

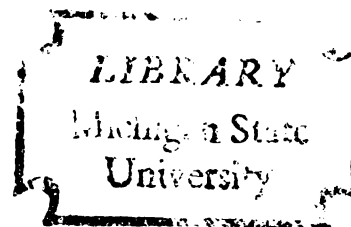
ACCOUNTING FOR LAND DEVELOPMENT

Thesis for the Degree of Ph.D.

MICHIGAN STATE UNIVERSITY

ARJAN T. SADHWANI

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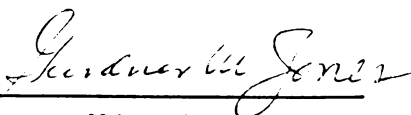
This is to certify that the
thesis entitled
ACCOUNTING FOR LAND DEVELOPMENT

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Arjan T. Sadhwani

has been accepted towards fulfillment
of the requirements for

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Major professor

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ABSTRACT

ACCOUNTING FOR LAND DEVELOPMENT

By

Arjan T. Sadhwani

A developed lot is the final product of long and complex operations requiring a series of production processes, and is essentially a manufactured commodity. In the last few years several large publicly held corporations have ventured into land development business. Although the broad purpose of the accounting function in the land development industry is to identify, measure and communicate useful information for external and internal users, the unique features of the industry give rise to many accounting problems.

The purpose of this study has been to investigate the accounting requirements of land developers with primary emphasis on financial accounting with the interests of owners (shareholders) in mind. The emphasis on meeting the needs of the shareholders is justifiable because of the increase in public ownership of land development companies. Actual accounting procedures and practices employed by developers are examined and critically evaluated in the study. Some accounting system changes are proposed to accommodate peculiar features of the industry, and to replace extensive dependence on tax considerations as the basis of accounting. The criteria for evaluation of the accounting practices have been within the theoretical framework outlined in the American

Accounting Association's Statement of Basic Accounting Theory (1966).

Data about the actual accounting procedures and practices employed by the developers were gathered by means of a mail questionnaire and personal visits. In a sample of 65 companies, 30 companies returned completed questionnaires; 10 companies that had sent completed questionnaires were visited to pursue the questions and their replies in greater depth. The choice was made to study fewer subjects (firms) in depth rather than a larger universe in limited depth in order to examine real-world accounting techniques; an attempt is made to find solutions for their accounting problems. The sample companies are engaged in developing subdivisions for various uses, ranging from those for only residential homes to complete communities with schools, civic center, golf course, shopping centers, industrial parks, etc.

Many peculiar characteristics and accounting problems can be attributed to complexities of the land development process and to the selling techniques of developers which have evolved over a long period of time. Therefore, part of the study dealt with tracing the evolution of conventional accounting practices employed in the industry since 1901. The study also describes briefly the unique features of the industry and the principal accounting problems at the present time.

The analysis of questionnaire responses reveals that the managerial objectives of accounting, such as, determination of accurate cost of each improved lot or group of lots, cash planning and budgetary control, etc. are given priority over the non-managerial objectives. However, tax considerations appear to be at the heart of the actual practices and procedures used by developers. The use of multiple corporations in the organizational set up of developers and current

expensing of carrying charges are common in the industry. However the publicly owned corporations tend to capitalize the carrying charges in order to show rapid earnings improvement in the short run. Furthermore, the majority of the companies recognize revenue from lots sold on the installment plan immediately when the sale contract is signed and the down payment is received, but they report under the installment basis for tax purposes.

Generally speaking, developers have not constructed a scientific approach to the allocation of joint costs in spite of an often expressed desire to know the "exact" unit-lot-cost. The majority of the companies use "number of lots" method under which each lot is assigned the same cost irrespective of its size, location or other physical features. Companies which had separate land survey, planning and engineering sections in their organizational set up treated large amounts of expenditure on land survey and engineering as a period cost rather than a cost of improved lots; while others who used subcontractors for survey and planning work inventoried the expenditure and included it in the cost of improved lots.

Conclusions and recommendations in the study are drawn after first evaluating procedures and practices to ascertain how far the Federal income tax law, the Treasury regulations and judicial rulings in many court cases influenced the accounting procedures, and then analyzing each method under theoretical considerations. The proposed changes concern classification patterns for costs, accounting treatment of the carrying charges and imputed interest, recognition of revenue from non-installment and installment sales of lots, recognition of 'after costs' and partial reimbursements of utility deposit refunds, revaluation of repossessed lots, and methods of allocation of joint costs.

ACCOUNTING FOR LAND DEVELOPMENT

By
Arjan T. Sadhwani

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TO MY FATHER

When the going got tough, there was always my father, a
source of comfort, inspiration and encouragement.

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Finally, I must express my deep appreciation to my wife, Lata and daughter Anjali for patience, encouragement and love and putting up with frustrations and irritations of graduate study.

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CHAPTER I

INTRODUCTION

Purpose of Research

The purposes of this research are:

(1) To investigate the accounting requirements of land developers. The particularized accounting requirements for this industry are examined with primary emphasis on financial accounting with the interests of owners (shareholders) in mind. Secondary emphasis is placed on accounting requirements in aid of managers of land development activities. The greater emphasis to meet the needs of the shareholders is justifiable because of the increase in public ownership of the land development companies in recent years.

(2) To propose some accounting system changes to accommodate peculiarities of the industry, and to replace extensive dependence on tax considerations as the basis of accounting. The proposed changes will be mainly concerned with the process of identification and measurement of accounting data. The criteria for acceptance of the changes will be within the theoretical framework as outlined in the "Statement of Basic Accounting Theory".¹ The standards and guidelines of the above theoretical framework provide a means of "accepting or rejecting accounting methods currently in use, or methods

¹A Statement of Basic Accounting Theory, American Accounting Association (1966).

proposed for future use."

It is hypothesized that an improved lot sold by the land developer is akin to a manufactured commodity. The manufacturing operations which convert raw land into improved lots are complex processes extending over lengthy periods. The accounting procedures of manufacturing industries can be extended with a few modifications to accommodate the unique characteristics of the land development process.

Background

Land is described in the early economic literature as consisting of many ingredients and ready for use for a variety of purposes. With increase in population, trade and commerce, land has become a complex manufactured commodity, requiring a series of production processes very much like any manufactured commodity. The degree of complexity necessary to produce the final product increases as one moves from land used in farming to land used for urban real estate. Ratcliff very aptly describes the nature of urban real estate in the following words:

Urban real estate is a complex commodity. In the first place it is a manufactured product (emphasis added). The original gift of nature, the surface of the earth which gives support and provides space for the activities of city dwellers, is extensively modified before it can be put to use for urban purposes. The land is one of the many components. It may have to be leveled off if it is hilly, or filled if it is marshy. It is of no use to anyone if it is not accessible, and so we construct streets and side walks. That man's activities will not be flooded out when it rains or when the snow melts, we put curbs and gutters along the streets and install miles of underground storm water sewers ... require a complex distribution system of pumps and buried pipes with hydrants for fire fighters who stand off the holocaust which periodically wiped out ancient cities. We should die like

flies before onslaught of disease but for costly and efficient waste disposal facilities of sanitary sewer laterals, mains, interceptors, and disposal plants. In addition to these community installations, each tract or parcel of land is processed and improved in accordance with its intended use.²

The long and complex process of producing lots to meet the specifications of intended use accompanied by advances in engineering and technical aspects of land development have given rise to the specialized land development industry. Separate land development companies are organized to develop land for different uses. A great number of the land development companies in the industry are specializing in subdividing large tracts of land and creating new communities. The existing realty companies which were not engaged in land development projects have started to realize the large potential in the land development business; and separate sub-organizations within their company structures are being established to handle the development business.

Land Development Accounting

Accounting is defined broadly "as the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by the users."³ Identification and measurement entail systematic classification of business transactions, events, and selection of appropriate alternatives for measurement of events or transactions. Communication involves reporting and interpreting the results. The structure through which the accounting process flows

² Richard U. Ratcliff, Real Estate Analysis, McGraw-Hill Book Company, Inc., New York, 1961, p. 2.

³ A Statement of Basic Accounting Theory, American Accounting Association (1966), p. 1.

is termed an accounting system and is recognized as a "major quantitative system of almost every organization."⁴

The users of information are classified as external users, who are ultimate owners of the business, creditors or other potential investors, SEC and other government agencies; and internal users who are managers and other persons responsible for planning and control functions in the organization. Accounting in the land development business is expected to serve the same broad purposes of identifying, measuring and communicating useful information. However, the nature of the industry and its peculiar characteristics and types of establishments require special consideration for classification of events and business transactions and selection of different accounting alternatives for measurement and recording of these transactions. Although it is recognized by many developers that accounting is a very important function in the organization, the actual attention to accounting methods seems to be less than satisfactory. While land has become a complicated manufactured commodity and technological progress has kept up, relatively little attention has been given to the corresponding accounting. A cursory examination of land developer organizations reveals that the accounting function is relegated to the background by the domination of engineering and marketing functions.

Need and Significance of the Study

The need for the study becomes apparent when land development accounting is compared with the advances in other related aspects of

⁴ Charles T. Horngren, Cost Accounting: A Managerial Emphasis, Prentice-Hall, Inc., Englewood Cliffs, N.J., (1967), p. 3.

of the business. The situation becomes glaring when the advances in accounting in manufacturing industries are compared with land development accounting. A few practicing accountants in the United States and other parts of the world have expressed concern over the neglect in land development accounting. John W. Bennett, a Canadian Chartered Accountant, writing about the problems in land development accounting stated:

As the business of the land development company has become increasingly complicated, sophisticated and diversified, the only important aspect that has not kept pace is accounting practice.⁵

In Australia, realizing the dearth of authoritative literature on the subject, the Queensland division of the Australian Chartered Accountants Research Society held a panel discussion on the various aspects of land development accounting from a practitioner's view point. In concluding remarks, the chairman of the panel, Mr. J.L. Aimes, stated:

The discussion tonight emphasized the need for accountants to give further consideration to accounting aspects arising from: the desire of management to capitalize certain development and holding costs; determination of a fair value of unsold land; the formula used to determine cost of sales in a given period; the effect of state laws on repossession or rescinded contracts; the contingent liability which might arise from an action for damages; providing for future costs of collection on term sales; providing for deferred income tax when figures differ; providing for anticipated other possible contingencies and losses.⁶

Until recently, the persons who were engaged in the business of land development were typically super-entrepreneurial types who had learned "the tricks of the trade" by experience acquired in the

⁵J.W. Bennett, "Problems in Land Development Accounting," Canadian Chartered Accountant, April, 1969, p. 778.

⁶Summary by Chairman Mr. J.L. Aimes, "Presentation of Practitioners View Points on Accounting for Land Development Companies" The Australian Chartered Accountant, June 1964, p. 778.

business. They considered themselves as being a highly creative type and having very little need for an accounting system to gather and furnish information for their day-to-day operations and for investment decisions. They possessed intuition which made them very skilled promoters and operators. Consequently, the form of organization in the industry typically was a closed corporation or a partnership of a few persons who were quite close to each other and who needed very little help from an accounting function.

In the last few years a growing number of large publicly held corporations have ventured into the land development business. Examples of a few include Aluminum Company of America, Pennsylvania Railroad, Kaiser Industries, and Atlantic Richfield Company. It has also been reported that General Electric is planning the development of hundreds of 'new towns' -- complete communities, including all necessary business, public service and other facilities -- in various parts of the United States.⁷ There also is a trend among large corporations toward acquiring real estate development companies. Examples include the Pennsylvania Railroad's acquisition of Macco Realty, and Boise Cascade Corporation's acquisition of S.V. Hunsaker and Deane Brothers. One encounters news about such mergers quite often. On December 17, 1969, the Wall Street Journal reported an acquisition of two Florida land development companies by Fuqua Industries, Haft Gains Co., a Fort Lauderdale developer which is building a 10,000 condominium project with three golf courses and other recreational facilities; and Kagnuson Corporation, a Miami based developer of subdivisions totaling 7,200

⁷ Robert P. Jones, "Tax Aspects of Real Estate Investments," Arthur Young Journal, Winter, 1967, p. 10.

acres on the island of Great Exuma in the Bahama Islands. These companies have been in the land development business for nearly 15 years. The public information on accounting practices followed by these closely held corporations has been practically non-existent. Concern has been expressed by practicing accountants over this lack of information on actual practices followed by land developers. As early as 1960, when corporations were just beginning to enter into this specialized industry, LeRoy Cole, partner in the Los Angeles office of Arthur Young and Company, said that "because most real estate development in the past has been undertaken by individuals, or closely held corporations on which little public information is available, the entry of large publicly held corporations into the field has presented new accounting problems and view points."⁸

Although the product sold by a developer is an improved lot and is comparable to any other manufactured commodity, the valuation of inventory presents a puzzling problem for him. Short-term turnover of inventory as found in a manufacturing company is missing in a land development company. The inventory has a high unit cost and a very low turnover. This gives rise to some peculiar problems and needs very thorough examination within both a theoretical and a practical framework. Extended production periods involved in the production process create subaccounting periods which are some times quite arbitrary but which are critical in the measurement process.

Robert K. Mautz, discussing the meaning of research in accounting describes it "as thinking seriously, patiently and in an organized

⁸ LeRoy H. Cole, "Accounting for Real Estate Developments," The Journal of Accountancy, October, 1960, p. 59.

fashion about the problems of accounting in an effort to understand accounting better and to arrive at useful solutions to its problems together with related activities as are necessary to obtain data helpful to this purpose."⁹ Later, discussing kinds of research in accounting, he describes Critical Research "as searching review of theories or practices to discover unexpected weaknesses or strengths with a view toward improvement of the idea or procedure studies."¹⁰ Finally, classifying 'levels of interest', he categorizes one of the research interests as a level where "actual application of techniques and procedures in practice" is the "object of research".¹¹

This dissertation effort falls in the category of investigation of 'actual application of techniques and procedures' and is concerned with a penetrating examination and analysis of those principles and practices employed by the land development companies. The principal accounting problems will be investigated and solutions to these will be sought within the established theoretical accounting framework. It is critical research involving review of accounting principles and basic concepts behind the accounting practices of the land development companies. Hopefully, the proposed accounting system changes will improve practices under actual operational conditions.

⁹Robert K. Mautz, "The Role of American Accounting Association in Accounting Research," in Jaedicke, Ijiri, Nielsen (ed.) Research in Accounting Measurement, The American Accounting Assoc., p. 1.

¹⁰Ibid., p. 2.

¹¹Ibid., p. 4.

Methodology and Investigative Techniques

The methodology is primarily one of descriptive and critical analysis of actual accounting practices and problems of land development companies. It consists of both library research and field research.

(1) Library Research

The library research provided a review of pertinent literature on land development accounting and related topics. The secondary sources such as published articles, books, financial statements of land development companies, prospectuses issued at the time of new issues by various companies etc. were supplemented by field research to gain insight into:

- (i) Unique features of the land development industry; and
- (ii) Principal accounting problems in the industry due to its unique features.

(2) Field Research

The field research was aimed at examining actual accounting problems and practices and the role of the accounting function within an organization of land development companies. Two types of investigative techniques -- questionnaire administration and field interviews and observations -- were used to gather data needed for the study.

(a) Questionnaire Administration:

A four part questionnaire (Appendix-B) based on guidelines outlined in Appendix-A was developed and sent to 65 selected land development companies.

The selected sample consisted of two groups.

