JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

V. INDUSTRY SEMINARS AND SPEECHES - SHORT TERM

I. Other Presentations In Which Either The Date And / Or Sponsoring Organization Is Missing

2. Appraisal Topics

e. "Contemporary Real Estate Appraisal Seminar", assorted outlines from a variety of presentations (one dated June 30, 1977)

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CONTEMPORARY REAL ESTATE APPRAISAL SEMINAR

Instructor: Professor James A. Graaskamp
University of Wisconsin School of Business

SECOND MORNING
8:30-10:15 a.m.

I. A Real Estate Appraisal - A Business Forecast

A. Prof. Richard U. Ratcliff was the first of several urban land economists to critique traditional appraisal in light of current business forecasting methods and techniques. In effect Ratcliff describes an appraisal as a prediction about the price of a future transaction under conditions of uncertainty. Uncertainty is introduced because knowledge of the facts is less than perfect and future conditions unknown.

One approach to forecasting or reaching a decision is by modeling to structure facts and relationships in a manner appropriate to the decision process. Three types of models are common in real estate analysis:

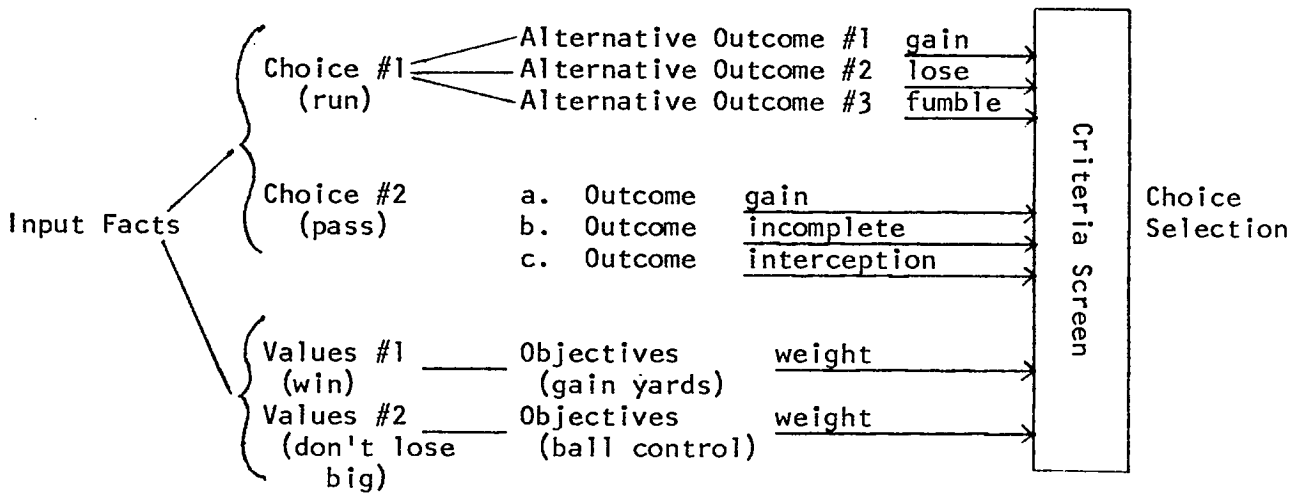
1. Physical models = sand tables to understand site, building mass, and shape.
2. Communication models = flow charts of industrial process or traffic patterns.
3. Abstract or symbolic models = items with mathematical or logic concepts, I/C = V is a symbolic model of the relationship between income productivity.

C. In constructing any decision model there are six basic elements to be considered:

1. The decision to be made or the question to be answered.
2. The data available with which a decision must be made.
3. The theoretical relationships or logical structure which focuses the data on the problem.
4. The interface between the analyst and the requirements of the model.
5. The interface between the results of the model and the decision maker or client and their ability to comprehend and believe (credit ability is always more important than credit in real estate).
6. The relationship between the economic significance of the answer and the cost to acquire the answer by using the model.

