

JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

II. CLASSES AT THE UNIVERSITY OF WISCONSIN--MADISON

P. Assorted Bits from Additional Classes Taught by
Graaskamp

9. Business 937 (Seminar--Urban Land Economics):
Course outline, assignment sheets, and
problem sets

Real Estate Market Research

937 Section 32

I. Introduction

This seminar will take real estate market research as its theme. We have spent the past several months researching methods of teaching real estate market research and have arrived at a conclusion that it is unteachable. Further it appears it is not being taught anywhere with the demise of the NYU Real Estate Program.

First the subject of market research is difficult to distinguish from urban land economics or investment feasibility studies. As I see it real estate market research should be an attempt to forecast a demand and supply curve for a general real estate commodity.

Real estate market research may be interested in establishing the demand in coming years for premium office space on the square or attendance at a all purpose arena over time. It is not interested in predicting the demand for space only in the Anchor Building or for a single Madison Mustang game. Real estate market research may be interested in defining market stratifications of significance but not in setting specific policies for a given building to reach a specific market segment.

To that degree real estate market research is applied urban land economics, applied to the point of determining questions of quantity and price on the demand and supply side of space in the general market equation.

The decision making system calls for inputs of fact, values, and from values criteria for interpreting. Real estate market research is interested in delineating meaningful facts for the equation and conversion points which can convert values to quantifiable material.

II. I propose to teach us all, including myself, something about real estate market research following a number of techniques.

- A. Critical review of existing market research reports for method, style, and presentation.
- B. Research for almost non-existent literature in the field.
- C. Actual practice on real market research problems in the Madison area for individual term projects. For example:
 - 1. A Madison housing forecast ala NAHB
 - 2. A forecast of Madison industrial land needs for the next 15 years
 - 3. A forecast of residential single family rural acreage unit demand
 - 4. A forecast of demand for private college dormitory housing in Madison and the essential demand creation features for private dorms in general
 - 5. Individual projects for the campus planning department
 - 6. Any other analysis which you and I can agree on

D. In addition we hope to have a number of guest speakers the first of which will be this Thursday evening. Real Estate and Construction Management Association has the privilege of entertaining Mr. William Smolkin for its first meeting. Mr. Smolkin is a marketing specialist who has specialized in recent years in home building. Introductions at 5:15, dinner at 5:30. Mr. Smolkin must leave at 8:00.

Cost of \$2.50 includes ~~xxxxxx~~ dues for a semester in the real estate club. 202A Breese Terrace is the place and attendance is restricted to those who sign up by Wednesday morning

III. Real estate market research covers indirectly a much broader area than space and price would suggest. For example it may first be necessary to determine retail sales potential for a given product line before one can determine space needs. Or one must determine the approximate volume of prescriptions a given group of doctors will write before setting a rent on the pharmacy in the clinical building.

Before deciding to build a branch to a savings and loan bank one must first determine the deposit and mortgage loan potential of a given area and the degree to which the branch would adversely affect the main bank.

Real estate market research may be concerned with locating communities where properties are enjoying or vulnerable to a rapid decline in value, making these towns unsuitable for the sale of ~~xxxxxx~~ mortgage insurance loans.

The point is that real estate market research may encompass problems in real estate finance, national resource allocation, business policy, and city and campus planning as well as brick and mortar questions of how much to build and how much to charge.

IV. Your grade will stress your term paper but will also include several little written exercises which I will throw out from time to time. There will be a finagle ~~xxxxxxxxxxxx~~ factor for class participation.

V. Class materials: There is no use for text book material in this field. Therefore there is no syllabus. What I propose to do is make weekly assignments from materials on reserve at the reserve desk in the Commerce library. We will have a minimum of ~~xx~~ two copies of each. In addition, now that I know how many and who is in the course, I will pose individual problems in technique to specific members of the class who will then be expected to report the following week on possible solutions. For example I might ask someone to tell me how we would determine or discover the average number of square feet of office space required per attorney and the trend of this requirement. Presumably the demand for office space by attorneys could be determined by multiplying the forecasted number of attorneys by the average space used per attorney.

In short real estate market research is often simply imagination in developing source material or converting readily available general information to specific purposes

VI. For Monday warm up on the following manual, one of the few of any kind that has been done:

How to do Housing Market Research, by Uriel Manheim. Scan Chapt. 1
Read chapt. 2, 3, 4, 5, and 6. We will talk about chap. 7 and 8 in class next week along with the economics of housing demand in general.

MARKET RESEARCH NOTES

I. Assignments

- A. Monday, Nov. 15: Stanford Market Analysis
Broome County Analysis
- B. Monday, Nov. 22; Worthen Bank of Little Rock
Des Moines Bank
- C. Monday, Nov. 29: Feasibility Study, Abercrombie and Fitch

II. One of the basic problems of market research is reducing aggregate data to elements which reflect a more specialized part of the market in which you are interested.

