, I'll put it on the board. The noun of this sentence is what? The subject is what? Diagraming sentences. Does anything modify this noun? Who brought up article before? This is the article. And the verb is. I'm sure you don't need to know that - that happens to be a transitive verb that requires a direct object. Did you catch in your reading the difference between active and passive writing? Can anybody give me a rule? Active and passive writing? Let me write it down and see what you get. Confidence is an example of the active voice. Responsibility for the actions of the sentence rests with the subject. Passive voice: the action of the sentence rests with the object and the clue is right there. Remember last week when we started a trigger list? Important words that trigger a stop in your writing to decide whether you want to use it or not or which direction you want to go with it. What was our first? Somebody said last week when I asked for reasons why we started out with this, somebody up here said it was meaningless. I was thinking about it later on my way home and he wasn't that far off alone. This is essentially meaningless. Now we're going to add "by". Only in a way if its on our list perhaps when you write a "by" you stop and think whether or not you are writing a passive sentence. This is not to say that passive writing is all bad and that you may never have a passive sentence in any of your reports. Active writing keeps the interest of your reader. Let the subject of your sentence carry the action. Okay, here we go. Okay, we need an object. The

committee examined the response. We have a couple of modifiers of response. Another article. An adjective. Now we're hanging those two things together with a preposition to. We have a proposition has just turned another noun; in this particular sentence its what? Modified once again with a couple of more adjectives. And there now, that's how you diagram a sentence. You can take sentences apart and make each have a place and there's a reason for them to be placed in their particular place. Okay the next thing I would like to talk about is clauses--independent and dependent clauses. The kind that seems to give the most trouble to writers are called subordinate clauses that begin with either a "which" or an "at". Grammar rule is slightly esoteric, in that which begins a nonrestrictive clause and on that which begins a restrictive clause. What that means is when you begin a clause with a which, which is nonrestrictive, means you can throw it out of the sentence. Any clause that begins with a which if you can pick that up and throw it out of the sentence without distorting the meaning you may use a "which", otherwise its an "at". That clause belongs in the sentence and is necessary to sense of what you're saying. I recently heard a woman in a short lecture that was talking about grammar and punctuation say that there was no difference between the two and that if you had to pick you should pick a which. Wrong, wrong, wrong. Somebody asked her about it and she spent ten minutes explaining the difference between the two and then went ahead again and said they don't make any difference-they do. They are interchangeable. I am going to add to trigger list because people rarely misuse a "that". But often misuse a "which". Can you see those examples. The top example says a composition which asks to dissolve, that is an incorrect which. Because which acts to resolve and threw it out of the sentence you would be distorting your meaning or throwing away your meaning. Actually I think what I should have had hear are complete sentences which would have given you a better sense of why "which" is misused so often. All three of those that are circled should be that. But now that I look



at it I think the whole sentence would have made a little more sense. Here's the rule of thumb so that you don't have to remember the grammar rule--people who handle that and which with perfect ease while speaking may go to pieces over these words when writing. The most common misconception as was the power sign, is that which is more literary and therefore, preferable. That is correct in restrictive clauses but they need to be in a sentence, they are restricted in the sentence. Which is nonrestrictive. It boils down is the rule of thumb--if you can put a comma in front of it--you may use a which. Later on I have a whole thing of it, with better examples that I think will perhaps cement that concept for you a little better. But keep in mind, that people rarely misuse a "that", but often misuse a "which". So, "which" is a biggy on our trigger list. Okay, by the way speaking of which, if you want to see a good example of misused "whichs", Mr. Ratcliff is a perfect bear on that whole score. Page 23 in p25 N. Pinckney, he gives an explanation of, I think its most probable price. But he uses at least two or three "whichs" in the paragraph incorrectly. And, its how I spotted it was its one of those quotes that comes up in almost every appraisal. And people just copy it, which is what we should do. And it always makes me laugh. He didn't have a handle on the difference between which and that at all. Punctuation--point the way and aid readability. In creative writing people can fool around with punctuation. I don't know if anybody has ever read a book called pLoon Lakep by G. L. Doctorow. He goes for pages without periods or commas or all kinds of streams of consciousness type of thing. Creative punctuation has no place in a business report. I think everybody understands the reasons for using the end of a sentence or a thought, move on to the next one. The only rule on that - that hasn't changed in several hundred years I think is when the Federal Government finally simplified something and they turned all the state pronunciation into two capital letters without imagery. I think unless I see in some of the assignments that are coming up that we need an explanation of lists used, I'll pass on that. Its

used rarely. If it looks like we need it we'll talk about it a little bit.