D. In general, a decision requires that information be systematically organized to identify choices of action and the alternative outcomes from each choice. (See Diagram #1). At the same time facts help shape general values which in turn lead to explicit objectives, and then specific selection criteria.

Diagram #1



E. The three approaches to value are models of how economic man might price a property to maximize his return and minimize his cost. It represents an historical compromise between three powerful groups in the early 1930's who really had different needs or questions about price.

1. Insurance company lenders wanted to lend less than cost to build - thus they emphasize the cost approach.
2. Real estate brokers wanted to know what they could sell it for today, and therefore emphasize the market comparison approach.
3. The FHA appraisal section was headed by a Michigan professor, Fred Babcock, who believed all property should be valued as a capital budgeting decision, i.e. as the present value of future net returns.
4. To compromise they seized on Marshallian economics which said in the short run the market is out of balance and reveals market price. During the intermediate term, it reflects income value which cannot be forecast for the long run. In the long run, prices have tendency to equal cost of production.

F. Since that time, writers have shown buyers are interested in many things besides maximum profit including minimum risk, compatibility with community, portfolio effects from taxes and diversification as well as subjective, qualitative satisfactions. Therefore, an appraisal model may seem to have the same question - What is the value of property - but in fact it represents multiple questions:

1. What is the nature of the decision to be served by the appraisal benchmark?
2. What is the specific asset for which value is sought?
3. What is the date for which value is relevant?
4. What is the definition of value - theoretical structure - which focuses the data on the problem?

G. Ratcliff points out a variety of value estimates or viewpoints which have significance in the appraisal of any specific property:

1. Vs - value to the owner or user.
2. Vc - cost of constructing a substitute property.
3. Vp - a probabilistic prediction of what the property will sell for.
4. Vo - price at which the property is offered for sale.
5. Vb - bid price by a prospective purchaser.
6. Vt - the price at which the property is actually sold, as an historic fact.

H. The Ratcliff viewpoint is just plain common sense. On page 14 of his text he states his premise:

"The fundamental concepts of value and price which are central to appraisal are at the heart of the social science of economics. Economic goods are valuable because of their utility (productivity) and scarcity. Thus in analyzing the value of a parcel of real estate, the starting point is with its inherent utility - the characteristics and qualities which can make it productive and desirable, and for which people are willing to pay.

"But price is set in the market place. To serve his client's needs, the appraiser seeks to predict the price at which the subject property will probably sell. Viewing the property as a package of potentially productive qualities, the appraiser must predict the outcome of the interaction of the market forces of demand and supply to which the property might be exposed and which could trigger a transaction from which market price will emerge.

"Economics is a behavioral science, descriptive of the economic behavior of people under various conditions. It is the appraiser's task to predict how people, both buyers and sellers, will behave with respect to the subject property when it is exposed for sale. People make values and determine prices."

I. An appraisal as a benchmark for decision requires the appraisal report to reflect the client's purposes for which an appraisal is sought. It is common sense that the more questions that an appraisal can serve, the more business potential there is; fair market value serves only a limited number of issues.

1. For the mortgage lender, the issue is the liquidating value or probability of future cash returns being adequate to repay the loan, interest, and cost, and the distribution of profit centers over time to maintain repayment incentive to the borrower.
2. For the courts eminent domain or assessment appeal, the statement of function leads to the definition of value as the jurisdictional market value.
3. A report for a would-be buyer or seller might lead to the definition of value as investment market value.
4. For most cases the appraiser would seek to determine the most probable selling price.

J. Investment market value is a term coined by Mack Hodges for the present value of future income receipts, considering a specific set of assumptions about the after tax cash flow of property and

requires some general description of the investment standards and tax status of buyers interested in a specific type of property, specifically income investment property. Investment value, which requires some detail about motivations of a probable or specific buyer, is a special case of the broader concept of "most probable sales price." (Vp)

K. Most probable selling price is derivative of the theoretical work of Prof. Richard U. Ratcliff.

1. The quotable definition: "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."
2. This approach makes the point conclusion explicitly a statement of the central tendency (mode, mean, or median) around which a transaction price is likely to fall. Thus it generally supplies a valuation as a range of prices within which a transaction would most likely occur, similar to but not necessarily a concept of statistical standard error. This range will be called a transaction zone.

