JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

I. MANUSCRIPTS

D. Book Reviews

1. "Dollars and Cents of Shopping Centers 1969: A Review Article", <u>Land Economics</u>, May, 1970

Index

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the problems of farmers, by seeing them in historical and geographical perspective. Throughout his life he visited farms regularly, always taking systematic notes — a practice which he encouraged students to emulate. Whenever he returned to Madison, Wisconsin, he always tried to revisit a few farms that he had studied as a young instructor. His observations on some of these farms covered a span of at least 6 decades. In his own doctoral dissertation, "The Decline of Land Owners Farmers in England," (Wisconsin 1902) he visited more than a hundred farms, travelling by bicycle. Some 60 years later, with Mrs. Taylor, he revisited the same farms which he had studied as a young man. In the very last years of his life, he was trying to complete a 100-year history of the original Taylor farm in Iowa, Tarplewick, upon which his mother and father started farming in 1861[3]

A second piece of advice to students was to see things whole. He feared that agricultural economics might break up into segments or parts, each of which would attempt to achieve professional autonomy. He used to emphasize the point by relating an observation made on a trip to India. There he saw a very ancient banyan tree — which had grown to cover some two acres of land. But the original tree at the core was dead and gone. This he wanted agricultural economists to avoid.

In closing this brief tribute to H. C. Taylor in *Land Economics,* it is appropriate to note that he was a long-time friend and frequent contributor to the journal.[4] He admired and respected Professor Ely, the teacher who had influenced him most deeply. He was always grateful for Ely's advice regarding the choice of a thesis topic: "Study something that has to do with land." This he did.

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[3] While in the process of writing this discourse on Dr. Taylor I have been informed by a colleague that this material is in the process of being published under the sponsorship of the Farm Foundation of Chicago.

[4] For instance, "Agricultural Contraction versus Expansion as a National Policy," July 1926; "Share of Agriculture in the National Income," co-authored with Jacob Perlman, May 1927; Agricultural Estate Management, May 1927; "The Farmer in the Groupistic Regime," August 1940; "Justice for the Farmer and the Rest of us," February 1954; and "Food and Farm Land in Britain," February 1955.

LAND ECONOMICS, MAY 1970

Dollars and Cents of Shopping Centers 1969: A Review Article†

THE AUTHORITATIVE SOURCE on operating revenues and expenses of shopping centers is the triennial study, *The Dollars and Cents of Shopping Centers,* published since 1961 by the Urban Land Institute. The fourth extension of this study of receipts and expenses has been released with a variety of improvements in format and an expansion of the data base to 360 centers. Each development has been classified into one of three types — regional, community, or neighborhood center — and further subdivided into six geographical regions for the United States (assembled from Federal Reserve Districts) and a seventh area for all of Canada. Expansion of the participating sample of centers has also permitted a separate break-out of data for recently constructed, enclosed-mall, regional shopping centers. The operating data are essentially for 1968 and such currency testifies to the efficiency of the Shopping Center Study Committee of the Community Builders' Council who provide the data while they are still useful, a standard more liberally financed government agencies could do well to follow.

The above-mentioned Committee, which has been the driving force behind this publication, has taken great care to protect the anonymity of the data sources from com-

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petitive sleuths who might detect a pattern in a small cluster of data respecting a specific regional center. At the same time the Committee has attempted to provide precise tabulations of comparable centers. The Committee first established a standard system of cost accounting (*Standard Manual of Expense Accounts for Shopping Centers,* Washington, D.C.: Urban Land Institute, March 1961). Operating results by this accounting standard were given a common denominator of square foot of gross leaseable area (GLA) and were presented by geographic area, grouping by age of center and by tenant characteristics for the three defined types of centers, plus a separate accounting for the enclosed mall center. For these sets of tabulations composite data have been presented for the middle range and the median value. In the words of the chairman of the Study Committee, Roy Drachman, "the mid-range presents a closer perspective as a guideline 'to common experience.' It eliminates the extremes of the full range and the chance revelation of an unusual center. Median represents typical conditions, whereas average implies an industry average." This philosophy might be further improved by presenting medians of the quartiles and with the total operating balance (net income) followed by total debt service pay-outs (interest, bonus interest, and principal) as rent levels include annual cash requirements on construction capital debt, a point further developed hereinafter.

The Foreword in the publication is a particularly effective statement on the management problems and objectives of any compendium of operating costs. It is noteworthy that the early editions, financed by various professional trade organizations, were priced to generate a fund with which to finance continued publication of the study so that this standard reference tool now has the capacity to grow and to refine essential benchmark guidelines. Indeed, it was suggested that, if more centers would participate, geographic areas might be reduced to Federal Reserve Districts or perhaps in some cases to standard metropolitan statistical areas. No other report of real estate development or operation has achieved the objectivity of financial independence, of the care in statistical construction, or of the variety of detail for an infinitely complex real estate specimen — the shopping center.

With its position as a reliable data source for the real estate industry established, the Study Committee might consider two incremental features which would not depend upon an immediate expansion of the number of participating centers. The first feature would expand the Report's service to appraisers while the second is tied to current debate on redefinition of productivity as cash throw-off rather than net income. With reference to the expansion of data appropriate to the appraiser or investment analyst, it might be possible to expand the supplementary information to assist the appraiser on the following related matters: (1) resale prices of older centers, (2) awards and appraisals for partial takings due to eminent domain, (3) sales of major store or free standing structure pads within center complexes under development, (4) sales or land leases of sandwich positions in developments under construction, and (5) description of common financing packages and repayment formulas.