On page 3 in your workbook are a whole group of easy notes on commas, one of the most misused pieces of punctuation. A comma does not get inserted into a sentence because if you were speaking it, you came to a fall of breath, for instance. If you were saying your sentence out loud and your voice rose and fell that doesn't necessarily mean it's a place for a comma. One of the biggest misuses of commas is inserting one somehow usually on the fall of the breath between the noun and the verb, a big no no. Read your sentences with an eye to where your silence falls and whether you want them or not. Modern usage has begun using fewer and fewer commas unlike in Victorian times and before, remember from the former student that had nine commas in one sentence. None of them were incorrect really, but it sure gets jumpy. But the main one is never separate the noun and the verb with them. Those rules in your workbook can stand rereading every once and a while. We talked briefly last week about hyphenations. If you use hyphens be sure that you use them correctly. There are rules. I recently saw some type written copy that had since hyphenated. Crazy. In your workbook in your reading this past week you came to a section on numbers. As I recall when I was making this thing I tried to argue one of points of Fran's of book references. The big thing with numbers is consistency because real estate appraisers have to use so many numbers in their reports the simplest thing seems to be, decide on what you want to do and stick to it. Mostly I think you will be happiest with Arabic numerals. Some people make a rule for themselves and say everything under ten, everything ten and under, I will write out, everything over turns into Arabic numerals. That seems to be a good and sensible rule. But whatever you do be consistent. The clarity that your striving for in your report and certainly somewhere along the way if you decide to start writing out your numbers and you get into seven hundred and fifty, you realize that you have to and you back and rethink your rule. The only place that you always use Arabic numbers is in percentages. They are never

written out. One percent is an Arabic one and then here's another place for you to make decisions. You may either use the symbol or the word percent, be consistent. If you start saying percent on page 3 and you're writing it out and when it comes up again on page 40, it should be still written out. Be sensitive and understand style. And then percentage is always an Arabic numeral. Okay, on our list of parts of speech, active and passive. Use a subject that shows what your sentence actually confirms and use the verb that says what you really want to say about that subject. Two examples, the concrete was damaged by the cold weather. A passive sentence. The cold weather damaged the concrete. You decide who should carry the action. Here's a good example of passive writing-- The theatre was recognized by many European artists of the 20s and 30s as a powerful propaganda mechanism. If you were writing in the active voice the subject is of your sentence is many European artist? It has been generally understood by Counsel members and staff that availability of blah, blah, blah. Another passive sentence with a buying in it. That sentence has got another thing in it that I wonder if anyone will recognize as less than ideal way of writing. If you have a sentence starting with an "it", in our list of trigger words speak I put on at the bottom "pronoun". Certainly of value as a part of speech of without which we cannot do. But pronouns are as you will see when we finish our list one of the biggest culprits in weak and imprecise and mushy writing. So we will add "it". Okay, you have here a pronoun. You will remember that our good guy A. B. White said write with pronouns and verbs are profound thought. Pronouns in writing should almost always be nouns. You don't ever want to ask your reader who is your most important person when you're writing to have to decide what the pronoun stands for. You have to decide what the pronoun stands for. If you can't repeat the same noun use a synonym, but use a noun. Your antecedent which means what your pronoun refers to is too far away, you can often get yourself in a terrible bind having people try to decide what "this" is. Or "it" is. And we have another rule for it, neither begin nor