L. Combining the basic question for which an answer is sought - most probable price - with the elements of economic analysis forecasting leads to a simple appraisal logic.

1. The purpose of the appraisal (assessment, mortgage loan, insurance, etc.) leads to a selection of a value definition.
2. Detailed analysis of the property leads to a statement about most probable productive use.
3. Most probable use leads to inference about the most probable buyer-type, his motivation, and economic logic.
4. Buyer-type leads to a choice of valuation method. Comparability becomes a matter of analyzing a buyer-type as well as a physical piece of similar real estate.
5. In Ratcliff the basic approaches are:
   a. Preferred method is to infer buyer behavior from actual market transactions.
   b. In the absence of adequate market data, the method requires simulation of probable buyer investment analysis or enterprise budgeting.

M. The number of points would be underscored:

1. One or more of the traditional approaches to value may be used if relevant to the purpose or any other method may be used which provides a reliable conclusion. The degree of error in the estimate is more important than the consistency of the theoretical logic.
2. Buyer-type may be a class of buyers, it may be a single buyer such as the property owner next door, or a particular investor with a very strong preference for property attributes inherent in the subject property.

3. There is no need that buyers be fully informed as the market may provide evidence that prices are being set by ignorance; there is no need that buyers have reasonable choices if the seller is enjoying a monopoly position.
4. Finally it should be noted that the logical development from productivity analysis to selection of the appraisal report structures the form of the report.

II. Since appraisal starts from what is known about a specific piece of property (Productivity Analysis, Chapter 2 in Ratcliff), it is similar to a feasibility report until one has determined the probable use and the probable buyer.

A. Refer to Exhibit 2.

B. The traditional appraisal report always moves from the general to the specific, subject to a series of limiting conditions. Many of these special conditions are professional courtesy to avoid competition with other professions at the same time that one avoids paying the other professions and continues as a lone wolf in appraisal, controlling the customer, a psychological hang-up of real estate brokerage. Thus the appraiser avoids:

1. Engineering factors
2. Finance and taxation matters
3. Title issues, surveys, etc.
4. Legal character of leases, permits, and other contracts

C. At the same time the element of uncertainty, left implicit by a single number conclusion, is hedged by additional limiting conditions including the appraisal practice of ignoring politics, land use administration, and personalities.

1. The practice of using limiting conditions has moved to the point where the appraiser supports consistency based on faulty premises rather than honesty as the reliability of a prediction
2. Nevertheless, all an investor buys is a set of assumptions about future.
3. Since risk is the variance between assumptions and realizations, how can the appraiser evaluate the probable productivity of the property without evaluating all the assumptions which can be made explicit.
4. Thus the transaction zone or range of estimates together with other report writing techniques are intended to provide better methods of recognizing the need for tolerance in the decision process for the conditions of uncertainty which surround the appraisal estimate.

III. Ratcliff has been most comprehensive in statement of basic appraisal theory, many writers are contributing to the rethinking of the appraisal process and appraisal techniques. A number of selected readings by these other professional and academic critics have been included in the appendix of your workbook.