- A. You have all read various market potential reports for a shopping center.
 - A primary marketing area is defined
 - Aggregate family income determined
 - Reduced to retail purchasing volume
 - Retail purchasing volume reduced into groups of merchandise sales
 - Total sales in each group reduced to necessary floor space
 - Total floor space reduced to additional needed floor space
 - And then this figure is increased by space necessary for service areas
 - With total floor space multiplied by another factor for parking to determine site area required.
- B. The critical data are the assumptions made to determine the reduction or multiplication factor which link each segment of the logical process.
- C. The process can be outlined in reverse order to define the scope of your research problem and the critical reduction of data assumptions which must be made to answer the specific questions of the research.
- D. For example here is an outline of a capitalization rate analysis for the Ellwood factor. In effect it is a graphic formula. It is my belief the same outline technique can be applied to your research problem.

III. Assume we want to measure the potential demand for townhouses in Madison, specifically the demand which must be met with new construction.

- A. New townhouses required will equal the increase in the number of households using townhouse type facilities minus the supply from other sources such as rented single family homes and duplex construction;

NOTES-2

- B. The demand and the supply factor can then each be carried back to other figures until we reach some aggregate data which we can obtain.
- C. People renting townhouses can be given certain characteristics as to income, age, and family size. This group in turn represents only a portion of total population projected for a community in this age group. You would define general groups according to the kind of data available, such as the MATS data for Madison.
- D. To define the characteristics may require a consumer profile of existing townhouse tenants or a hypotheses that a certain segment of the population was ready for a townhouse unit.
- E. The link between the segment and the aggregate might be age brackets plus adjustments for non-households and a average family size or it might be a percentage distribution of average incomes by age or occupation. In short a rational is needed for the reduction factors which reduce a given aggregate to a measure of demand for suburban revenue of \$150-\$225. These rent levels presume an income level and hence an occupation or age level. For example \$175 a month is \$2100 which should be no more than 20% of family income. Therefore our customers should have incomes of \$9000 or above, and we know how much of the market we have dropped off.
- F. However, most of the people in that income range will purchase a home and so we must either know what percentage of this group are home-owners or which sub-groups have the least incentive to own a home. These might include people over 65 or professional people just moving into Madison. There may also be a trend towards postponing home ownership because of nature of the occupation. If worse comes to worse a researcher must simply make a reasonable and conservative guess or introduce a high and low range of possessions.
- G. One measure of demand is the rate of absorption of townhouse type units which have built. Unfortunately this will tell you what the demand was but may not highlight what the additional demand might be.
- H. Process of outlining should create a pyramid of data and conversion points which will structure collection of data and the writing of the actual report. It will also show the researcher where he may substitute a plausible assumption for a market tested fact in the interest of speed or budget.

REAL ESTATE MARKET RESEARCH

ASSIGNMENT

9/27/65

Housing Market Analysis, A Study of Theory and Methods
by Chester Rappkin, Louis Winnick, David M. Blank
Development Opportunities
by Larry Smith & Company

TOPIC

Problem solving research as compared to macro analysis and predictions.

1. NAHB study of nation from individual city forecast
2. Dodge reports on national construction levels
3. National economics for forecasting techniques and statistics
4. General economic theory

MARKET RESEARCH PROJECTS

1. Develop a model couched in Urban Land Economics' terms which would indicate when an old college building should be remodeled or replaced on campus according to highest and best use theory.
2. Develop a technique for determining the absorbtion rate for single family acreages for non-rural families. Of interest would be the creation, sale, and development of individual home sites for those seeking estate living on the periphery of the Madison community.
3. Development of a technique to relate individual retail floor space needs adjacent to the campus area to support increasing number of student enrollment.
4. Measuring the demand for private residential dormitory units given various assumptions as to the structure of the student housing regulations.
5. Deriving a technique for choosing the optimal location for a floral shop.
6. Developing a multiple regression housing construction forecast for the Madison metropolitan area following the NAHB and Smolkin models.
7. Developing a technique for forecasting industrial land needs in Madison for 1970, 1975, and 1980, critiquing at the same time the assumptions of the present Madison Planning Department forecast.