Group I - 35 companies selected from a list of large and medium-size Michigan companies obtained from the regional home builders' associations at Lansing, Detroit, and Grand Rapids, and some well-known large or medium-size companies in Jackson and Flint.

Group II - 30 companies selected from Dun and Bradstreet Million Dollar Directory, 1970, from those listed under standard industrial classification code 6552 -- Real Estate: Subdividers and Developers except cemeteries.

Under S.I.C. code 6552, 220 companies located in 37 states are listed. Eighty-five of these are classified under S.I.C. code 6552 only. The rest have more than one classification, indicating that these companies are also engaged in other related activities like homebuilding, construction of industrial estates, real estate brokerage, etc.

Out of 30 companies selected in Group-II, 20 are classified under S.I.C. code 6552 only, and 10 although primarily engaged in the land development business, also had additional related classification such as general building contractors and/or operative builders.

The descriptions of the companies in the Dun & Bradstreet Million Dollar Directory, 1970, Standard and Poor's Register of Corporation, and other published sources were used to ensure that the company can at least be classified as large or medium-size, based on these descriptions. About 75% of the Group-II companies are located in three states, viz. Florida, California, and Texas, where the greatest activity in the industry takes place.

(b) Field Interviews and Observations

From the list of 35 companies in Group-I, 10 companies were selected for intensive personal interviews with accounting and other executives to enable the researcher:

- (a) to observe actual operations of the land development companies;
- (b) to pursue various questions and responses in greater depth;
- (c) to discuss the present role of the accounting functions in land development companies;
- (d) to assess the direction in which the role of the accounting function is expected to proceed in the future, since large publicly held corporations have made in-roads into the industry; and
- (e) to assess the consequences of expansion in the industry and the impact of automated data processing techniques on the land development accounting methods.

Limitations of the Study

(1) The scope of the study is limited to the investigation of accounting requirements for urban land development intended to be used for residential, commercial and industrial purposes.

(2) The field interviews and observations are limited to the land development companies located in the state of Michigan. Although the large land development companies are located in states of Florida, Nevada and California where large tracts of raw land are available for development into new full-fledged communities or cities, quite a few

companies in the Detroit area have been engaged in large complex projects. Many of their projects involve simultaneous development of residential, commercial and industrial subdivisions. Some of the companies have been in the land development business for over 25 years and have grown significantly in the last decade. Investigation during company visitations indicated that the accounting practices and problems of a company located in Florida or Texas are not significantly different from those of a company located in Michigan. Limiting the area of visitations was necessary to keep the scope within financial and time constraints.

(3) The sample of companies selected for questionnaire administration and visitations is selective. The investigation results are not amenable to statistical analysis. In other words, the study does not aim to formulate a hypothesis about the accounting techniques employed by developers and confirm or refute the hypothesis based on sample statistical tests of data. Rather, the study belongs to the category of problem solving studies in which real world accounting techniques are examined and an attempt is made to find solutions for the accounting problems of developers. The choice was made to study fewer subjects (firms) in depth rather than a larger universe in limited depth.

Organization of Chapters

Chapter I deals with introduction and provides background material, purpose, need and significance of the research, outlines research methodology and data-gathering techniques, and limitations of the study.

Chapter II discusses land development accounting in historical perspective since 1900 and reviews the unique features and principal accounting problems in the industry.

Chapter III summarizes the results of the land development accounting practices survey. In this chapter, common accounting procedures and practices employed by developers are gathered for critical analysis in the two following chapters. Also data accumulated during company visitations is included along with summaries or explanations for various questions of the questionnaire.

Chapter IV examines and evaluates accounting procedures and practices to trace the influence of the Federal income tax law, and of the Treasury regulations on accounting techniques used by developers.

Chapter V deals with theoretical considerations, accounting concepts and theoretical standards involved in land development accounting. Based on the concepts and standards, different alternative accounting methods used in the land development industry are examined and critically evaluated.

Chapter VI is devoted to overall summarization of results and outlines recommended accounting system changes. A few areas which need additional investigation are suggested for further research.

CHAPTER II

PECULIAR FEATURES AND PRINCIPAL ACCOUNTING PROBLEMS -- A CRITICAL ANALYSIS

Introduction

The land developer has to select such accounting principles and practices that his accounting system is tailor-made to serve his needs. The tailoring generally refers to selection of a set of accounting practices from various alternative methods to account for a transaction. The selection of methods requires understanding of the peculiar features of the industry and various accounting problems arising due to those features. Also, the selection process entails an understanding of assumptions and accounting concepts underlying the alternative methods, and evaluation of the relative importance of different concepts to accommodate peculiarities of the land development business.

In the land development industry, many peculiar characteristics and accounting problems can be attributed to complexities of the land development process and selling techniques of developers evolved over a long period. At various points in time, a few attempts have been made to evaluate some accounting practices and conventions in the industry. A few changes were suggested to accommodate the evolved features or accounting problems of the time; some were accepted and others were rejected mostly on taxation considerations.

Past is a guide to the future; and the study of history furnishes many clues. To gain insight into the past and to find some

clues related to the present accounting problems of the industry, this chapter attempts:

- (i) to trace the evolution of conventional accounting practices employed in the industry since 1901; and
- (ii) to examine and analyze the unique features of the industry and principal accounting problems at the present time.

Land Development Accounting: A Historical Perspective

(1) 1901-1920: The first comprehensive paper completely dealing with the accounts of a land development company appeared in the issue of The Accountant of May 19, 1906.¹ The paper starts with an outline of four distinguishing features of interest to auditors: (a) Trading in fixed assets, viz. plots of developed land; (b) outstanding liabilities accruing over a number of years; (c) difficulties in valuation of residual assets and consequent computation of realized profits; and (d) treatment of non-realizable assets whose precise value cannot be indicated. Also, there was brief discussion of different features of installment sales and auditing problems connected with verification and certification of these sales, bookkeeping methods related to computation of cost of land sold, apportionment of cost among various lots, and accrual procedures for uncompleted improvements. Furthermore, some of the problems connected with consolidation of accounts of subsidiary companies engaged in the land development business and how the auditor should go about solving the problems in the best possible manner, were touched briefly. The emphasis in the paper

¹Garratt, Percy, "Notes on the Accounts of Land Development Companies," The Accountant, May 19, 1906, p. 637-643.

centers around accountability of the management to the shareholders, and the methods which should be used by the auditor to examine the correctness of the balance sheet items.

The first pioneering book in the wider field of real estate accounting appeared in 1917.² Since the land development activity comprised a major activity of a real estate company, the book dealt with accounting methods applicable to a land development company. The examination of the book in historical perspective reveals a conformity to a noticeable trend toward uniform accounting systems. During earlier parts of the century, various trade associations or practicing accountants intimately associated with an industry, carried a 'crusade' of designing and publishing the uniform system of accounts applicable to the industry.³ Probably cost consciousness among the firms of an industry accelerated the movement for the establishment of a uniform accounting and costing system for the industry. Also, accountants engaged in different industries felt that each industry has some peculiar features and that generalized text book accounting methods could not deal adequately with the peculiarities of an industry.

²Walter Mucklow, Real Estate Accounts, Ronald Press (1917); The successor edition of the book entitled Land Accounts appeared in 1935, and dealt with the narrower topic of land development accounting.

³For example in 12 issues of The Journal of Accountancy in the year 1917, there are six articles dealing with uniform accounting of the following industries. Electric Utilities Accounting (P. 326 Vol. 23), Cost Accounting for Contractors (P. 177, Vol. 23), Navy Yard Cost Accounting (P. 28, Vol. 24), Accounting Systems for Retail Merchants (P. 100, Vol. 24), Construction Records and Accounts (P. 28, Vol. 24), Uniform Cost Accounting for Milk Distributors (P. 424, Vol. 24), Uniform Accounting for Third Class Cities, New York. In 1917, at least following 5 books were published dealing with uniform accounting: Milk Production Cost Accounts: Principles and Methods; Printer's Accounts, Rubber Companies Accounts, Real Estate Accounts. One can list books for about 30 uniform systems of accounting published during first two decades of the century.

Mr. Mucklow was a practicing accountant, and had had considerable experience in real estate accounting, and sensed the need at that time for a book dealing with specialized accounting -- real estate accounting.

Mr. Mucklow's book was the first book to treat the developed lot of a developer as "stock-in-trade". Also the book outlined some of the special features of the industry and attempted to define a few terms peculiar to the industry. The Federal income tax law came into effect on March 1, 1913 and the accountants of the period used various provisions of the law as standards for explaining the knotty problems in accounting for certain transactions. Mr. Mucklow, in conformity with the practice of the period, used the income tax law and Treasury rulings under the income tax law to evaluate or explain some problems related to realization of profits, provision for cancellation of contracts, treatment of contracts receivable and treatment of profit from installment sales. Bookkeeping methods, forms, records, etc. are also described in great detail.

(2) 1921-1930: During the early twenties, industry, trade and commerce expanded rapidly. The growth and prosperity created a tremendous demand for improved land for industrial, commercial and residential purposes. This demand was joined by speculative demand and created an unprecedented boom in the land development industry. Since the greatest activity occurred in the state of Florida, the boom was called the 'Florida real estate boom.'

"During the recent past, business in Florida real estate has been so active that the ribald and profane regard it as a 'boom', rather than a natural

or proper regard of undoubted merit".⁴

During the boom period, the activity in the industry was feverish. "From the Western Union messenger boy to the millionaire, everyone was drawn into the orgy of buying and selling."⁵ The boom created two opposite forces: (a) there was great volume and many complexities in real estate transactions which needed the concentrated attention of trained accountants; (b) instead, accounting was neglected since many persons got involved in varied joint ventures and seemed uninterested in a systematic accounting of their ventures. Only when "the smoke of battle" cleared away in the Spring of 1926, and the fortunate ones faced the prospect of accounting to the Federal Government for their profits, were the public accountants of the state called upon to perform the very arduous duties of determining from the maze of settlement sheets, contracts, receipts, and checks just what had taken place.⁶

A few practicing accountants, viz. Walter Mucklow, Lewis Wintermute, F.E. Ross, O.W. Boyd and at least one academician, H.F. Taggart, who came to be recognized as authorities on land development accounting during the period, wrote some interesting articles or a book on land development accounting and problems in accounting for various complex

⁴Walter Mucklow, "The Accountant and the Real-Estate Developer," The Journal of Accountancy, November, 1926, p. 327.

⁵Orton W. Boyd, "Accounting Problems of the Florida Real Estate Boom," Accounting Review, September, 1926, p. 64.

⁶Ibid., p. 66.

transactions peculiar to the industry. An article by Mr. Mucklow, one by Wintermute and a book by Taggart dealing with subdivision accounts are especially important from the point of view of historical study of land development accounting, and are briefly discussed in the following paragraphs.

Mucklow's article -- The Accountant and the Real-Estate Developer --⁷ discussed the role of the accountant in a land development company and stressed the co-operation between the accountant and other professionals working in a land development company. The technical accounting jargon and accountant's inability to prepare accounting reports 'in such a language as to be understood by the man on the street' is traced as the cause of lack of interest in accounting by the developer. Mucklow very aptly puts his point in the following words:

"It should be remembered than many of the most able of those engaged in the development business have no such (i.e. accounting) training and that the average layman is as much bewildered by such technicalities as is a patient who hears his disease described in medical terms by a consultant to his colleague."⁸

For the first time, Mucklow discussed the peculiar problems of the industry related to the 'theory of accountancy'. Interestingly, he points out, "the difficulties in (this) class are the least in number, and, perhaps, are easiest to deal with, as the complications which sometimes arise should not be found difficult to cope with by one who is familiar with recognized principles of accounting."⁹

⁷Walter Mucklow, "The Accountant and the Real-Estate Developer", The Journal of Accountancy, November, 1926, pp. 327-348.

⁸Ibid., p. 328.

⁹Ibid., p. 330.

(Emphasis added). The approved methods for the preparation of the balance sheet issued by the Federal Reserve Board in 1918 were used as recognized methods for theoretical examination.¹⁰ The following five items not specifically covered in the Federal Reserve Board's approved method are briefly discussed:¹¹

1. The price at which land is to be shown on the balance sheet.
2. The establishment of reserves for profits not yet realized.
3. The treatment of prepaid expenses and deferred charges.
4. Contingent liabilities.
5. The method of dealing with sales which have been cancelled.

Mr. Mucklow also discussed at great length the difficulties associated with the Federal income tax law in recognizing the profit on installment sales and reposessions arising from defaulted contracts. The Federal Income Tax Act, 1926 provided positive recognition of installment sales under certain conditions, and allowed the taxpayer to report the income of a period based on the installments received during the period subject to the Treasury regulations under the income tax law.¹² The Treasury regulations under the income tax law complicated the matter by differentiating somewhat arbitrarily between installment sales and deferred-payment sales not on the installment plan,

¹⁰Approved Methods for the Preparation of the Balance Sheet, Federal Reserve Bulletin, 1918.

¹¹Mucklow, op. cit., p. 330.

¹²Income Tax Act, 1926, Sec. 212 (d).

and by vaguely defining fair market value of the property as "that amount which would induce a willing seller to sell and a willing buyer to purchase."¹³

Mr. Mucklow provided a penetrating analysis of the problems caused by the income tax law and regulations, and suggested a remedy based on recoverability of cost before any profit can be recognized:

"In all sales of real estate, no taxable profit shall arise until the vendor has received in cash, or in obligations assumed by the purchaser, the cost of the property; after which all receipts shall constitute taxable income..... It would also prevent the growth of an erroneous idea which appears to be gaining strength, there is some mysterious basic difference between various sales, such as installment sales, sales on deferred-payment plan and closed transactions."¹⁴

Mr. Wintermute's article discussed in a limited way the accounting procedures required for proper control over certain operations arising out of specific conditions that are not common to most business undertakings.¹⁵ The bulk of the discussion surrounds bookkeeping methods for accounting for different transactions and setting-up of the books and the forms. There is a good bit of discussion on computation of unit lot costs, problems associated with apportionment of the total cost over individual lots, and problem of capitalizing or expensing carrying charges, viz. interest on investment in developed and undeveloped land, property taxes, etc. Evaluating this problem, Mr. Wintermute remarked:

¹³Regulation 65, articles 45 and 46.

¹⁴Mucklow, p. 343.

¹⁵Lewis Wintermute, "Some Problems of Allotment Accounting," The Journal of Accountancy, September, 1928, p. 161-178.

"As a matter of fact, they (i.e. carrying charges) continue to accrue from the date the property is acquired until it is actually disposed of, but there is here involved not only the theory of accounting but the much more important necessity of being practical."¹⁶

As a practical expediency, he suggested capitalizing carrying charges until the lots were placed on sale and treating them as operating expenses from that date on.

In the land development business, many times it is necessary to find the cost of sales prior to completion of all improvements necessary to fulfill the contractual obligation. Mr. Wintermute discusses some of the details associated with estimating the cost of lots sold and procedures involved in setting up of contra accounts. Although, he does not mention explicitly the notion of 'matching revenues with costs', his discussion implies that matching is highly desirable even if it involves estimating costs for the uncompleted improvements.

In 1930, a study¹⁷ completely dealing with land development accounting was published by the University of Michigan's Bureau of Business Research. The study focused on "problems involved in the purchases, development, and sale of unimproved property principally for residential purposes."¹⁸ At the outset Taggart noted the paucity of literature on the subject as evidence by (his) meagre bibliography¹⁹

¹⁶Ibid., p. 163.