Exhibit 2

TRADITIONAL APPRAISAL AS A FICTIONAL SET OF FEASIBILITY ASSUMPTIONS

Feasibility Analysis	Appraisal Analysis
Will the project really work for a specific investor?	What would the project sell for if it did work for a typical 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	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 opportunity identification	2. Aggregate market potential business climate
3. Merchandising analysis (Defining competitive edge) and specific user profile	3. Merchandising comparison (Defining standard competitive substitute)
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	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 examined in terms of what might be	5. Physical-technical constraints are studied as is or in terms of conventional uses
6. Impact on environment and community specifically forecast	6. Impact on environment and community assumed acceptable within existing permitted uses
7. Financing from buyer viewpoint considering all profit centers	7. Financing from lender viewpoint considering only net income line and below
8. Income tax advantages or disadvantages affecting spendable cash	8. Income tax not considered except implicitly recognized in market comparison
9. Actual cash revenues and expenses forecasted for each period of time horizon	9. Revenues and expenses generally normalized and projected on linear trend for standard period
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 conslusion or recommendation	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

A. Much commentary on appraisal can be divided between those who would just as soon scrap the historical textbooks and language of appraisal (a la Ratcliff and Graaskamp), and those who would simply like to refine present dogma and techniques of appraisal report content (Wendt and Smith).

B. While the rebels attack theory head-on with the romantic notion of toppling the temple of principles built in Chicago, the more pragmatic politicians are realistically chipping away at the stone tablets from within traditional institutions.

C. A few argue that the change in appraisal method represents a shift from deductive logic based on principles to inductive forecasting tools capitalizing on observed behavior. A parody of scientific method versus theory and reason.

D. Some of the other issues in debate relate to the following topics:

1. What is function of appraisal?
   a. Benchmark of value
   b. Predict transaction price under conditions of uncertainty
   c. To answer a question of a client
2. What is the standard of professionalism?
   a. Format (profession vs. institution)
   b. Tools and techniques
   c. Standards of business conduct
   d. Reliability of results
3. What is the frame of reference of real estate productivity?
   a. The parcel
   b. The individual investment interest
   c. The community
   d. The collective interest of society

COFFEE BREAK

CONTEMPORARY REAL ESTATE APPRAISAL SEMINAR

SECOND EVENING
7:00-9:00 p.m.

Concept of Most Probable Buyer Type/Most Probable Price

I. Ratcliff Theory would place as much emphasis on behavior of prospective buyers or investors as on the operating behavior and characteristics of a property. Appraisal is trying to predict how people, buyer and seller, will behave in the future, converting a decision to a mutually acceptable price.

A. Each party is operating under certain assumptions and constraints:

1. Buyers assume they will have to pay no less than some specific price, that others are bidding for the property, that they cannot afford to pay more than a certain amount of income for shelter or business location, or that a desired use requires a specific set of attributes.
2. Sellers assume buyers see the property in the same way they do, that the property has some inherent value and utility, and that its just a matter of time before some fish can be found to pay the asking price.

B. The definition of value selected by the appraiser also assumes certain motivations for buyer and seller which typically are a matter of convenience for the appraiser but often a significant source of error in the prediction of price. While the wording on fair market value differs slightly, the following conditions are always assumed to prevail:

1. Competitive market conditions.
2. An informed buyer and seller.
3. No undue pressure on either party.
4. "Rational" or prudent economic behavior by both buyer and seller.
5. A reasonable turnover period.
6. Payment consistent with the standards of behavior of the market.
7. Market Value looks at the transaction from the point of view of the buyer.

C. However, a buyer is integrating and comparing a property more to a personal set of needs than to a property alternative which is only roughly similar to another in function and potential.

1. For example, a commercial office building developer seeks a site with a minimum number of construction problems, an optimum shape, and maximum rental value. On the other hand, the committee buying a home office site for an insurance company or bank will emphasize visibility and location at the expense of almost any development cost and despite any reduction in rental value for re-use.
2. A young couple may buy an old house because it is run down and in need of renovation in order that the initial cost is low and the opportunity for creating equity is greatest, while the seller is selling because of irritation with the fit of the structure to his lifestyle or because he has reached the end of his lifecycle in that location.

3. One man's floor is another man's ceiling.
4. Therefore, the eventual sales price at which two parties will agree is arranged within a zone of expectations and requirements reflecting the assumptions of each party. Indeed some transactions are designed so that the final price is determined later based on whose assumptions prove to be more correct in a speculative situation.