end a sentence with an "it". Next week one of the things that we will talk about is called a deterrent subject which we will talk a little bit more about beginning sentences with an it. But a nice short one is, neither begin nor end a sentence with an it. Okay, two of the former students, let me read you two little biddy paragraphs that they wrote and then I'll tell you what we need you to do for next week. He says if anything, I would suggest more assignments on paragraph writing. I'm ashamed to admit that every day I dictate a letter, I find my paragraphs are much too long and often don't contain the syntax, the paragraph exercises were good. And one of these stars of some years ago says have people write a variety of business letters. I have found that this one area where it is extremely difficult to write a correct and intelligent series of paragraphs and the exercises are also practical. In addition to being an exercise in grammar, punctuation and format, it will help people deal with communication. I found it particularly difficult to explain a complex or technical subject, appraisal theory, etc., to a client who knows nothing about the subject without resorting to formal footnotes and other tools that aren't commonly accepted in business letters. So for next week, I'll ask you to reread Chapter 4 and add Chapters 5 and 6. And once again ask you to try to do some of the exercises that are at the end. Okay. For next week we're going to write a business letter of at least three paragraphs. We're going to write to a lawyer who has asked you for an explanation of the difference between fair market value and most probably price. Question--are these your ideas or somebody elses? Mittnacht--Some years ago I asked Chief if he had any wishes on what I should be assigning in this class and he said yes, they can write down the difference between fair market value and most probable price. It will be good exercises in setting out your thoughts clearly in a logical progression. It should be at least one page. I will take it as a given that you all know that business letters are single spaced. But please don't single space the assignment. Its hard to read and its hard to correct. Two copies as usual, one for Chief and

one for me. Double spaced. Now, one more little side thing about this letter, some how in business school people often come to shortening into acronyms kind of standard phrases because everybody knows what they mean say for instance, I don't know if you've done this yet with fair market value but FMV. Don't do it in a business letter. Somebody some years ago came up with the empty notion that it would simplify things, but you're writing to someone who does not understand these two concepts and to have a reader who has to stop every time he comes to an anachronism that FMV means fair market value. They are three little words--write them out. Okay? Paragraphs--Now the requirements of a paragraph--a topic sentence, which you know sets out your primary idea of what you're going to write. A topic sentence. Start out your paragraph with a topic sentence. This is what I'm going to talk about more or less. Develop the topic sentence and then if you're finished with what you're going to say and your assignment is over, you conclude or if you're going on the next paragraph you try to have a smooth transition. This whole list is in your workbook. Are your paragraphs in logical order? Before class when I was speaking to one of you we talked about scientific writing which often becomes fairly dense but one of the things I have always admired about scientific writing is its logical progression. They must be absolutely clear in here is where I started, this is what I started with, this is what I did and this is what happened. So your paragraphs in a letter or in an article should follow a logical progression. One paragraph leads into the next. We're talking transition again. We will go on the assumption that all the sentences are grammatically correct. Okay how about reading sentences as sentences, what do they say. Maybe you have written down all the words that you want in that sentence, but what does the sentence say? Some years ago I typed a sentence that said, he drew a picture on the wall of a small dog. Okay. Obviously that person didn't read that sentence to discover what it literally said. Does a dog have a wall? So read your sentences for what they say. Positive writing--we talked about the rule for

the active voice. The subject carries the action of the sentence. Try to write in a positive voice, it keeps your reader awake. Appropriate words goes along everything that we had talked about. How about are my words spelled correctly. Educated people do not misspell words. We have dictionaries. If you're unsure as to how to spell words, please look it up. Proper names--spell correctly. I don't anticipate that you're going to use that particular line in this next assignment however, you may be for your appraisal be interviewing people for different aspects of your appraisal. Be sure that you find out at the time certainly if you're going to quote any of the material that they give you. Find out how to spell their name. First and last. In your appraisal it will not do to say Mr. Jones said. It should be Newton Jones, whoever he is. The point that I'm trying to make is spell people's names correctly. Thereafter you can call him Jones unless they have a prestigious title. Generally speaking, you leave titles out. We're ascribing to have as little jargon as possible. What about Doctor? I think I would give him his title the first time around. Are all of my words necessary? One of the aspects that you'll discover is your assignments that you get back is that I'm very fond of chunking out unnecessary words. We try for tight writing. Another thing I try to avoid: ..."He reiterated again..." Read your sentences for redundancies. Chop out extra words. Sometimes it helps people to read their sentences out loud. Um, I really don't have a great deal to say about that, but I have heard people say that it does help them to read their sentences out loud. Is all of my information pertinent. One of the feasibility studies that I read several years ago had at least 30 pages in it about another project and background to what the present developer was proposing to do and it seemed to me that those 30 pages were totally extraneous, it was not pertinent to the studies that she was making at that time. Illustrations we'll talk about later. Will my writing style hold the interest of my reader well? We certainly hope so. Everybody's style is individual, but if you keep in mind our trigger words and some of the things

that we talked about in class about tightness and meaning and active voice I'm sure each of you has either found already or will find a nice comfortable writing style for yourself. I think that's it for today.