¹⁷Taggart, Herbert F., Subdivision Accounts, University of Michigan, Bureau of Business Research, Ann Arbor (1930).

¹⁸Ibid, p. 8.

¹⁹Ibid., p. iii; he cited only nine publications in his bibliography (p. 89).

and lack of interest in accounting by the developers.

Contrary to the normal expectation that the subject matter would have been treated and evaluated in a theoretical framework, since the study is a product of an academician in the field of accounting, the treatment of many important topics and resolution of controversial points were strictly based on the Treasury regulations and court rulings under the income tax law. Taggart justified this practical treatment of the subject matter on two grounds:

- (1) "The coercion exerted by the income tax law is almost the only stimulus able to produce an effective interest in accounts on the part of a real estate dealer. This fact, is one reason for the emphasis on income tax consideration in the present work."²⁰
- (2) "Most bookkeepers and accountants are content to follow the rules laid down for them by the income tax laws and regulations in the matters of income and valuation---these rules have become more detailed and definite as each successive revenue act has been passed, so that the guidance thus afforded, if the rules are intelligently interpreted and applied, is adequate for tax purposes and is far better than nothing for accounting purposes."²¹

Prof. Taggart recognized the limitations of the financial statements prepared on the basis of income tax rules and regulations.

²⁰Ibid., p. iii (Author's Note).

²¹Ibid., p. 2.

Alternatively, he suggests that two sets of the statements may be necessary to provide adequate financial information. Interestingly, he favors methods employed by manufacturing companies as methods preferable to those of trading companies for the second set of financial statements.²²

The strict adherence to the income tax law and Treasury regulations under the law and recommendations based on convenience or expediency rather than even the accepted accounting theory of the period astonished a few practicing accountants of the period. Mr. Mucklow, who had been very active in the practice of land development accounting, commented while reviewing the book:

"Such a reader may feel surprised at the deference paid by the author to the regulations and bulletins of the Treasury Department, to which reference is made with a respect almost equal to the reverence observed by a Rabbi to the law and prophets: a feeling which is not shared by all those accountants who have appeared before those prophets, some of whom may be properly classed among the minor prophets; while a few, alas! might, by the cynical, be placed among the false prophets who worship in the house of Baal rather than in the temple of the true God."²³

Another striking feature of the study is a complete omission of any reference to the Federal Reserve Board's approved methods for the preparation of balance sheet statements or its revised version of 1929, "Verification of Financial Statements".²⁴ One would suspect that Professor Taggart may be dealing with accounts of a firm which is not a corporate type of organization, and therefore, the federal

²²Ibid., p. 2.

²³Mr. Walter Mucklow, Book Review Section, The Journal of Accountancy, April, 1930, p. 336.

²⁴"Verification of Financial Statements", Federal Reserve Bulletin, May, 1929. It may be possible that the revised version was published after Taggart had finished writing the book.

board's guidelines may not be applicable. On the contrary, he explicitly acknowledges that the principles, procedures and terminology used in the study relate to a corporate form of organization.²⁵ Also, his illustrative statements clearly indicate the corporate form of organization.²⁶

Nevertheless, the study can be considered as a landmark in the literature on land development accounting. The study discusses problems connected with the determination of lot costs, costs related to improvements after sale, and capitalizing vs. expensing of carrying charges in detail. Many methods suggested by Prof. Taggart filtered into the accounting text books and the books specializing in outlining accounting systems for various industries. Even at present, quite a few procedures recommended in his book are being followed by many land development companies. These methods and procedures will be discussed in this research effort wherever it is necessary to explain the origin of the method. To avoid duplication, no detailed discussion is presented in this chapter.

(3) After 1930: The depression during the 1930's witnessed a debacle in the stock market, and there was great disenchantment with publicly owned corporations. During the post-depression era, serious re-appraisals by various government and private bodies were made. The Securities Act, 1933, and Security Exchange Act, 1934 imposed strict disclosure requirements for the publicly owned corporation. Accountants were thrust into additional responsibilities of

²⁵ Taggart, op. cit., p. 3.

²⁶ Ibid., p. 67-88.

certification and verification of the published information by public corporations. During the decade of the forties and fifties, a great number of companies in many industries became publicly owned. The tremendous increase in demand for the products manufactured by many industries, advances in mass production technology and other related factors accelerated the trend of public ownership of corporations.

Many of the above factors affected the land development industry, but most of the land development companies were organized either as partnerships or private closely held corporations. Until recently, the public corporation form of organization was not popular in the land development industry. The joint-ventures of the 1920's and 1930's retained their popularity. The lack of interest in accounting by the management and the owners had an adverse effect on the accounting function. During that period, there were great advances in the practice of accounting elsewhere, but the procedures followed by land development companies were oriented mainly toward the fulfillment of an obligation to file tax returns.

The survey of accounting literature after 1930 indicates very few articles on land development accounting. A successor edition of Mucklow's book²⁷ appeared in 1935. Although the author claimed in the preface that great advances in accountancy had taken place and procedures employed in land development companies should be re-cast, the bulk of the material is more or less a summarization of the procedures and practices recommended before 1930.

²⁷ Mucklow, Walter, Land Accounts, American Institute Publishing Co., Inc., (New York) 1935.

Some of the handbooks of accounting methods published after 1930, also outlined accounting systems for real-estate or land development companies.²⁸ The material in most of these books is based on Taggart's Subdivision Accounts or articles published before 1930.

Recently, the entry of public corporations into the industry has aroused interest in the subject of accounting. A few accountants and academicians have discussed problems in land development accounting and complications created by the tax laws. Numerous but scattered court cases and treasury regulations discuss peculiar treatment for various cost and revenue elements.²⁹

Unique Features

The review of existing literature, the published statements of a few land development companies, interviews with executives of land development companies, and actual observation of the land development process provided the material contained in the following paragraphs.

Some writers discuss the unique features and the accounting problems in the industry interchangeably; or both are described as 'difficulties' in land development accounting. In the study, two aspects are separately discussed. This separation permits first the discussion of the unique features of the industry, and second the analysis of the effect of such unique features on accounting requirements of a developer and the principal accounting problems arising therefrom.

²⁸ J.K. Lasser (Ed), Handbook of Accounting Methods, D. Van Nostrand Company, New York, 1943, p. 1072-1082; Paton, William (Ed), Accountants Handbook, Ronald Press Co., New York (1932), p. 463-518 & 1430-9.

²⁹ These are discussed in Chapter IV.

1. Nature of the Business: It is a high unit cost, low inventory turnover business. Many development projects contemplate creation of entire new communities with a lake, a golf course or other recreational facilities, shopping centers, and industrial parks. The projects vary considerably in operation. Since improvements differ greatly in detail between projects to suit topography, location and other physical and social factors, there are few common repetitive operations amenable to standards except for broad engineering standards for earth moving, sewers, etc.

2. Multiperiod Projects: Land development projects generally extend over a number of years. A large development project involving thousands of acres may take a period of 25 years before the last lot is developed and sold. Even a medium size development project involving about 200-300 acres of land may extend over a period of five to seven years to complete. Many projects are developed in stages depending upon the market situation or available resources of the developer. The planning, engineering, inspection and legal formalities in search and transfer of title to the property take long periods of time. Some projects necessitate alteration of zoning provisions in a locality or a community and require extensive negotiations with many parties.

3. Nature of Costs: Land development costs related to assembling of raw land and improvement of undeveloped land are almost always joint costs. Two or more pieces of adjoining undeveloped land may be acquired for one subdivision and improvements carried out jointly or in parts without considering the individuality of each parcel of land. Many types of improvements involving large expenditures relate to the entire subdivision or more than one subdivision.

4. Excessive Use of Estimates: There is excessive use of 'estimates' in accounting for various items of costs or reductions from revenue. Since many lots are sold prior to completion of contracted improvements, the developer has to use estimated cost for these obligations to reflect the expected cost of improvements. Almost every published financial statement of a land development company contains a footnote that costs of improvements are based upon internal engineering estimates for uncompleted obligations. In some cases nearly 80%-90% of the costs of improvements were based on the estimates.

5. Sub-Contracting: The bulk of the land development operations is executed on a sub-contracting basis. The tradition in the industry and the strongly unionized labor needed in the operations and consequent labor relations problem are the two main reasons for this feature.

Interviews with a few executives of large and medium-sized land development companies revealed that the companies developed and sold thousands of lots over a period but did not own even a single piece of earth moving or concrete mixing equipment. All the operations, except designing a subdivision, were performed by sub-contractors.

6. Financing a Land Development Company: There are two major forms of financing a land development company:

- (i) Land contracts based on the mortgage of unimproved land or developed lots. Since the bulk of investment in land development is in land, this collateral is very attractive to the lenders in financing operations.

- (ii) Borrowings on 'installment sales contracts' of buyers of lots. Since most of the sales are on the installment basis and the periodic installments provide a regular source of retirement of the loans, lenders are willing to accept these as collateral. The land development company also benefits by this convenient form of financing.

7. Governmental Regulation: Government at local, state and federal levels has extensively regulated the land development business. The regulations are aimed at protecting both physical and social elements in a community. The most important area of regulation is zoning. It has become universally accepted in this country as well as outside the United States. It controls the use and development of all types of property from residential to heavy industrial use. Zoning laws protect and preserve neighborhoods and property values. Local and state regulations specify provisions for streets, their widths and structure, sewer systems, requirements for layouts etc. Subsidies for common services like storm sewers, access roads and paving of streets are paid by various local and state authorities. At the national level, indirect influence is exercised by Federal Housing Administration and Public Housing Administration. Loans to individuals or developers depend upon many specific requirements to be met by them.

8. Taxation Features: Taxation laws and regulations play an important role in the operation of every business. Some businesses have acquired special features to accommodate special requirements imposed by these laws. The land development industry happens to be

one such industry. It is characterized by a multiplicity of taxation laws, regulations and rules providing many options under different circumstances. Local, state and federal taxes are levied on land and land developers. Numerous court decisions scattered in taxation literature dictate various alternatives for treating different elements of cost, revenue or other recoveries. These factors are becoming more and more significant as vast amounts of capital are invested in diverse development projects.

9. Nature and Type of Establishments: Until recently, land development projects were usually undertaken by private individuals or proprietary companies. These were sort of super-entrepreneurial individuals who had acquired business acumen by experience on the job. Quite often a few individuals or closed companies formed joint ventures for specific projects, and little information of gains and losses was made available to outsiders by them. It is common practice among land developers to organize multiple corporations, either under control of one parent company or on a co-venture organization basis to perform one or more of the following functions:

- (1) purchase and hold raw tracts until land can be developed into profitable subdivisions;
- (2) develop the raw tracts and subdivide into improved lots on which residential or other structures can be built;
- (3) sale of developed lots and/or built structures; and
- (4) management of property (including rental of structures) until all property or lots are sold.

There are very few national land development companies, although a trend toward this direction is increasingly rapidly.

Principal Accounting Problems

By its very nature and peculiar features, the land development industry creates accounting problems. In an award winning article, Dr. Gardner Jones summarized several difficulties: joint costs, income tax provisions, inapplicability of standards, operation of developed properties while awaiting for sale, and joint ventures in development.³⁰

Some other writers have discussed problems connected with recognition of revenue, treatment of partial refunds from civic authorities, installment sales, carrying and holding charges, etc. These can be described briefly under the following four headings:

(1) Classification and accumulation of costs and revenues: In land development accounting, classification and accumulation of items and expense are key problems and extend into other areas like allocation of costs to individual lots and periods, and recognition of revenue. Two methods have been suggested to handle the problem of classification and accumulation of costs: (i) The first method is aggregating cost of land and land improvements related to one or more subdivisions and allocating that cost periodically or at the end of the venture to individual lots. Revenue realized on the sale of lots is matched with costs over a period of time, and the difference between the two amounts represents gross margin. Administrative and selling expenses are classified as period costs of doing business. Refunds and other revenue are also related to the period during which these were received. Obviously, such accounting classification follows the natural basis, is very simple but provides very little value and information expected

³⁰ Gardner Jones, "Some Problems in Accounting for Land Development", Management Accounting (N.A.A.), August, 1968, p. 33.

from an accounting function in an organization. (ii) The second method is to break down costs into prime classifications such as land cost, carrying charges consisting of property taxes and interest charges, land improvement cost broken down into many sub-classifications such as water system cost, sanitary and sewer system cost, engineering and surveying costs, etc. Special provisions are made for credits for recoverable portions of costs, revenues realized from land dedications, etc. Under this method of classification, an attempt is made to combine natural and functional bases by segmenting items of costs and revenues according to the original purpose within each functional category. Revenue and expenditure accumulated under each prime classification are allocated, using appropriate bases over individual periods and lots. Contra accounts are used to handle the problem of multi-period flows and to satisfy some of the income tax provisions. This method may provide better information but may be laborious and expensive.

(2) Allocation of Cost: In the land development industry, the merchandise produced for sale consists of lots. These lots are of different sizes and have different physical and locational characteristics giving rise to different selling prices. All expenditure, direct and indirect, ultimately must be allocated to individual lots to ascertain the cost of goods manufactured and cost of goods sold. This is one of the major and formidable problems for a land developer. The joint nature of costs can be identified as one of the causes of this problem. It is necessary to provide a classification scheme that will allow the rearrangement of joint cost items by different categories for identifying cost of land or cost of improvements. Furthermore,

because, the business is a high unit cost, slow turnover type, the developer may be forced to use for short periods part of developed property to produce some income. In some cases which arise in many big projects, improvements may be necessary on related land, and the cost of these must ultimately be allocated to lots. These off-site improvements may benefit two or more projects developed over a number of years. Examples of such improvements include off-site street parking, golf course, lake construction, parks, marinas, water main and sewer systems. The problem can get complicated if some of these improvements have to be capitalized and offset with income produced from the operation of the facilities. If these facilities turn out to be of a low-income producing type which cannot pay for their capitalized cost, the allocation problem can become more complex. The income tax provisions which require equitable allocation of the expenditure on on-site and off-site improvements to compute gain or loss from each lot sold during the period aggravate this problem.

Multi-period projects, which characterize the land development business, also create complicated allocation problems. As the land development progresses, some items of expenditure may become necessary which in fact benefited the lots developed and sold in earlier periods. Should this type of expenditure be estimated and provided as an item of cost before allocation? Or should the extra expenditure be allocated on remaining lots unsold?