D. Both buyer and seller enter negotiations with a subjective value expectation (Vs) which is a constraint in bargaining for the property.

1. "The actual selling price will usually represent a compromise between what the buyer would have paid if necessary and what the seller would have taken as a last resort." p. 13, Ratcliff.
2. Therefore, the appraisal must take more than just the buyer viewpoint of the transaction or the appraisal will not be of a value that reaches the minimum the seller can or would accept.

E. This leads then to the concept of a transaction zone around a point which is the central tendency of bargaining, a point we call most probable price. Notice the assumptions of most probable price may be somewhat more acceptable in terms of pragmatic realism than those of fair market value.

1. Subjective value (Vs) is a figure with which buyers and sellers enter the market as a constraint in the bargaining. The actual selling price will represent a compromise between what the buyer would have paid if necessary and what the seller would have taken as a last resort.
2. In residential work, where there are many sales, the transaction zone may be defined statistically as the standard deviation of the estimate.
3. The possible variance or error in the estimate of probable sales price may be intuitive by the appraiser.
4. The zone may be defined by the logic of bargaining positions. The seller wants to cover his debt and broker fees; the buyer assumes a certain value in a new use less remodeling costs, less a cushion for unexpected costs and profit.
5. In the cast of investment properties, sensitivity analysis may define the range of alternative outcomes.
6. There may be certain conditions which cannot be known by the appraiser but which would change his estimate as to what the buyer or seller would accept; the appraiser may define the transaction zone as the range between optimistic and pessimistic impacts of external events.

F. The important function of the transaction zone is to alert the reader of the report:

1. To the fact that an appraisal value is not a certainty but a prediction of a future hypothetical business event.
2. Present value is the purchase of a set of assumptions about the future and therefore value depends on which set of assumptions the buyer and seller "buy."
3. The reliability of a prediction is important in using probable price as a benchmark for a decision; reliability is less important in assessment than in investment, conservatism more important in lending than in equity investment, etc.

MORNING SESSION
10:15-12:00 (noon)

Suggested Outline for
A CONTEMPORARY REAL ESTATE APPRAISAL REPORT
Based on Appraisal Theories of Richard U. Ratcliff
Prof. James A. Graaskamp
University of Wisconsin School of Business
6/30/77

Letter of Transmittal

1. Brief statement of appraisal issue
2. Value conclusion as most probable price within stated transaction zone
3. Sensitivity of conclusion to critical assumptions
4. Incorporation by reference of limiting assumptions and conditions

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Digest of Facts, Assumptions, and Conclusions

1. Property type
2. Property location
3. Property ownership pattern
4. Keystone physical attributes
5. Keystone legal attributes
6. Keystone linkage attributes
7. Keystone dynamic attributes
8. Most probable use conclusion
9. Most probable buyer assumption
10. Most probable price prediction and central tendency
11. Correction of preliminary value estimate for external factors or market position of parties
12. Test of corrected probable price for consistency with most probable buyer objectives
13. Final value conclusion and range of error estimate as appropriate

I. Basic appraisal process constraints

A. Statement of issue and circumstances for which appraisal is intended to serve as a decision benchmark and date of valuation

B. Special problems implicit in property type or issue which effect appraisal methodology and definition of value

C. Special assumptions or instructions provided by others

D. Definition of value to be the objective of appraisal analysis and discipline of appraisal process

1. State selected definition and source
2. List implicit conditions of the definition
3. Special assumptions required by relevant legal constraints

E. Definition of legal interests to be appraised

1. Legal description and source

2. Permits, political approvals and other public use entitlements included in sale
3. Fixtures or personalty to be included with sale
4. Specific assets excluded as inconsistent with issue or premise of appraisal

II. Property analysis to determine most probable use

A. Site analysis

1. Physical (static) site attributes (including size, shape, geology, slope, soil, hydrology, etc.)
2. Legal-political attributes (including zoning, covenants, easements, special assessments, or other land use codes and ordinances, etc.)
3. Linkages of site (including key relationships to networks, populations, or activity centers which might generate need for subject property)
4. Dynamic attributes of site (perceptual responses of people to site in terms of anxiety, visibility, prestige, aesthetics, etc.)