Market Research

10/4

Assignment:

1. Scan Housing Market Data from Census Material--note the lack of comparable 1950-1960 information and the trend of the census to gather more market data. Note efforts to define SMSA.
2. Read The Techniques of Urban Economic Analysis by Ralph Pfouts:
 - Historical Development of the Base Concept, p. 5
 - Economic Base Analysis, p. 19
 - Classification of Base Types, p. 51
 - The Problem of Base Measurement, p. 65
 - Special Problems of Base Identification, p. 97
 - The Problem of Area Delimitation, p. 117
 - The Concept of Base Ratios, p. 139
 - The Community Income Multiplier: A Case Study, p. 341
3. Chapter 2, Urban Growth Dynamics by Stuart Chapin and Shirley Weiss
(Statistical measures of urban interaction)
4. Measuring the Need for a Sports Arena
 - a. Definitions--page 5
 - b. Land requirements--location, parking, floor area, supporting adjacent land uses such as hotels, banquet halls
 - c. Direct and indirect revenue
 - d. Size of trading area for arena attendants
 - e. Slotting size of arena for gaps in existing supply of facilities to prevent undermining revenue sources of other public projects
 - f. Age composition and sporting attendants
 - g. Support for favorite local amateur sports
 - h. Availability of franchises, management
5. An arena can not be justified on direct dollar profits. Only 22 out of 68 showed a profit in 1958. There is some economies of scale on the basis of cash receipts but after adjustment for depreciation the larger buildings show a deficit of \$35,000 more than the smaller buildings. If 6% interest on land value is allowed, the despairsty increases as land values are higher in larger cities.

None of these operating results reflect debt service and amortization requirements. Federal financing through CFA or ARA is available. State financing would be available where ticket offices can be state-wide. City general obligation bonds or general tax revenues are most common approach as revenue bonds are impossible.

6. To some extent community subsidy is justified by new downtown activity by area residents, conventioners, troupes, and support to private facilities such as hotels and parking lots.

To estimate a land economist assumes state and local conventions last about 3 days and those attending spend \$31.00 a day or about \$90.00. Of this 27% is for hotel rooms, 27% for restaurants, 19% for retail sales, 15% for booze, and 11% for miscellaneous. Averages show about 275 for state and local conventions and 450 for regional conventions. Other events bring people to town for an evening and an overnight. These people might spend an average of \$2.75 which would add a million or more in downtown sales volume.

7. Significantly the consultants for the Providence project never said indirect benefits justified direct cost for Providence. Instead they pointed out many other cities had weighed the same problem and decided in favor of this land use.

Notes and Comments on Feasability Reports

I. Broome County

1. Economic base forecast by means of a National forecast for five major industries operating in Broome. Is this a valid approach?
2. Do you think that population projection is oversimplified by applying National averages to Broome county population? What do you think of income projections relative to employment profiles?
3. Are land needs based on local planning department densities valid? What about three factors of mix, employment density and intensity of land use changes, and supply of available land?
4. How do you judge how much land is suitable and available for industrial purposes and is this the critical problem for this county? Should you know present land holdings of major employers?
5. Are broad classifications of land use demands helpful guidelines?
6. Do you sense the economic and social necessity for the creation of "place", the Architect's term for a focal point for the three cities and the county? Have the report writers avoided the issue of a metropolitan county where all the individual communities should be absorbed?
7. Should the critical issue of better education to attract higher income technicians be stressed in more detail?
8. Does the economic picture dictate the political experiment of strong county government as a means of metropolitan government?

II. Stanford Study

1. This study starts out on the promising target of employment for different age groups but then never analyzes employment trends in the community on the basis of age. Never ask a question in the introduction which does not establish a theme for the organization of material. Personal income data is not analyzed according to age or employment source so that one doesn't know whether Stanford's income is attributable to local employment or to a basic economic activity of providing residential space to New York executives who like to sail. This particular study is extremely poor in analyzing sources of economic base potential.

III. Abercrombie & Fitch

1. The real estate problem is to lease this site or another or to buy this site or an alternate.
2. Note that the building is relatively old and of low value relative to the land and that the size of each floor is inefficient for retailing anything but high value small scale sport's articles. Since this was written they have built a pre-fabricated summer cottage on the roof.
3. Note provisions in lease which prevent operation of any other store in New York, any change in business policy reducing sales from this outlet, and subordination of lease to mortgage.

4. Note the logic: the first issue is, is there a location that has better future potential or comparable potential. Only a few are found with comparable potential. The question is then narrowed as to the possibilities of lower rent or better lease terms at the present or a different site based on recent lease deals.
5. Note the use of an architect to establish building areas of alternative schemes under New York zoning requirements.
6. Note that the analysis of comparable locations leads to analysis of competitors modus operandi, i.e. separation of mail order business from high rent locations and selection of branch store outlet.

IV. Des Moines, Iowa Bank

1. This report is of note because the data appropriate to bank expansion in Des Moines runs counter to traditional measures of expansion for many other space users such as retailing.
2. Regional data indicates concentration and distance to larger centers is such that Reilly's law is deemed to be inoperable.
3. Of particular note is the analysis of the effect of new office buildings on the competitive position of the proposed building. Note the musical chairs analysis which shows that space freed is of lower quality and hence out of the high quality sub-market.
4. Note the recommendation to the bank to shore its values by attracting J. C. Penny as a neighbor.