(3) Capitalization versus expensing of carrying charges: This problem arises because of the nature of the business and multi-year projects of the developer. Examples of cost items which might be capitalized or expensed are: property taxes on developed and undeveloped property

held as inventory, subsequent clearing of weeds required as a fire prevention measure, interest charges which may be explicit on a mortgage or loans, social security taxes on employees, sales and use taxes on materials used in the development process, insurance premiums related to land and property, and some other incidental expenses. Tax laws and regulations complicate the problem of offering the option either to capitalize or expense some of these without specifically following sound accounting principles, or specify one or the other option as mandatory. To illustrate one of the difficulties involved, the election in respect to unimproved and unproductive real property applies only to property taxes, interest and other carrying charges and may be made annually. For all other property, the election is binding for subsequent years. The rationale behind such stipulation seems ambiguous and without any support from sound accounting theory. Similarly the definition of a project is surrounded by ambiguities. Internal Revenue Service Reg. 1.266-1(c) states that if an expenditure for several types of the same item are incurred with respect to a single project, the election to capitalize must be applicable to all items of that type. However this does not require capitalization of other types of items listed within the same project. Nor does it require capitalization of the same items existing in other projects

(4) Recognition of Revenue: What comprises revenue of the period and from what lots poses another puzzling problem in land development accounting. It consists of four sub-problems:

(i) Installment sales and revenue recognition: This problem involves differentiating between the amount of revenue to be recognized as current revenue of a specific period and the amount to be

carried forward as being applicable to future periods. Because of the complexity of terms under which developers make sales and collection of installments before actual delivery of the lot, the determination of the proper income accounting methods present challenging problems. The problems are becoming more important as larger proportions of sales are made on the installment basis and longer periods are allowed in installment contracts. For example, in one real estate development company, 1962 land receivables represented an unusually high average of 950 days of land sales; for another they represented 425 days.³¹

(ii) Repossessions, foreclosures and forfeiture of deposits:

Gains and losses can frequently arise from defaulted contracts involving repossessions, foreclosures or forfeitures of despoit. These create problems of assigning them to periods and classifying them into ordinary income, extraordinary income and capital gain or loss. In the case of repossession and foreclosure, gain or loss is the difference between original sale price recognized at the time of the sale and the sum of fair value of repossessed or acquired land and cash received since the sale was made. The determination of fair value of land presents another problem. Should fair value be appraised value, market value, realizable value, net realizable value, or some other measure? As with other problems in the industry, income tax laws and regulations can create additional problems of treatment of proceeds into capital gain or ordinary income, and losses into capital loss or bad debt expense.

³¹ Lilian Affinito, "Problems in Accounting for Land Sales of Developer," Price Waterhouse Review, Autumn, 1963, p. 20.

(iii) Proceeds received from dedication of land, sale of timber, gravel, etc., governmental subsidies and grants: How the proceeds from these should be treated presents problems. Should these proceeds be treated as extraordinary revenue or reduction in cost of land or land development? Additional problems are created when land is donated to form an adjacent country club which will not be able to make sufficient income for long periods of time to pay for the reasonable cost of land; or land given to water or sewer or electric companies for rights of way or filter systems for nominal value.

(iv) Income and expenses on developed property in interim period: When the land developer has to operate developed properties for interim periods until these can be sold, the problem arises of accounting for income and expenses from these properties. He might need a separate set of accounts and accounting methods for income measurement and income tax purposes. Also, the main activity of the land developer is to develop the land rather than to hold properties for income. The accounting system then should be able to supply information which will be in terms of income, expenses and other related data, to re-evaluate periodically the sell or hold decision. The generation of appropriate measures for required data can cause lots of problems in accounting for these types of items.

CHAPTER III

LAND DEVELOPMENT ACCOUNTING PRACTICES SURVEY

Sample Distribution and Response

As indicated in Chapter I, the sample of selected companies was divided into two groups. Group-I is comprised of 35 companies located in the state of Michigan. Group-II is comprised of 30 companies from various states selected from Dun & Bradstreet Million Dollars Directory, 1970, from those listed under code 6552 -- Real Estate: subdividers and developers except cemeteries.

From Group-I, 14 companies replied and returned completed questionnaires. The response from this group was 40% and was lower than anticipated. Additional investigation by way of reminders, phone calls and personal visits to some of the non-responding companies revealed an interesting practice in the industry. Many companies which were classified as medium size by the regional home builders associations actually were medium size and had a considerable sales volume and amount invested in their development projects. But they did not have any accounting department or accounting section in their organizational set up. They employed a couple of bookkeepers or secretaries who maintained routine records of cash and other related transactions. Periodically, the records were summarized and the financial statements for income tax and other purposes were prepared by a public accounting firm. The majority of those companies were privately owned corporations, and managing directors or the presidents

of the companies did considerable quasi-accounting work on their own for planning and investment decisions. Rules-of-thumb learned by extended association with the land development business were used to handle various accounting problems. Generally the tax considerations and advice from lending institutions guided their actions for treating any peculiar problem which arose in accounting for a transaction.

From the 30 Group-II companies, 20 replies were received. Out of the twenty replies, 16 returned the completed questionnaires and four returned uncompleted questionnaires. The 16 completed questionnaires represent about 53% response.

Two companies which returned the uncompleted questionnaires declined to participate in the study; the officers of a third company indicated that they were mainly engaged in the development of agricultural land viz. citrus groves, cattle, timber, etc. and considered the questionnaire inappropriate for their type of operations; and the respondent for the fourth company replied that their land development activity had been phased out during the last five years and that he did not think it appropriate to participate in the study.

Nine companies in Group-II who returned the completed questionnaire are located in the states of Florida, Texas, and California, where the greater part of the land development activity in the industry takes place.

Company Visitations

As indicated in Chapter I, the researcher visited 10 companies that had sent completed questionnaires and are located in the state of Michigan. Six of the companies are large and four are of medium

size. Five large companies are engaged in extensive land development projects and have been in the land development business for over twentyfive years.

Since the basis of interviews was to pursue various questions in the questionnaire in greater depth, the information gathered during company visitations and interviews with different executives is summarized together with information gathered in questionnaires. By treating all information related to a question together, survey results portray clearly actual accounting techniques used by developers.

Size Determination

In almost every industry, accounting practices vary significantly according to the size of the companies. But the categorization of companies into different sizes has posed many problems to empirical researchers who have tried their hand in defining which companies should be considered small, medium or large. Since some criteria must be used in the process of categorization, sales volume in dollars or physical units, total assets of a company, number of employees, total capacity of a company in relation to the industry capacity, net income or percent of net income over some suitable base such as total assets or total equity, number of branches or plants, etc. are used as bases for categorization. In most cases the sales volume is the main criterion, and others are used as supplementary criteria along with the sales volume.

In the land development industry, preliminary investigations before selection of the sample companies and interviews with a few executives of the development companies and the regional home builders

associations revealed that the sales volume criterion to categorize developers might prove seriously inadequate because of two reasons:

1. Some companies may have relatively low sales volume due to their recent entry into the industry, especially subsidiaries of some large companies in related industries. Many such companies in the industry have large projects involving subdivisions of thousands of acres on their drawing boards or in the initial stages of development, with relatively low sales volume in the current or last year.
2. Reluctance of many sample companies to divulge the sale volume or the total assets employed by the company, especially those in Group-I.

As a compromise, the following question was asked in part I of the questionnaire:

"How do you classify your company in the industry?

Small ----- Medium ----- Large -----"

Since the respondents must have used some criteria to categorize themselves, a companion question was asked to identify the factors which should be considered in classifying a company a small, medium or large. Six factors which were the most relevant for the industry were suggested in the questionnaire and the companies were requested to check those factors they considered in classifying a company in the industry. These were:

1. Amount invested in current development
2. Sales in dollars in a year
3. Number of lots developed in a year
4. Number of subdivisions developed in a year
5. Number of acres developed in a year
6. Number of employees

The replies from the companies are summarized in Tables 3.1 and 3.2.

Table 3.1--Distribution of companies into large, medium and small according to their own categorization.

Category	Group-I		Group-II		Total	
	Number	%	Number	%	Number	%
Large	6	43	6	38	12	40
Medium	8	57	10	62	18	60
Small	0	0	0	0	0	0
Total	14	100	16	100	30	100

Table 3.2--Factors considered by the companies to categorize into large, medium and small¹

Factors	Group I		Group II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
Amount invested in current development projects	5	6	4	7	9	13	22	73
Sales in dollars in a year	6	8	6	10	12	18	30	100
Number of lots developed in a year	4	5	2	2	6	7	13	43
Number of subdivisions developed in a year	0	2	0	2	0	4	4	13
Number of acres developed in a year	3	2	1	3	4	5	9	30
Number of employees	1	2	0	4	1	6	7	21

¹Since no company categorized itself small, the tables will only show large (L) and medium (M) sizes. Many companies checked two or more factors therefore total percent is over 100%.

Twelve compnaies (40%) categorized themselves as large and 18 (60%) as medium; no company considered itself as small. In Group-I there are 6 large and 8 medium size companies; in Group-II there are 6 large and 10 medium size companies.

One company considered sales volume in a year as the only factor which should be considered in categorization. On the other extreme, one company considered all the six factors as relevant factors.

Interestingly, all 30 companies considered sales in dollars in a year as one of the factors. Twentytwo companies (73%) considered amount invested in current development projects as the other factor. The number of subdivisions developed in a year scored the minimum number (4) since expansion in the industry has led to the development of large subdivisions and the absolute number of subdivisions developed in a year has lost its relevance to a great degree in the determination of the size of a company. Probably due to extensive use of sub-contracting in the industry the number of employees was considered by only 7 companies -- one large in group-I and 6 medium size (2 in group-I and 4 in group-II).

This question was further explored during company visitations. The majority of the executives agreed that accounting practices will vary -- sometimes considerably -- between different sizes of companies and also believed that the sales volume and the amount invested in development projects are very important factors in the size determination. However, during one of the initial visits, one top executive of a large company suggested that employment of a qualified²

²It became extremely difficult to lay down objective criteria for considering a person who is a qualified accountant. Instead, a full time accountant with some college degree or equivalent is used as a criterion to check this factor in subsequent investigations.

accountant can be considered as one of the factors. He argued that since small companies cannot afford to employ an accountant on a full time basis, it is possible to categorize companies roughly on that basis. Revisits and supplementary inquiries revealed that all thirty companies did employ an accountant to head the accounting department or the accounting function in the company on a full time basis. Consequently, employment of a full time accountant does not appear to be an objective criterion for categorizing a company as medium or large in size.

In the absence of any predetermined objective criteria, it was decided to base analysis and evaluation of accounting practices on self-categorization. In other words, the categorization -- large, medium or small -- as indicated by the company is accepted for analysis and evaluation. Also, other variables such as types of subdivision developed by a company, number of subsidiaries owned and location of a company gathered in part-I of the questionnaire are used when necessary to find any tendency or relation between a particular accounting technique used by a company and the variables.

During the company visitations, the limitations of self-categorization were further investigated. The majority of executives visited could not suggest any other way to handle the problem, and thought it to be the best possible way of classifying a company. However, two executives, one of a large company and the other of a medium sized company, were somewhat skeptical about self-categorization. They argued that a relatively medium size company operating in a concentrated local market and not surrounded by many other companies which are bigger than this company might consider itself a large

company; or a relatively large sized company operating in a large metropolitan area and surrounded by giants in the industry might consider itself medium sized. Since the self-categorization alternative is the only practical way in the present situation, it is accepted as the basis for analyzing practices along with the other variables.

Scope of Operations and Use of Subsidiary Corporations

Questions 1, 2, and 3 in part I of the questionnaire sought responses regarding three other important variables which can significantly affect accounting practices employed by a developer. The variables are:

1. Development of subdivisions for various uses.
2. Use of subsidiary corporations for some functions which can be considered as a part of the complete business; or other closely related functions.
3. Area of operations of the company, viz. local (city and county) state, national (other states) and international (outside the U.S.).

1. Development of subdivisions: A question was asked to indicate whether the responding company is involved in the development of subdivisions for various uses. To facilitate the response, the six most common uses in which many developers are involved were suggested, and the seventh was open-ended for any closely related use in which a company might be involved. The responses are summarized in Table 3.3.

Table 3.3--Development of subdivisions for various uses.

Development of land for:	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
Residential Homes	5	7	3	5	8	12	20	67
Residential & Recreational	3	4	3	1	6	5	11	37
Residential & Commercial	4	3	2	2	6	5	11	37
Commercial	2	4	1	2	3	6	9	30
Industrial	2	3	0	3	2	6	8	27
Complete community	2	2	5	6	7	8	15	50
Other uses	1	1	2	1	3	2	5	17

Twentytwo companies are engaged in the development of land for more than one use. Only two companies, one medium size, each in group I and group II, are engaged in the development of land for residential homes only. The remaining six -- 5 in group I, one large and four medium, and one in group II (medium size) -- are developing land for complete communities only. Overall, 15 companies (or 50%) are engaged in the development of land for complete communities which include schools, parks, shopping centers, etc. This indicates increased interest in the development of complete communities, generally away from metropolitan centers. The other uses include: apartment and multi-density dwellings; condominiums; and mobile parks.

2. Use of subsidiary corporations: In this question the six most common functions for which subsidiary corporations or multiple companies are used by developers were provided for checking. The seventh alternative was open ended since many developers own subsidiaries for

other closely related functions. Table 3.4 summarizes the responses received:

Table 3.4--Use of subsidiary corporations

Functions	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
Purchase and hold land until it is ready for development	5	5	1	4	6	9	15	50
Land improvement and sub-division	5	4	2	5	7	9	16	53
Real estate brokerage	3	1	0	4	3	5	8	27
Management of property on fee	3	4	0	2	3	6	9	30
Mortgage financing	3	0	1	2	4	2	6	20
Marketing of developed lots	1	0	0	2	1	2	3	10
Others	2	1	5	4	7	5	12	40

Four companies do not own any subsidiary or multiple corporations to perform any of the related functions independently. Two are in group I both medium size, and 2 in group II -- one large and one medium size. Fifty percent of the companies own subsidiaries which purchase and hold land until it is ready for development and 53% own subsidiaries for land improvement and subdivision. Forty percent of the companies own subsidiaries for closely related operations viz. construction of residential units, utility operations, hotels or motel, golf courses or other recreational clubs, mobile parks and cable TV systems. In group II there is a tendency to own subsidiaries for utility operations (5 large companies), since the companies

develop land away from towns or cities and create complete communities requiring such utilities.

3. Area of operations: City, county, state, other states and outside the United States are logical areas in which a company may develop any subdivision. One question sought an answer from a responding company to indicate whether the company had developed or intended to develop in the near future any subdivision in the above areas. The responses are summarized in Table 3.5.

Table 3.5--Area of operations

Area of operation	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
Local -- city	5	5	4	5	9	10	19	63
	6	8	5	8	11	16	27	90
State	6	7	6	8	12	15	27	90
In other states in the U.S.	4	1	3	3	7	4	11	36
In other countries	3	0	0	2	3	2	5	16

Since some companies operated in two or more areas, the total percent is more than 100%.

The analysis of the replies and subsequent exploration during company visitations showed that this question was a bit ambiguous. For example, the state includes the county and the county includes the city. The intention of the question was to ascertain whether a company had developed or intended to develop in the near future any subdivision in the city, in the county but outside the city, in the state but outside the county where the company was located. There is a

possibility that some companies may have checked all three items viz. city, county and state, although it developed land in a city alone. All companies in group I were contacted by either a visit or by phone to correct the ambiguity in answering the question. In group II it was not feasible to contact all companies, although there seems to be no apparent error in checking the state column. There is some little possibility of ambiguity in checking of city and county columns.

Subject to the above limitation, it can be seen that majority of the responding companies develop in the state and the county where they are located. Thirtysix percent of the companies develop subdivisions in more than one state and 16% in other countries outside the country, especially in Canada, Bahamas and Europe, where Americans have been buying sites for vacation homes.

Objectives of the Accounting Function in the Land Development Industry

In part II of the questionnaire two questions were structured to identify and rank the expected objectives of the accounting function of developers. The main purposes behind the questions were the following:

1. To ascertain how many reporting companies do actually define the accounting objectives.
2. To ascertain from those companies which do not have a defined set of objectives of the accounting function in their organization, the assignment of order of importance among a set of the most common objectives described in the accounting literature.