Recognizing the private nature of most of this information and the general practice in appraisal of checking data with grantor or grantee, all that should be required is identification of such transactions by grantor or grantee who could then determine from a specific inquiry whether he wished to share such information with an inquiring appraiser under specific conditions. It might be possible to report resales of older centers in terms of the net income to price ratio which is often termed the over-all capitalization rate. Such rates are difficult to find in any given locality on a current basis due to infrequent sales. They could be used by the appraiser without need of the specific dollar figures because of the credibility of the Urban Land Institute publication.

When *The Dollars and Cents of Shopping Centers* was first published in 1961, the majority of appraisers accepted net income defined by the common denominator of gross leaseable area as the measure of productivity for any selected retailing property type. More recently, mortgage equity techniques and cash throw-off after debt service have become the preferred measures of investment productivity for sophisticated

appraisers and investment analysts. The problem of relating the great disparity of operating income balances for various centers is insurmountable unless the cash requirements of the financing package are related to both operating income and original capital costs. Minimum rents of newer centers must be set relative to debt capital costs; and financing requirements are generally rising with wide geographic differentials and with vast differences relative to the age of a particular complex. Even the capital costs and therefore minimum rents of a center which might have begun operations only two years ago (at the end of 1967) would have reflected actual construction in 1966 on the basis of bids and contracts and interest commitments in 1965. The best guess of a professorial outsider would be that the higher receipts and net operating balances in some geographic areas are more than offset by higher capital outlays and hence higher debt service drains on operating income. Therefore it would seem feasible without great damage to the skittish participation of many developers if medium- or middle-range operating balances were followed by total debt service (interest, bonus interest, and principal payments) lumped into a single figure or divided between total interest and principal reduction. Highest and best use studies which traditionally have referred to productivity as net income rather than cash throw-off after debt service would find it impossible today to measure risk or investment incentive for shopping center development without information on the elasticity of minimum rents or distribution of financing costs through the mechanics of various new loan and joint venture forms of organization. While the exact details of each arrangement are both unique and (logically) privileged information, certainly the gross pay-out to lending sources should be included to put income from operations in proper perspective. Were Fredrick M. Babcock writing his classic *Evaluation of Real Estate* in 1972, rather than 1932, he would almost certainly recognize the benefits of ownership to be the after-tax dollars accruing rather than the net income before debt service or taxes, which were of minor significance in his era. Indeed, public as well as private investment policies and decisions in urban development could be determined by reference to after-tax spendable dollars as demonstrated by the recent publication by Robert O'Block, "Low-Income Housing: Actors, Goals, and Decision-making," appearing in *Social Innovation in the City*, a set of working papers from the Harvard School of Business, mimeographed in 1969 by the Harvard Press. Much of the literature in urban land economics needs to be restructured to reflect the dynamics of cash throw-off after financing and cash flow after income taxes to correctly evaluate investment incentives for all manner of land use decisions. Perhaps in 1972 *The Dollars and Cents of Shopping Centers* might lend its prestigious impact toward such an improvement of the urban land economics model by improvement of data necessary for field use of the model.

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Basic Determinants and Consequences of Shifts in the Supply of Iron Ore

SINCE WORLD WAR II two basic shifts in iron ore sources for the American iron and steel industry have occurred. First was the shift to new foreign sources. Large-scale searches for new reserves of high grade natural ores launched by both mining firms and steel producers after Second World War uncovered vast natural ore bodies in Canada, South America, and Africa, and more recently in Australia. The second shift was the introduction of beneficiation and pelletizing of low-grade ores of the Lake

NOTES
and comments

Dollars and Cents of Shopping Centers 1969*

James A. Graaskamp

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* The above is taken from an article written by the author which appeared in *Land Economics*, May, 1970

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Who Was Inwood?

L. W. Ellwood, M.A.I.

ALL WELL-KNOWN ENCYCLOPEDIAS contain rather comprehensive biographies of John Napier, the Scottish mathematician who invented logarithms; Sir Isaac Newton, the British scientist who, among other things, developed the early form of differential calculus; and Francis Baily, the English astronomer, explorer and financier who acquired a great reputation for his actuarial calculations and other work pertaining to the arithmetic of money at interest.

The name, William Inwood, does not appear in any of the standard references. To learn anything of the career of this man whose name is now associated with development of formulae for the six basic compound interest functions, one must refer to some of the old and rarer biographical dictionaries.

The Inwood formulas and tables, founded on earlier works of Napier, Newton and Baily, were first published about 160 years ago and, in various forms, are still primary mathematical tools in the fields of banking, finance, insurance, and valuation.

Every valid income approach and every capitalization technique used by real estate appraisers over the years is based on Inwood formulae. Aside from the judgment factor involved in selection of the most appropriate technique in any given case, the mathematical accuracy of the technique itself can be demonstrated only by use of these same formulae.

One of the interesting things we gather from reading about Inwood is that the formulae and tables for which we know him today were probably no more than a by-product of his work as a land surveyor, architect, and steward of large estates. The problems of economic real estate development he faced in these capacities naturally gave birth to the idea that a precomputed tabulation of standard coefficients would not only save time, but also serve as a handy tool for the real estate investment business as a whole.

L. W. Ellwood, M.A.I., is a author of Ellwood Tables for Real Estate Appraising and Financing. Mr. Ellwood is former Chief Appraiser for New York Life Insurance Company.