B. Improvement analysis

1. Physical (static) attributes of improvements (cataloged by type, construction, layout, condition, structural flaws, etc.)
2. Special capacities and conditions of site improvements (such as wells, bulkheads, irrigation systems, parking surfaces with unique salvage or re-use characteristics)
3. Legal-political constraints on use of existing improvements (including capacities imposed by utilities, building codes and inspection liens, fire codes, conditional use procedures, or neighborhood planning groups)
4. Special structural linkages to off-site elements (tunnels, bridges, adjoining structures, etc.)
5. Dynamic attributes of existing improvements (affecting how people relate to the property such as historical sentiment, building style, impressions created by bulk, texture, previous uses, or functional efficiency)
6. Current uses and tenancies of improvements, if any

C. Identification of plausible alternative use scenarios for subject property

D. Comparative analysis of alternative uses for fit to physical and political context to identify uses for which market demand should be studied.

1. Testing alternative use strategies for compatability with physical property attributes within reasonable cost to cure.
2. Testing and ranking alternative use strategies for political compatability.

E. Analysis of effective demand for selected uses ranked in "D" and selection of best market potential uses.

1. Resolution of conflict between market demand and physical context.
2. Recommendation for compromise between market and political

III. Selection of appraisal methodology appropriate to most probable use

A. Specification of most probable buyer type implied by most probable use

1. Alternative buyer types and motivations
2. Specification of essential site, improvement, financial, or key decision criteria of principal alternative buyer types
3. Selection of most probable buyer type as basis for prediction of a sales transaction with logic for discard of alternatives

B. Explanation of appraisal methodology for prediction of probable purchase price of subject property assuming most probable use and most probable buyer models

1. Preferred method - to infer buyer behavior from actual market transaction and market data available from sales by comparable buyers of acceptable alternative properties
2. In the absence of adequate market sales data, the alternative method selected for simulation of probable buyer decision process
3. The test proposed to relate probable price prediction to criteria of probable buyer profile

C. Search for comparable market sales transactions

1. Explanation of search parameters
2. Investigation of sale transaction circumstances
3. Evaluation for comparability
4. Definition of predominant terms of sale

D. Establishing basis for sales transaction comparison

1. Unit of comparison
2. Method of comparison
3. Source of comparative adjustments
4. Decision as to adequacy for inference from market transactions

E. Simulation of probable buyer decision process if market comparison approach is inconclusive or impossible

1. Explanation of simulation model
2. Schedules of simulation assumptions
3. Range of alternative simulation predictions

F. Determination of most probable price and standard error of prediction

G. Correction of preliminary value estimate for external factors

1. Identification of conditions relative to date of appraisal not present in market comparison assumptions
2. Specification of political contingencies which might upset normal appraisal assumptions of substitution
3. Identification of any violation of conditions in the definition of value by the appraisal methodology
4. Indication of adjustment necessary to preliminary probable price estimate or explicit statement that no adjustment is necessary

H. Test of most probable price or value conclusion by means of:

1. Comparison to a selected alternative appraisal methodology
2. Comparison to decision criteria appropriate to issue (such as financial ratios required by mortgage lender, comparative assessments of similar property for the tax appeal board, rates of return in alternative investments, construction prices for similar property, or whatever demonstrate consistency with statement of the issue)

IV. Appraisal conclusion and supporting documentation

A. Definition of value and value conclusion of the report

B. Certification of independent appraisal judgment

C. Statement of limiting conditions which establish:

1. Contributions of other professionals on which report relies
2. Facts and forecasting under conditions of uncertainty
3. Assumptions provided by the client
4. Controls on use of appraisal imposed by the appraiser

D. Appendices and supporting legal documentation of permits, etc.

E. Professional credentials