3. To confirm or refute, as indicated by library research, that most development companies consider the accounting function to be that of providing a measure of income for the period for tax purposes only.
4. To provide an additional critical variable -- a set of the accounting objectives -- along with the other four provided in answers to the questions in part I of the questionnaire, for further analysis of practices and procedures employed by developers. Examination of accounting methods used by various companies along with their identified accounting objectives and priorities will provide an opportunity to ascertain how far the companies employ the procedures to accomplish their declared objectives.
5. To lay the foundation for proposed system changes, since the need of developers can significantly be inferred from the consensus set of objectives and the priorities assigned to each of the objectives.

Sixtyeight percent of the companies answered 'yes' to the first question, i.e. in their companies the accounting objectives are defined. Thirtythree percent are large companies (10 companies) and 10 are medium size. Out of the 10 large companies, four are in group I and 6 are in group II. This indicates that the companies in group II (located outside the state of Michigan) do not necessarily have a tendency to define explicitly the accounting objectives. On the other hand more large companies (83%) have their accounting objectives defined when compared to the medium size companies (55%).

To examine whether there was any correlation between the definition of the objectives in formal terms and the critical variables such as the scope of operations, the owning of subsidiaries to perform various related operations or the area of operations, the answers of the companies which replied 'yes' were further analyzed. Tables 3.6 and 3.7 summarize the result of the analysis.

The analysis of results and aggregate summary as presented in the two tables indicate that no conclusion can be drawn about the correlation between the definition of the accounting objectives and the scope of operations, or the owning of the subsidiaries, or the type of subdivisions developed by the company. On one extreme, a large as well as a medium size company, owning no subsidiary company and involved in residential homes subdivisions in the localized area have their accounting objectives defined; on the other extreme there are multi-subsidiary companies who have developed land for various purposes or developed complete communities in many states as well as in other countries that do not have their accounting objectives defined.

Further investigations and inquiries at the time of company visitations showed that the definition of accounting objectives depended very much upon the personality of the executive in charge of the accounting function in the company. He influenced to a great extent the formalization of the accounting objectives. Two controllers, one of a large company and one of a medium size company, pointed out that they defined the accounting objectives soon after their joining the companies. In four companies, the accounting objectives were only known to the controllers and were briefly described at the beginning of the chart of their accounts. In one company the objectives were

Table 3.6--Analysis of the characteristics of companies which have the defined set of objectives of the accounting function.

Size & company	Charac- teristics													
	Local-city & County	State	Other states	Outside the U.S.	One subsidiary	Two subsidiaries	Three subsidiaries	Four subsidiaries	More than four sub- sidiaries	Residential homes	Residential & re- creational	Residential & Comm.	Industrial	Complete community Other
<u>Large-Group I</u> (4 companies)	x	x	x	x			x			x	x	x		x
	x	x	x					x		x				
	x	x						x		x	x	x	x	
	x	x		x	x					x	x	x		
<u>Large-Group II</u> (6 companies)			x	x	x					x	x		x	
	x	x					x			x	x		x	x
	x	x	x						x				x	x
	x	x				x				x	x	x		x
	x	x								x				
	x	x					x						x	
<u>Medium-Group I</u> (4 companies)	x	x					x			x	x	x		x
	x	x						x		x	x	x	x	
	x	x					x			x	x	x	x	
	x	x								x	x	x	x	
<u>Medium-Group II</u> (6 companies)	x	x							x	x	x	x		
	x	x	x	x				x						x
		x												x
	x	x						x				x		
			x	x		x						x		
	x	x			x					x		x	x	x

x indicates presence of the characteristic. One row for each company.

Table 3.7--Aggregate summary of variables indicated by the companies who have defined set of objectives of the accounting function.

Factors	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
<u>Scope of operations</u>								
Residential Homes	3	4	4	2	7	6	13	46
Residential and Recreational	2	4	3	1	5	5	10	33
Recreational and Commercial	3	4	1	3	4	7	11	36
Industrial	1	2	0	2	1	4	5	16
Complete communities	1	1	5	4	6	5	11	36
<u>Owning of subsidiaries</u>								
Purchase & hold land	3	4	2	3	5	7	12	40
Land improvement	3	3	3	4	6	7	13	43
Real estate brokerage	2	1	1	3	3	4	7	23
Management of property	2	3	0	2	2	5	7	23
Mortgage financing	3	0	2	1	5	1	6	20
Marketing of lots	1	0	3	2	4	2	6	20
Others	1	0	3	2	4	2	6	20
<u>Area of operations</u>								
Local - city & county	4	4	5	4	9	8	17	56
State	4	4	5	5	9	9	18	60
National	3	0	2	2	5	2	7	23
International	2	0	1	2	3	2	5	16

defined in their detailed budgets prepared for submission to the board of directors. In another company the objectives appeared in the job description of the accountant who was in charge of the accounting function.

The companies which answered 'yes' to the question were requested to give a brief description and indicate the order of importance assigned to each objective, if any. Seventeen companies described the objectives and three chose to rank the given set of the most common accounting objectives.

The descriptions and rankings as given by the companies are as follows:

Group I: Large companies

"Accounting and management information divisions are separate; accounting mainly concerned with collection of figures to prepare profit and loss account, and balance sheet. It also supplied data to the data bank in MID (Management information division). MID does all forecasting, analysis, etc. Ranking of objectives: (1) Preparation of financial statements; (2) Budgets and estimates for planning and control; (3) Income tax return."

"(1) cost reductions and control; (2) preparation of income statement and balance sheet; (3) cash flow analysis; (4) evaluation of project profitability, budgeting and estimating."

"(1) Computation of cost of each lot to determine profit and loss; (2) preparation of financial statements; (3) preparation of income tax returns; (4) evaluation of subcontractor's performance; (5) cash flow analysis."

"Accurate costing of lots sold and computation of profits from various departments; historical records for future planning and control."

Group II: Large companies

"Cash flow analysis and operating budgets."

"(1) Management control (Budgets, cost reports, etc.); (2) financial statements."

"To provide management with necessary information for decision making."

"(1) Cash flow analysis; (2) Budgets and estimates; (3) financial statements and related records preparation; (4) feasibility studies; (5) tax returns."

Group I: Medium

"(1) Chart of accounts; (2) complete posting to ledger and trial balance; (3) quarterly cash flow statements and forecast."

"(1) To properly reflect the cost of development or operation to aid management in making future decisions; (2) to take advantage of allowable tax write-off."

"(1) Managerial objectives: cash flow analysis, budgeting and profitability analysis; (2) Financial and historical: profit and loss statement and balance sheet from related historical records; (3) tax accounting and deferrals. Note: We use responsibility accounting along with profit centers."

Group II: Medium

"(1) Cash flow budgeting -- cash flow planning; (2) tax planning to minimize income taxes; (3) accounting to maximize profit by facilitating analysis and planning; (4) to minimize overhead (dont' want tail wagging dog)."

"(1) Maintenance of accounting records for historical purposes; (2) payment of all financial obligations and receipt bank deposit of funds; (3) preparation of financial statements; (4) cash flow analysis; (5) budget and forecast preparation including balance sheet and income statement preparation; (6) evaluation of project profitability; (7) accountability for land inventories and all other assets; (8) preparation of income tax returns; (9) cost reduction and control."

"Development of revenue estimates, product line profitability, cash flow analysis, cost control, project profitability, income statements, budgets."

"To provide management information on: (1) cash flow; (2) current appraisal values on balance sheet; (3) profit and loss and related operations."

"Accurate preparation of results of operations and balance sheet of its developments."

The examination of the accounting objectives indicates that these are interestingly described and at times border on idealism. Some show the functions performed in the accounting department rather than the accounting objectives. The attitudes and viewpoints of the accounting executives are reflected in the descriptions. Also, the importance assigned to various objectives reflects the perception of the accountant as to how to fulfill his job to the satisfaction of the management. The managerial objectives of accounting, viz. cash flow analysis, budgeting, estimating, profitability analysis, etc.

are given higher priority than non-managerial objectives. Except for one company, the firms ignore the use of the accounting information for employee appraisal. There is frequent use of the word management information, indicating the popularity of the word among accountants employed in the industry. One company had a management information division (MID) consisting of personnel from all of the related functions. The MID was responsible for forecasting, feasibility analysis and gathering of information for many operations of the company.

The companies that answered that they did not have a set of defined accounting objectives were asked to indicate the order of importance among the set given in the questionnaire of the most common accounting objectives. Except for two large companies in group I, all other eight companies are medium size; three other large companies and three medium size companies also ranked the objectives. In other words, sixteen companies, or 53%, ranked from the given set of objectives.

Table 3.8 summarizes the replies from sixteen companies in both groups.

It can be seen that the objectives of evaluation of performance of employees is ranked as 7th by 12 companies (75%). The preparation of financial statements is ranked first by 7 companies (55%). Budgets and estimates is ranked first by 4 companies, second by five companies, and third by 3 companies. Surprisingly, the preparation of income tax return is ranked only second by two companies, fourth by 2 companies, fifth by four companies, sixth by 5 companies and seventh by 3 companies. The cash flow analysis scored favorably, probably due to the cash and credit crunch chronically experienced

Table 3.8--Ranking of the accounting objectives among the given set of objectives
(Groups I & II)

Objectives	Ranking	Large Size (5 companies)							Medium Size (11 companies)							Total (16 companies)						
		1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1. Preparation of income tax return		0	0	0	1	1	2	1	0	2	0	1	3	3	2	0	2	0	2	4	5	3
2. Preparation of income statement and balance sheet		1	1	0	0	2	1	0	6	2	0	2	0	0	1	7	3	0	2	2	1	1
3. Cash flow analysis		2	1	2	0	0	0	0	2	4	2	1	2	0	0	4	5	4	1	2	0	0
4. Budgets & estimates		1	3	0	1	0	0	0	3	2	3	0	2	1	0	4	5	3	1	2	1	0
5. Cost reduction & control		0	0	1	2	0	2	0	0	1	4	2	1	2	1	0	1	5	4	0	4	1
6. Evaluation of project profitability		1	0	2	1	1	0	0	0	2	4	1	1	2	1	1	2	6	2	1	2	1
7. Evaluation of performance of employees		0	0	0	0	1	0	4	0	0	0	1	1	1	8	0	0	0	1	2	1	12

by many developers and especially felt in the last couple of years.

To ascertain the concensus of priorities, the seven objectives were further grouped into 3 broad categories, viz. managerial, by grouping cash flow analysis, budgets and estimates, cost reduction and control, project profitability, and evaluation of performance of employees under the managerial objective; financial statement preparation; and preparation of income tax returns. It turned out that 9 companies (56%) ranked the managerial objectives first and almost all other companies ranked them second or third. One significant conclusion can be drawn from the analysis of the results. Budgets and estimates and cash flow analysis are considered very important objectives of the accounting function by developers. The next importance is generally assigned to the preparation of the financial statements. This conclusion is also strongly confirmed from field interviews. The accounting executives as well as other executives agreed that the two objectives should be assigned priority in design of the accounting system. The relegation of the preparation of income tax returns into the background was probably due to increased use of deferrals and the practice of compiling the income tax return by the independent accountants on a fee basis.

EVALUATION OF ACCOUNTING PRACTICES

Part III of the questionnaire consisted of questions regarding actual accounting practices and procedures employed by land development companies.

Classification and Accumulation of Costs

The first question asked: "How do you classify and accumulate cost for each subdivision or a development project?"

Based on library research and investigations into application of the methods of classification and accumulation of costs in other manufacturing industries with similar or related problems, four logical alternatives were structured. The alternatives can be considered the most common patterns which can be applied by developers. To ascertain any other pattern of classification and accumulation of cost, the fifth alternative was open ended so that the company using a different pattern could specify the details.

The replies are summarized in Table 3.9. No company used any other pattern of classification and accumulation of costs.

Examination of the summary of responses shows that the third and fourth method are followed by a majority of large companies. In total, about 67% of the companies used the two (third and fourth) methods. The first method is followed by only two companies, one in each of the groups. As a single method, the fourth method is followed by 37% of the companies.

Since the method of classification and accumulation of costs extends into other accounting procedures to accomplish the accounting objectives, the examination of the method of classification and accumulation of costs vis-a-vis other factors showed the following noticeable tendencies:

Table 3.9 --Classification and accumulation of costs

Method of Classification	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
1. All items for land and land development accumulated under <u>ONE</u> heading and then allocated to individual lots.	0	1	0	1	0	2	2	7
2. Land cost and land development cost separately classified under two separate headings (viz. land cost & land development cost) but allocated in total to individual lots.	1	2	1	4	2	6	8	26
3. Classified and accumulated under separate headings (viz. land, roads, sidewalks, etc.) but allocated in total to individual lots.	3	3	2	3	5	6	11	37
4. Classified and accumulated under separate headings and each item or group of items separately allocated to individual lots.	2	2	3	2	5	4	9	30
Total	6	8	6	10	12	18	30	100

Both the companies which are using the first method of classification and accumulation of costs assign the first priority to the preparation of the financial statements and lower priority to the managerial objectives. Both have concentrated localized operations and own less than two subsidiaries for related operations. All companies using the

third and the fourth methods strongly emphasize the managerial objectives. About one-third are involved in development of complete communities and have their operations in more than one state. The companies following the second method of classification and accumulation of costs varied in size, the area of operations, as well as in the identification of the accounting objectives to derive any significant conclusion.

Items of expenditure included in Cost of Land

For a developer, the cost of land is analogous to the cost of materials to a manufacturing company. However, the developer has an opportunity to include many other material items as a part of the cost of land. To ascertain the range of items included, an open-ended question -- what items of expenditure are included in 'Cost of Land' -- sought the data. The replies are summarized under the five headings in Table 3.10.

Table 3.10--Items of expenditure included in 'Cost of Land'

Items of expenditure	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
Raw land	6	8	6	10	12	18	30	100
Interest expense	2	2	4	5	6	7	13	43
Real estate taxes	3	1	4	5	7	6	13	43
Commissions	3	1	4	2	7	3	10	30
Legal expense	2	0	1	0	3	0	3	10
Incidental expenses	1	1	1	0	2	1	3	10

The above summary indicates that interest expense and real estate taxes paid prior to the development of a piece of land are inventoried as the cost of land by nearly half of the responding companies. Commissions are included as an item of expenditure by one-third of the companies. Legal expenses such as finders fees, cost related to option agreements, and incidental expenses such as preliminary surveys, insurance expense, other expenses connected with rezoning, etc. are included by relatively fewer companies.

One noticeable difference between the companies in group I and group II is in respect to inventorying of interest expense and real estate taxes as part of the cost of land. Only 4 companies (25%) include interest expense in the cost of land in the group I vs. 9 companies (56%) in group II, and only 4 companies (29%) include real estate taxes in group I vs. 9 companies (56%) in group II.

One large company in group II even uses guidelines for inclusion of various items. The reply reads:

"Purchase price and capitalized interest, real estate taxes and other direct costs of ownership before development or sales, so long as developed cost does not exceed 89% of net realizable value."

One medium size company in group II includes "interest and taxes both actual and accrued during (the) period prior to development."

Capitalization vs. expensing of carrying charges

To determine the accounting for carrying charges and reasons behind their treatment, the following question was asked:

"Under the Federal income tax law, there is an option to capitalize or expense the following items. Please indicate whether you capitalize or expense the following items. If you have done both for different projects, please indicate

the most common practice."

The tiems were:

- "(i) Property taxes -- undeveloped land
- (ii) Second clearing -- undeveloped land
- (iii) Property taxes -- developed lots
- (iv) Sales and use taxes on materials
- (v) Other incidental expenses."

Also, the space was provided for brief reasons. Table 3.11 presents the summary of the answers.

Table 3.11--Treatment of carrying charges

Item	Group I		Group II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
<u>Property taxes--Undeveloped Land</u>								
Capitalize	3	1	4	5	7	6	13	43
Expense	3	7	2	5	5	12	17	57
<u>Second Clearing--Undeveloped Land</u>								
Capitalize	3	1	3	4	6	5	11	37
Expense	3	7	3	6	6	13	19	63
<u>Interest paid on Capital invested in a project</u>								
Capitalize	2	2	4	5	6	7	13	43
Expense	4	6	2	5	6	11	17	57
<u>Sales and use taxes on materials</u>								
Capitalize	2	1	1	1	3	2	5	17
Expense	4	7	5	9	9	16	25	83
<u>Other incidental expenses</u>								
Capitalize	1	1	1	1	2	2	4	13
Expense	5	7	5	9	10	16	26	87

About 43% of the companies capitalize property taxes on undeveloped land. The percentage of the companies capitalizing this item is relatively larger than that of other items. Surprisingly, there is no relation between the identified accounting objectives such as finding an accurate cost of improved lot necessitating capitalization of this item and the treatment of property taxes in the accounts of the company.

About 37% of the companies capitalized second clearing of undeveloped land (viz. to prevent fire hazards or meet the local city or county regulations). The percentage of companies capitalizing this item is slightly more in group II than in group I.

The treatment of interest paid on the capital invested in a project is nearly the same as for the property taxes.

Only a few companies that capitalized the above items provided any reasons. Many companies left the space provided for the reasons blank. Those companies that gave some reasons gave them in vague terms, such as company policy, easy to compute, or cost control.

The companies expensing the above items mentioned 'tax advantage' as the most common reason. Some other reasons described are:

"Doesn't add value to land"

"Cost control, tax support"

"Logical and simple"

"To provide correct cash flow analysis"

A further exploration of this question during the company visitation revealed an interesting practice. The companies which were privately owned or closed-corporations expensed the carrying

charges. A company which went public by merger in the recent past indicated that they had changed from expensing to capitalization after merger on directive from the parent company. Before the merger they expensed because of the tax advantage.

Inclusion of Imputed Interest

Except for one large company in group I and one medium size company in group II, all the companies answered that they did not include imputed interest charge on funds invested in land for computing the cost of improved lot. Both companies attributed the practice of including the imputed interest to the company policy to reckon all items of cost and evaluate profits from different profit centers since both companies used profit centers for related activities such as property management, construction of new homes, land development, etc.

The companies which do not include imputed interest mentioned that it was not allowed by auditors or the AICPA, or that it was not practical.

Nine companies, seven of them large, indicated that although they did not include the imputed interest in normal accounting, or for income measurement and presentation in the financial statements, they did include imputed interest at market rate in their feasibility studies, the setting of selling prices of lots, at the time of selling undeveloped land, or in some cost control decisions. One medium size company in group II indicated that they used discounted cash flows for lot costing and selling prices in profitability evaluation at various points in time, and pointed out that imputed interest was taken into account during that exercise in published statements.

One company in group I which said that it included the imputed interest was visited. It turned out that in fact they included the imputed interest in their internal reports only, and did not include it in the published financial statements. The vice-president (finance) commented that they used imputed interest as a guideline to control the profit centers and divisions within the organization and would not violate the AICPA rules which they interpret as prohibiting the inclusion of imputed interest.

Adjustments of Cost of Developed Lots

Two related questions were asked as follows:

1. If a subdivision or a project is developed in parts over more than one accounting period, some items of cost in subsequent periods might be legitimately applicable to lots developed in an earlier period. Do you estimate those costs and include them in the total cost to individual lots? Please describe reasons briefly.
2. If the answer to (1) is 'yes', do you allocate and adjust in subsequent periods the cost of:

All sold and unsold lots

Only unsold lots

Any other (please specify)

Table 3.12 summarizes the answers to the above two questions.

Table 3.12--Adjustment of cost incurred in subsequent periods and allocation to improved lots

	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
1. Answering -- Yes	4	5	6	9	10	14	24	80
No	2	3	0	1	2	4	6	20
2. <u>Adjustments--Cost of Sales</u>								
All sold and unsold lots	3	4	4	3	7	7	14	47
Only on unsold lots	1	1	2	6	3	7	10	33

Eighty percent of the companies answered that they estimated the cost for subsequent adjustment which might be legitimately applicable to the lots developed in earlier periods, and opened reserve or contra accounts. Fourteen companies (out of 24) answered that they adjusted only the cost of unsold lots. In other words, they implied that if the reserve proved inadequate in later years when the cost was to be incurred, or when estimates were revised and needed an increase, the extra amount was spread over only the unsold lots at that point in time.

Only one company in group I versus 5 companies in group II answered 'no' to the first question, showing noticeable difference in practice between the two groups.

As far as other variables, such as the size of the company, the owning of subsidiaries and the fulfillment of the accounting objectives are concerned there seems to be no relationship between the practice of providing contra accounts and subsequent adjustments. However, as

indicated during the company visitations, the practice depended very much upon the attitude of the accounting executive. If he was a strong believer in the matching process, he would take pains to open many contra or reserve accounts and would make periodic adjustments and revisions in the amounts of those accounts, the cost of sales and the cost of unsold lots. Also, the importance of the matching process and correct accrual accounting is apparent from the following sample of reasons described to support the practice:

"To match revenue with expenses"

"To arrive at true accrual"

"The basic principle of accounting is to match costs with revenue"

"Necessary for proper accountability"

"To compute correct cost of lots sold"

"To reflect actual cost; we defer or accrue in earlier periods and adjust in the next period. These accruals are based on engineering estimates."

"We try to anticipate total development cost including a small contingency reserve for unforeseen costs and reserve the unexpended amount. We properly match cost and income or to say in other words, we establish sale price needed to make our desired margin or profit."

"So as to insure that cost to sales value relationship maintains to a degree of comparability"

"The difference in original cost incurred is applied to balance of lots remaining in the inventory"

"Strict accrual accounting; generally lots are sold before the development begins"

The reasons for companies not doing adjustments or opening reserve accounts are:

"Because it will make accounts messy. We don't do much accruing. Cost of sales and inventory values are based on estimates since most of the lots are sold before the subdivision is fully developed"

"Development reserves are examined routinely and amounts pertaining to lots sold are charged to expense regardless of accounting year and balance to remainder of lots in inventory for that particular subdivision."

Recognition of Revenue

Two questions, one for revenue from sale of lots on non-installment sales and the other for those sold on the installment basis were directed toward existing practices for revenue recognition.

1. Non-installment sales: Since a developed lot is a high unit cost product, processed over a long period and many times sold prior to completion of all the required improvements, the question was asked:

"When is the revenue from lots sold under non-installment agreement sales recognized?

When the sale contract is signed?

When developed lot is delivered to the purchaser or his agent?

When title to lot is transferred?

Any other (please specify) "

The replies are summarized in Table 3.13.

Table 3.13--Recognition of revenue from non-installment sales

When recognized	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
When sale contract is signed	2	2	3	6	5	8	13	43
When developed lot is delivered	0	1	0	0	0	1	1	3
When title to lot is transferred	3	2	2	4	5	6	11	37
Other--when full payment received	1	3	1	0	2	3	5	17
Total	6	8	6	10	12	18	30	100

About 43% of the companies recognize the revenue from non-installment sales at the time when the sale contract is signed. Approximately 37% of the companies wait until the title to the lot is transferred to either the buyer of the lot or to the builder. The full payment criterion is used by 17% companies and only 3% of the companies wait until the delivery of the lot.

Nine companies also mentioned, either by way of a note or checking 'any other' column, that they used additional criterion of 'deposit received' along with the signing of the sale contract or the transfer of title criterion. One medium size company indicated that all three events, viz. signing of the sale contract, the transfer of the title and the receipt of the payment took place simultaneously. In the tabulation, the company is aggregated under the sale contract criterion since it is the first event among the three simultaneous events.

Further investigations showed that the popularity of the two criteria viz. when the sale contract is signed and when the title to the lot is transferred, was attributable to the industry practice of transferring the developed lots to a builder on a non-installment land contract (with some deposit in most of the cases) who subsequently build the structures and sell or lease to the ultimate users for cash and retire his own debt with the developer. The building construction subsidiaries of developers who operate independently but are part of the same organization also adopt the above practice. However, some companies have the construction division under one organizational set-up and develop the lot and build the structures on them. They treat the developed lot, although separately priced and shown in the contract

of sale, and the structure as one package and recognize the revenue when payment is received for the whole package, mostly from the mortgage financing institutions.

2. Installment sales: A three part question was asked to determine:

- (i) timing of revenue recognition from lots sold on the installment basis;
- (ii) whether a provision for cancellation of contracts and collection charges is made by the companies; and what bases are used for computation of each provision; and
- (iii) any guidelines used for recognition and timing of revenue.

(i) Timing of revenue:

Table 3.14 represents the tabulation of the responses from the companies to the following question:

"When is the revenue from lots sold on the installment basis recognized?

- a. When sale contract is signed?
- b. When down payment is received?
- c. When title to the lot is transferred to the purchaser?
- d. When the developed lot is delivered to the purchaser or his agent?
- e. On the installment basis?"

Table 3.14--Recognition of revenue from lots sold on the installment basis

When recognized	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
a. When sale contract is signed	0	0	0	0	0	0	0	0
b. When down payment is received	0	0	0	0	0	0	0	0
a. & b. When sale contract is signed and down payment is received	3	2	4	5	7	7	14	47
c. When title to lot is transferred	0	0	2	1	2	1	3	10
d. When developed lot is delivered	0	0	0	0	0	0	0	0
e. On installment basis	0	4	0	1	0	5	5	16
No installment sales	3	2	0	3	3	5	8	27
Total	6	8	6	10	12	18	30	100

Seventythree percent of the companies reported that they sold lots on installment basis and 27% of the companies did not sell lots on installment basis. About 47% of the companies recognize sales revenue when the sale contract is signed and the down payment is received. Only 16% of the companies, all medium size, recognize the revenue on the installment basis, i.e., spread collection over the life of the sale contract. No company waited until the delivery of the lot to the purchaser or his agent. One of the two large companies which recongize the revenue when the lot is transferred also checked 'when down payment is received'.

Further investigations revealed that almost all the companies which reported recognizing revenue using (a), (b), (c), or (d) as bases used the installment basis for tax reporting and deferred incomes taxes payable on revenue recognized at the time of sale in their books. Also, it is of interest to note that the five companies reporting on the installment basis are closely held corporations.

Further analysis using the defined accounting objectives or identified priorities from the set of the accounting objectives, or other critical variables such as the size, the area of operations, etc. did not show any correlation between method of recognizing revenue and the above variables. However, the increased use of recognition of revenue when the contract is signed and the down payment is received confirmed that the 'absolute-earnings-measure' is weighted heavily in the land development industry and point of sale is viewed as point of realization. During an interview with a general manager of a large company, he remarked that as long as the installment notes could be used as collateral for borrowing funds from the banks or other financial institutions, he would support the recognition of revenue using (a) or (b) as the bases. Probably, this may be one of the reasons for extensive use of (a) and (b), since many bankers advance large amounts to developers taking the installment receivables or notes as collateral.

(ii) Provision for cancellation of contracts and collection charges:

Ten companies (out of 17) or about 60% of the companies which recognize revenue from installment sales of lots using (a), (b), (c), or (d) as bases provide for cancellation of contracts; while only one medium size company makes a provision for collection charges. Further investigations showed that the collection charges, although amounting

to a large sum in some cases, are treated as a part of administrative expenses as an expedient and practical method.

The majority of the companies use past experience in some form as the basis for computing the provision for cancellation of contracts. Some use a percentage (varying from 2% to 25%) of net installment sales. One company uses 10% of contract receivables -- but limited to profit on lots sold on the installment plan, thereby implying that it can sell repossessed lots at least at the original cost to the company in case of repossession arising from default. One large company uses only the gross profit to be lost upon cancellation as the basis for computation of the provision for cancellation of contracts. Another large company uses the overdue contracts for 60 days or more and past experience as the basis.

(iii) Use of 'guidelines': Eleven companies (out of 17) use guidelines for revenue recognition for installment sales. Three companies who replied in the negative also mentioned that they used Internal Revenue Service guidelines for tax reporting. In most cases, the guidelines related to the percentage of down payment or number of installments which must be received before the recognition of revenue. One medium size company transfers all the lots to an escrow agent who will transfer title to the purchaser after receiving a contracted number of installments, which may not be the entire amount payable. Some companies retain title to the lot, and the deed is not handed to the purchaser until all payments are received. One large company reported that they did not recognize revenue until the purchaser had paid two monthly installments or 2½% of the sale price, whichever occurs first; but the purchaser was not allowed to build until he had paid all

installments and acquired the deed from the company.

Partial reimbursements of expenditure on roads, sewers, utility easements, etc.

Table 3.15 tabulates the replies to the question asking for the accounting treatment of partial reimbursements for roads, sewers, etc. received from local authorities.

Table 3.15--Accounting for partial reimbursements

Procedure used	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
Reduction in cost of development of the subdivision	1	5	2	6	3	11	14	47
Reduction in cost of item for which the refund is made	5	2	4	3	9	5	14	47
Extraordinary revenue for the period	0	1	0	1	0	2	2	6
Total	6	8	6	10	12	18	30	100

About 47% of the companies treat partial reimbursements as reduction in the cost of item for which the refund is made. An equal number of companies reduce the cost of development of the subdivision, while only 6% of the companies (all medium size) treat such reimbursements as extraordinary revenue for the period. Also, it can be noticed that more large companies treat partial reimbursements as reduction in the cost of the item, and more medium size companies use the first procedure. Surprisingly, the treatment of the partial reimbursements is

not dependent upon the method of classification and accumulation of costs, or method of allocation of total cost to individual lots. Again, expediency, and to a certain extent consciousness of the matching process prevails in the use of a procedure.

Valuation of repossessed land and treatment of gains and losses

Two related questions solicited information concerning the practice of valuing repossessed land from defaulted contracts and the treatment of gain or loss arising from repossessions, foreclosures and forfeiture of deposits.

Fifteen companies (50%) answered the question on valuation of repossessed land. Their replies are summarized under six headings in Table 3.16. Since the practice of valuation did not depend upon the size, or the area where the companies were located, the tabulation presents the results in aggregate for clearer analysis.

Table 3.16--Valuation of repossessed land from defaulted contracts

Valuation Method	No. of Companies	%
1. Fair market value	1	7
2. Balance due on the contract	4	27
3. Market price or (2) whichever is lower at the date of repossession	2	13
4. Original cost or (2) whichever is lower at the date of repossession	5	33
5. At original cost	1	7
6. At original cost or market value whichever is lower at the date of repossession	2	13
Total	15	100

The above results indicate varied methods used by developers in valuing the repossessed land. The second and the fourth methods are used by nearly 60% of the companies who answered the question.

The related question on treatment of gain or loss on repossession of land proved redundant in certain circumstances when the companies were using the second, the third or the fourth method. If a lot is valued as per balance payable on the contract on the date of repossession, there will be no gain or loss at that point in time. However, if market price or the original price is lower than the balance payable on the contract and repossessed lot is valued at cost or market, a loss will arise. Further investigation and enquiries during the company visitations showed that some companies charged the loss against a mortgage reserve account opened for this type of contingency; others treated it as an ordinary loss for the period. The four companies which use the first method, the fifth method and the sixth method treated gain or loss as ordinary gain or loss, respectively, for the period.

LOT COSTING AND VALUATION METHODS

Part IV of the questionnaire consisted of questions regarding lot costing and inventory valuation methods used by developers.

Methods of allocation of joint costs

The first question asked the methods used to allocate joint cost of land and land development to individual lots. The following five methods which are suggested in the accounting literature were provided for checking. Space was also provided for any other method a company might have used for allocation:

1. Tentative selling price of each lot.
2. Frontage feet of each lot
3. Number of lots in a subdivision
4. Area of each lot in a subdivision
5. Assessed value of each lot .

Since preliminary investigations had indicated that developers generally use one method for allocating all items of cost, they were required to indicate 'all items' under the method if they used one method for allocating all items of cost. Otherwise, they were to indicate under each method the items of cost allocated using that method as the basis of allocation.

This question was intended to be a means of determining the number of companies using each method as well as computing the methods of costing an improved lot, since almost all land and land improvement costs are joint in nature. The question is of great interest since the measurement of income and valuation of inventory are directly affected by the allocation method.

Table 3.18 tabulates the replies from all the responding companies and shows separately the methods used by the companies that allocate all items using one method, and those who use two or more methods for different items or different types of subdivisions.

Seventyseven percent of the companies use one method to allocate all items of cost. Two companies in group II--one large and one medium size--reported that they use two different methods for different types of subdivisions. The large company uses the tentative selling price method to allocate all items of cost for industrial subdivisions and the number of lots for residential subdivisions which generally had

Table 3.17--Methods of allocating joint cost of land and land development to individual lots

Group & Size	Method	Tentative selling price of each lot	Number of lots	Frontage feet of each lot	Area of each lot	Assessed value of each lot
<u>(1) Allocating All Items</u>						
<u>(23 companies)</u>						
	Group I : Large	1	5	0	0	0
	Medium	1	4	0	0	0
	Group II: Large	2	1	0	0	0
	Medium	2	4	0	3	0
	Total (1) Large	3	6	0	0	0
	Medium	3	8	0	3	0
<u>(2) Not Allocating All Items</u>						
<u>(7 companies)</u>						
	Group I : Large	0	0	0	0	0
	Medium	2	2	3	2	0
	Group II : Large	1	2	0	1	0
	Medium	1	1	0	1	0
	Total (2) Large	1	2	0	1	0
	Medium	3	3	3	3	0
	Total (1) & (2) Large	4	7	3	1	0
	Medium	6	12	0	6	0
Total: Large & Medium		10	19	3	7	0
Percent		33	63	10	23	0

standard size lots. Both methods are used on different parts of the project if it involves development of complete community or residential and commercial lots under one project. The medium size company uses the number of lots method to allocate all items except taxes, interest, clean-up cost and advertising for a residential subdivision and the area of each lot method for apartment and commercial sites. Two companies, one large company in group I and one medium size company in group II, use two methods for different items of cost. The large company allocates the cost of land on the basis of the area of each lot and uses the number of lots method for all other items. The medium size company uses the frontage feet method for cost of side walks, street, and sewer system, and the area of each lot method for all other items. Two medium size companies (6%) stated that they used all methods except the assessed value method for different items under different circumstances and for different types of subdivisions. These companies did not have a fixed pattern or method of allocation for various items except that they always tried to match the cost to the revenue as best they could. One company, as an example, indicated that they used the tentative selling prices method for river front residential recreational subdivisions or for commercial lots; the number of lots method for raw land, surveying and grading cost; the frontage feet method for cost of curbs, gutters, streets, water, sewer and side walks; and the area of each lot method for commercial subdivisions consisting of lots varying in size and shape.

The analysis of the tabulated results shows that the majority, or 63% of the companies use the number of lots method and about 33% of the companies use the tentative selling price method. No company

reported use of the assessed value method; while only 10% of the companies use the frontage feet method and 23% use the area of each lot method. Since some companies use more than one method, the total percent is more than 100%.

A further analysis was made to determine whether the pattern of classification and accumulation of cost or development of land for complete communities had any bearing on the method of allocation used.

The results which are tabulated in Table 3.19 indicate no relation between the pattern of classification and accumulation of costs, and the development of projects involving complete communities. Companies using all the four patterns of classification and accumulation of costs use every method of allocation. The same results are shown for the companies that developed large complete communities involving lots of different shapes, sizes, selling prices, and use.

Cost arising due to special conditions.

Developed raw land varies greatly in physical condition, and large sums may be spent on development of a lot or a group of lots due to such conditions or variations. To ascertain whether developers charge these costs directly to a lot or a group of lots or treat them as an overall cost of development of the subdivision, the question was asked: "if there are any items of cost which arise due to special conditions for one or more lots, do you charge these items to identified lot(s) to compute the cost of these lots". Along with 'yes' and 'no' alternatives, the companies were requested to describe briefly the reasons.

Table 3.18--Analysis of the method of allocation used and classification and accumulation of costs patterns, and development of projects involving complete communities

Factors	Methods	Tentative selling price of each lot	Number of lots	Frontage feet of each lot	Area of each lot	Assessed value of each lot
I. <u>Classification Pattern</u>						
	Land and land development cost classified under one heading and then allocated to individual lots	0	1	0	1	0
	Land and land development cost classified under two separate headings but allocated in total to individual lots	4	6	2	1	0
	Classified and accumulated under separate headings but allocated in total to lots	4	7	1	3	0
	Classified and accumulated under separate headings and each item or group of items allocated to individual lots	2	5	0	2	0
II.	Involved in development of projects with complete communities	6	7	1	5	0

Sixty percent of the companies (17) answered in the affirmative. Eight are large companies, 5 in group I and 3 in group II. Nine are medium size companies, 3 in group I and 6 in group II.

Many companies did not give reasons. Those who answered 'yes' and described the reasons emphasized the correct matching process or accurate costing. Those who replied 'no' gave such reasons as 'immaterial items in most cases', cost too small -- we look at total profit picture, or 'too cumbersome'.

Computation and allocation of selling and administrative overhead

During the process of formulation of the questionnaire, preliminary investigations showed that an in-depth analysis into the computation and allocation of selling and administrative overhead might require at least 10 questions. This would have taken about 3-4 pages and would have made the questionnaire too long; and might have discouraged the companies from completing and returning the questionnaire. To overcome this obstacle on non-response, a broad compact question was structured. It required the companies to indicate whether they allocated the three important groups of expenditures, viz. advertising and promotion expenses, other selling expenses, and administrative expenses and charged them to:

Each subdivision only

Charged as expense for the period

Any other (please specify).

Some of the practices related to computation of various item under each group were left for further investigation during the company visitations.

Table 3.19 summarizes the replies from the thirty responding companies.

Table 3.19--Allocation of selling and administrative expenses

Expenses	To each subdivision only	To each subdivision and then to each lot	Charged as expenses for the period
<u>Advertising and promotion expenses</u>			
Number	4	3	23
%	13	10	77
<u>Other selling expenses</u>			
Number	2	4	24
%	6	14	80
<u>Administrative expenses</u>			
Number	1	1	28
%	3	3	94

As it turned out, most of the companies charge the three items as expense for the period.

Twentythree percent of the companies allocated the advertising and promotion expenses either to each subdivision only or to each subdivision first and then to individual lots. Further investigation showed that large advertising and promotion expenses are capitalized at the time of incurrence of the expenditure and allocated pro-rate to the period when lots are sold, using the number of lots sold or sales volume related to the subdivision as the basis.

Twenty percent of the companies allocated other selling expenses to each subdivision only or to each subdivision and then to each lot. During the company visitations it was revealed that the companies in

fact segregated the selling expenses into two categories. In one category, the commissions payable to salesmen and some other direct legal expenses connected with selling activity are included. The second category includes the salaries of salesmen and other indirect selling expenses. The items included in the first category are charged to the subdivision or later allocated to lots in the period when these lots are sold. In some cases, especially when lots are sold on the installment basis, the commission is paid to salesmen when the sale contract is signed. It is charged as an expense in the period when revenue from the lot is recognized. However, if the contract is cancelled during the period, the commission is recovered back from the salesmen, and the accounting entries are reversed.

Only two companies reported that administrative expenses are allocated to each subdivision or to the individual lots later. Further investigation showed that the above treatment was in fact followed by those companies for internal reporting purpose only, since both were organized on the 'profit center' concept and needed net profit from each profit center for performance evaluation.

An important practice was noticed in the items included in the administrative expenses. Some companies have large land planning and engineering divisions or sections responsible for engineering and surveying operations connected with land development. A considerable portion of the expenditure related to those divisions represents salaries of engineering staff and expenses of technical equipment and supplies. These salaries and expenses are included in the administrative expenses or overhead and charged to the period when incurred. Only direct expenses paid to outsiders specifically for a particular sub-

division are included as an item in the cost of land or land development.

Some companies employed subcontractors for engineering and surveying work and inventoried such costs as an item in the cost of land or land development. Also a few companies that employed an attorney on a full time basis treated the attorney's salary and related legal expenses as administrative overhead and charged it as expense for the period, while others that employed outside legal services sometimes included such in the cost of land or land development.

Cost and revenue from lots sold to civic agencies, schools, churches, etc.

The following two related questions were asked concerning the determination of cost of lots and treatment of revenue from lots sold to civic agencies, churches, schools, etc.

- "1. Do you ascertain, using regular allocation methods, the cost of lots sold at a nominal price or dedicated to schools, churches, or to other civic agencies? ('yes' or 'no')
2. How are the proceeds from dedication or sale of land to civic authorities, public utilities, etc. treated?

Revenue for the period when received
Reduction in the cost of developing a subdivision
Only the excess of revenue over allocated cost
treated as revenue for the period
Any other (please specify)"

All 30 companies answered both questions. Replies are summarized in Table 3.20.

Eightythree percent of the companies answered 'yes' to the question on cost determination using regular methods. Seventeen percent of the companies, which said 'no' are in group II. Surprisingly, there are two large companies that are involved in development of complete communities where several lots must be sold to the civic

agencies, churches, schools, etc. As indicated by their comments and explanation on further enquiries, they excluded these lots from absorbing any costs on the assumption that other lots would automatically bear the cost of development of these lots.

Table 3.20--Determination of cost and treatment of proceeds from lots sold to civic agencies, schools, churches, etc.

Replies	Group-I		Group-II		Total Groups I & II		Total L & M	
	L	M	L	M	L	M	No.	%
<u>Determination of Cost</u>								
Yes	6	8	4	7	10	15	25	83
No	0	0	2	3	2	3	15	17
<u>Treatment of sale proceeds</u>								
Revenue of the period when received	0	5	2	2	2	7	9	30
Reduction in the cost of developing a subdivision	2	1	1	6	3	7	10	33
Only the excess of revenue over allocated cost treated as revenue for the period	4	2	3	2	7	4	11	37

Eleven companies (37%) treat the proceeds realized on sale of these lots in the normal manner where only the excess of revenue over the allocated cost is treated as revenue for the period. In other words, total cost is allocated to all developed lots in a subdivision including those sold to such agencies; and sale proceeds from lots sold to a civic agency are treated as sales revenue. Ten companies (33%) reduce the cost of development of a subdivision by the amount realized on

such sale. Three companies (10%) which do not determine the cost of such lots reported this alternative for treating the proceeds realized. Nine companies (30%) treat the proceeds realized as revenue of the period at the time of receipt. Two companies who do not allocate cost to the lots also use this alternative.

One medium size company in group I which treats the proceeds as revenue for the period and does not use regular allocation methods to determine the cost of lots indicated in a note that sometimes they appraised the value of such lots and treated the appraised value as a gift to the church or school; and recorded the corresponding amount as revenue for the period. If there was any nominal payment involved, they reduced the amount of the gift by such amount and booked the proceeds and the gift as revenue for the period.

Treatment of revenue realized on sale of gravel, sand, timber, etc. discovered on the site

Since many large projects are developed using raw land consisting of resources like gravel, sand and timber, the last question asked about the treatment of sale proceeds realized from such materials discovered during the development process.

Twentythree companies answered the question. Only two alternatives were provided in the replies. These are: 1. reduction of cost of development of the subdivision on which materials are found -- reported by 18 companies (60%); 2. miscellaneous revenue of the period -- reported by 5 companies (16%).

Further enquiries revealed that generally the initial grading or clearing work was done by sub-contractors who quoted their price after surveying the area and taking into account the revenue they might

realize from sale of such materials. The lower amount charged by the sub-contractor is implied reduction in the cost of development. Two companies which treat the proceeds as miscellaneous revenue reported that the proceeds, especially from some lake front subdivisions are substantial and extend over long periods; therefore they treat it as revenue after deducting direct cost connected with disposal of the items.

CHAPTER IV
INFLUENCE OF INCOME TAXATION ON ACCOUNTING
PROCEDURES-A CRITICAL ANALYSIS

Introduction

In Chapter III the replies received from land development companies in response to the land development accounting practices survey were summarized and partially analyzed to determine the most common accounting procedures and practices employed by developers. Questions which required additional investigation were explored during interviews with accounting and other executives of the companies at the time of company visitations. Wherever appropriate these have also been described in summaries and analyses in the previous chapter.

This chapter evaluates procedures and practices to trace how far the federal income tax law, the Treasury regulations and judicial rulings in many court cases have influenced accounting procedures followed by developers. The evaluation and discussion will not attempt to discuss in detail the legal and highly technical subject matter involved in the interpretation of the law and related judicial rulings. Instead, the relevant sections of the Internal Revenue Code, the revenue regulations under the Code and court cases will be cited in footnotes, and explained very briefly. The examination and evaluation will be focused on the issues and impact on practices and procedures.

The Use of Capital Gains Provisions of the Code

The land development industry happens to be one of the industries which has acquired special taxation features. One of the main reasons giving rise to these features is the nature of the raw materials of developers -- land, which can be treated for income tax purposes as a capital asset under one set of conditions and inventory under other sets of conditions. Other features leading to peculiar accounting procedures employed by developers arise due to the quest for tax advantages by converting ordinary income into capital gain, accelerating the deduction of expenses from income, and by splitting income among more than one taxable entity. To close the loopholes and allow some relief in specific situations, a multiplicity of specific provisions in the income tax law and the Treasury regulations have been enacted. These provisions and the many court cases are of special interest to developers and have an impact on their accounting techniques.

A developer who is engaged in subdividing and improving tracts of land for selling lots to customers in the ordinary course of business is treated as a dealer in real estate, except for those who qualify as investors under provisions of section 1237. The advantage of being qualified as an investor is tax savings resulting on the disposition of land because gains realized on disposition by an "investor" rather than a "dealer" can be treated as capital gains under section 1221.

Section 1237 provides the following conditions for non-corporate developers who may treat the gain on the disposition of land as capital gain. Also, developers who are organized in corporate form can come under section 1237 but only if no shareholder, directly or indirectly holds land for sale to customers in the ordinary course of business

and land was acquired by the corporation through foreclosure of a lien thereon. In case of joint ventures and partnerships, it has been established that it is the activity of the joint venture or partnership itself and not the occupation of the members that is controlling for application of the provisions.¹

1. Method and purpose of acquisition of land:

The land had not previously been purchased and held by the taxpayer primarily for sale to customers in the ordinary course of business; and in the taxable year in which the sale occurs he does not hold any other real property for sale to customers which will classify him as a dealer.

2. Length of holding period:

The land must have been held for at least five years. The five year holding period is waived if the taxpayer inherited the land, in which case the holding period is six months.

3. Activities related to development:

The taxpayer had made no substantial improvements that significantly enhance the value of the land while it is held, nor had any such improvements been made pursuant to a sale contract entered into between the taxpayer and the buyer. Treasury regulations set out what is considered to be substantial improvements. Erection of shopping centers, commercial or residential building, construction of hard surfaced roads, sewers, water, gas or electric lines are all

¹Jackson L. Boughner, "Getting capital gain treatment on sale of land - with or without Section 1237," The Journal of Taxation, September 1966, p. 174.

considered substantial improvements. The improvements not considered substantial are: a temporary structure used as a field office, surveying, draining, levelling and clearing operations and construction of minimum all weather access roads, including general roads where required by climate.

In cases where improvements have been made, there is special provision under section 1237 (b) (3) that allows capital gains treatment if the land is held by the taxpayer for a period of ten years. Under this provision, if such improvement is building or construction of water, sewer or drainage facilities or roads, and if he can show that the land would have not been salable without such improvements, and a developer does not deduct the cost of such improvements, he can treat gain on disposition as capital gain.

4. The 'Five-lots' and 5% rules:

If the above three requirements are met and a tract of land is subdivided, the gain on sale of the first five lots through the end of the taxable year from a single tract will be treated as capital gains. Two or more contiguous lots sold to a single buyer in one sale are treated as a single sale of a lot. If more than five lots are sold in the same year, the gain is treated as ordinary income (after deducting selling expenses) to the extent of 5% of the selling price and the balance as capital gain. However, if the sixth lot is sold in the following year, the five percent rule will only apply starting with the sixth sale and all the gain on the first five will be capital gain. "On the other hand, if the taxpayer sold the first three lots in a single tract in one year and the next three in a later year, only the gain realized from sales made

in the later year will be subject to the 5% rule. ... If no further sale is made for a period of five years, the remaining portion of the property is considered a tract held for five years and the 5% rule does not apply again until six more lots or parcels are sold."²

5. Judicial Rulings:

The attraction of this tax advantage has caused a problem for developers, especially when most of them were organized on a partnership or joint-venture basis. A long line of cases has developed in the last two decades to determine what can be considered property held primarily for sale. If land was held primarily for sale to customers in the ordinary course of business, the gain on its disposition was treated as ordinary income.

- (i) Malat case: The Malat case³ which is considered a landmark decision by the Supreme Court finally resolved the issue by interpreting the words 'primarily' held for sale to mean 'principally' held for sale rather than 'substantially' for sale as the Internal Revenue Service and several courts had held. Now, it is possible for a developer to get a tax advantage by making some investments in land and holding them for current income (i.e., rental) and long term appreciation.

²Charles J. Gaa, Federal Income Taxation, Fundamental Questions, Problems and Cases, Volume II, McGraw-Hill Book Company, New York (1965), p. 272.

³Malat v. Riddel, 383 U.S. 569 (1966). An interesting analysis of the Malat case by Mr. Altman, who represented the taxpayer is given in his article, "Does Malat signal trouble ahead for real estate dealers seeking capital gains?" The Journal of Taxation, February 1967, p. 118-119.

Malat was a member of a real estate partnership Lesser Enterprises which regularly subdivided land for sale and held property for rental income. He entered into a joint venture which acquired a forty five acre parcel of land with the intention of developing and operating an apartment project. Due to difficulties in getting requisite financing and rezoning, they were not able to build apartment houses and abandoned the idea of developing the entire project. In the meantime, interior lots of the tract were subdivided and sold. The gain from those sales was reported and taxed as ordinary income. The joint venturers continued to explore the possibility of commercially developing the remaining exterior parcels. They encountered zoning restrictions. As a result, Malat and one of the other co-venturers sold out their interest in the exterior parcels and claimed the gain realized as capital gain.

(ii) Post Malat Cases:

Although the Malat case clarified the interpretation of the meaning of 'primarily', the courts and the Internal Revenue Service have been treating each case on the basis of separate factual considerations. In addition to the four tests enumerated above, solicitations or advertising of the taxpayer and substantiality of income derived from subdivision activity compared to other sources of income are considered in determining the status of the taxpayer. In Scheuber vs. Commissioner, gain realized on the sale of a parcel of land was allowed as capital gain on the grounds that 'extremely substantial gain over their investments' was realized. The court reasoned that the amount of gain was unrealistically high when compared to realistic profit on property held for resale in day-to-day operation of business.⁴

⁴ Scheuber, 371 F.2d 996 (CA-7, 1967).

In another interesting post-Malat case, the court held that the purpose of holding property with respect to different tracts must be separately considered for examining the intention to hold property.⁵ In this case, the taxpayer had been a dealer in previous transactions and had held a tract for development of an industrial park -- an investment purpose. To encourage a railroad to extend its lease on land owned by the taxpayer along the railroad's right-of-way, the railroad was given options to buy some of the land. The first sale was 12 years after the taxpayer had bought the land. It was reasoned that when the occupation of the taxpayer apparently indicated that he made a living by selling or developing real estate, he had to overcome the presumption that a particular sale is not a further extension of these activities. If the individual facts show that such presumption is not discernible, a developer can be classified as a dealer for one tract of land and an investor for other tracts depending upon intent or purpose of holding each tract.

(iii) Substantial revenue and activity tests: In cases where the taxpayer has more than one occupation and he invests in land on a part-time basis with a view to realizing gain when the price of land appreciates in the future, "the thinking has been drifting for a considerable time towards the view that if the activities or revenue with respect to a plot of land were substantial, then the developer was in

⁵ The Municipal Bond Corporation, 382 F.2d 184 (CA-8, 1967).

the real estate business, and the land was held primarily for sale."⁶

The following recent cases clearly indicate the substantiality of revenue and activity tests applied on individual facts of the cases.

(1) U.S. vs. Winthrop⁷

In this case, the court held that sale of inherited land through a planned program of subdividing and selling over a period of 25 years resulted in ordinary income rather than capital gain.

The taxpayer was a civil engineer by profession but did little work of this type during the period in which lots were sold. However, he did devote substantial amounts of his time and skill in developing and selling the inherited property. He had no office, did not advertise but sold lots to people who approached him in his house, and engaged no brokers. During a 25 year period, he sold 456 lots and realized 52.4% of his income from profits and other income from sale of lots. He never used land for any purpose, Land was subdivided and sold lot by lot, over the entire period. There was no multiple or dual purpose or change in purpose during the entire period, and the taxpayer had as his sole motivation the sale of land, lot by lot, year by year, and transaction by transaction.

The court furthermore ruled that holding land primarily for sale is by itself insufficient to disqualify the taxpayer from capital

⁶Robert D. Griffith, "Capital gains from Real Estate and Certain Intangible Business Assets," Taxes -- The Tax Magazine, May 1967, p. 349. Also see Landrum J. Outtaw, "Gains on Sale of Real Estate", Taxes -- The Tax Magazine, July 1968, p. 467; and Randell B. Hanson, "When will the Dealer in Real Estate Receive Capital Gains?", The Journal of Taxation, January 1970, p. 40-44.

⁷Winthrop, 24 AFTR 2d 5477 (CA-5, 1969).

gains privileges. The sales must also be in the ordinary course of the taxpayer's business. In this case, the continuity and magnitude of operation over twenty five years and the realization of more than 50% of his income resulted in his being classified as dealer engaged in the sale of lots in the ordinary course of business.'

The additional criterion applied in the above case indicates that where a taxpayer is engaged in more than one occupation and one of which is development of land, the income of the development business may be taxed as ordinary income provided it exceeds substantially income from other sources or occupations, even though the development business may be his secondary or part-time business.

(2) Andrew Toll Investment Co. vs. Commissioner:⁸

In this case the court examined the character of each sale of property. The taxpayer, in the years 1961 through 1964 made ninety seven sales of property which were held for more than six months, and claimed capital gains treatment for the proceeds of sale. The court examined the nature and character of each transaction and determined that eighty seven out of ninety seven parcels of property were held primarily for sale to customers in the ordinary course of business, although the taxpayer was not engaged in the business of selling real estate. The taxpayer acquired raw land, undertook to develop the land, secured financing, and constructed and leased a complete facility. The court ruled that since the majority of real estate parcels sold by the taxpayer were primarily held for sale to customers in the ordinary course of business and sales arose from

⁸ Andrew Toll Investment Co., TCM 1970-130.

everyday operations of his business, he was not entitled to capital gains treatment for proceeds realized on sale of those properties. Furthermore, the interim rentals were considered merely incidental to the primary purpose of eventual realization of profit by sale in the ordinary course of business.

(3) Brodnax vs. Commissioner:⁹

In this case, the court held that the taxpayer, an architect, was an investor and not a dealer. Therefore, he was entitled to treat gain from the sale of parcels of land as capital gain on the grounds that the primary purpose meaning 'principal' purpose or 'of first importance', was to hold land for investment purposes. The taxpayer did not perform any activity other than assisting another associate architect in sketching the preliminary layout and so was not to be classified as a dealer engaged in the business of selling real estate. In addition, there were minimum improvements on the parcel of land.

Here, the taxpayer bought land near a proposed freeway. A preliminary layout divided a forty acre parcel into forty lots, and improvements included a black top access road with curbs and gutter, and a drainage ditch with conduits installed at either end of the road. The subdivision plat was never recorded and no utilities were extended on the laid out lots. He did not advertise or solicit the sale of these lots. Twenty eight lots were sold during a three year period -- seven to friends and twenty one to realty agents. He

⁹ Brodnax, TCM 1970-164.

retained twelve acres near the proposed freeway in anticipation of an increase in value of the land. He was repeatedly approached by real estate agents to sell those twelve lots but refused to sell.

In order to prove the intention of holding property for investment and for income, a developer has to keep a separate set of books clearly documenting such intention. Also, he may have to employ different accounting techniques for certain transactions to create additional tax advantages. For example, once the intention to hold property as investment for income is clearly documented and land is developed for rental income, a developer can amortize water system costs over its useful life by retaining title to the pipelines and treating expenditures incurred on them as an 'asset' and the amortization as expense rather than apportioning the cost over improved lots to reduce capital gain. Normally, if an improved lot is sold in the ordinary course of business, the cost of a water system is apportioned over lots and not amortized. Similarly, by extra planning, storm sewers or other necessary structures are erected after rental property is developed and sold, and expenditure on these installations is amortized over their useful life or treated as expense.

Carrying Charges

Section 266 provides that certain expenses which would ordinarily be deductible from current revenue may be capitalized subject to the prescribed Treasury regulations. For a developer, if these expenses are capitalized, they will become a component of cost of land in computing the cost of sales and taxable income.

Reg. 1.266(1)(b) enumerates the following items to which the election shall apply in connection with holding of real property, whether improved or unimproved and whether productive or unproductive:

- (1) Interest on loans excluding any imputed interest on the taxpayer's funds
- (2) Payroll taxes
- (3) Sales and use taxes on materials
- (4) Other necessary expenditures in connection with development or construction up to the time such work is completed.

In the case of unimproved and unproductive real property, the election applies to payroll taxes and sale and use taxes on materials, interest on a loan, and "other carrying charges". The election may be made annually; that is, a new election may be made each year if the property remains unimproved and unproductive. If for example, in three successive years (real estate) taxes, interest and carrying charges were paid for land which was vacant and unproductive for the first two years, but which produced income when leased to a department store for use as a parking lot in the third year, the taxpayer may elect to deduct or capitalize the taxes, interest, and carrying charges for either or both of the first two years. For the third year, however, he may not elect to capitalize them, since the land was no longer unproductive.¹⁰

¹⁰Your Federal Income Tax-1970 Edition, I.R.S. Publication No. 17, 1969, p. 63.

In the case of all other property, an election is binding for subsequent years until development is completed, although a separate election may be made for each "project" and any one or more items of expenditure incurred with respect to a single project.¹¹ However, if expenses of several items of the same type are incurred with respect to a single project, the election will have to be made for all items of that type. For example, if election is made to capitalize sales and use taxes on materials used in a project, then the election is applicable to sales and use taxes on all materials used in the project. It is not possible to capitalize this item on some materials and not capitalize on others. The restriction is on items which are related to a single project. It does not apply to the same type of items in other projects.

Although Reg. 1.266-1(c) defines project as "a particular development or construction of an improvement to real property", it is not clear whether a section of a large tract developed in parts can be considered as a project. Robert Jones who is actively engaged in tax planning for developers pointed out: "experience has indicated that Agents have not been rigid on this point and considerable flexibility may be used in breaking a large development into several projects if done in a reasonable manner and with substantial support."¹² A recent ruling also supports the view that land covered by subdivision

¹¹Reg. 1.266-1 (c).

¹²Robert Jones, "Tax Problems of Real Estate Developers-from Acquisition through Disposition," The Journal of Taxation, January 1966, p. 34.

plats will be considered unimproved and unproductive real property for purposes of electing to capitalize carrying charges until the time each such plat is recorded.¹³

Reg. 1.266-1(e) permits allocation of carrying charges in the light of facts and circumstances in each case wherever a part of the carrying charges are for development of property and a part are not. For example, if a developer borrowed funds under a blanket mortgage covering two pieces of property, equal in size and value, and paid interest on the loan, interest expense may be allocated equally to both pieces if these can be considered two separate projects. Interest on one piece may be capitalized and on the other piece expensed if properly elected.

In order for election to be effective, the taxpayer has to file a statement along with his original return for the year indicating the item or items which he elects to capitalize.

The election to expense carrying charges has the advantage of making available interest-free additional working capital (equivalent to the tax saving on the amount of carrying charges deducted) and affects the cash flow of the period. Also, it can be an income smoothing device, especially when multi-periods are necessary to complete a development project. If the carrying charges are capitalized, the capitalized amount remains as part of the cost of lots sold to be deducted from realized revenue of future periods.

The survey results and investigation during company visitations indicate that the election not to capitalize the carrying

¹³Rev. Rul. 69-105, I.R.B. 1969-10, 29.

charges was made by most of the privately held corporations to accelerate the deduction of expenses. At least one corporation which went public by merger with a publicly owned corporation, changed its election to capitalization after the merger on direction from the parent company. Public corporations tended to capitalize the carrying charges to avoid showing reduced earnings in the periods when they are paying substantially large amounts of interest on borrowed funds and real estate taxes on large acreage of undeveloped land that will be developed over a period of ten to twelve years.

The controller of one medium sized company in Group-I mentioned an interesting practice related to expensing the carrying charges. In his company the selling prices of lots are set by adding a fixed percentage mark-up over the cost of each improved lot. The income tax saving from expensing carrying charges, which they estimate at 48% of the carrying charges, is deducted in computing the cost of an improved lot. As illustrated in the following example, the estimated selling prices differ substantially under the two methods for handling income tax savings since interest expense and taxes amount to a considerable sum due to the nature of financing in their company.

<u>Cost Items (per Lot)</u>	<u>Estimated Selling Price Without Tax Savings</u>	<u>Estimated Selling Price with Tax Savings</u>
Land	\$2,000	\$2,000
Improvements	4,000	4,000
Interest expense	450	450
Taxes & other carrying charges	<u>250</u>	<u>250</u>
Total Cost	\$6,700	\$6,700
<u>Less</u> Tax Savings (48%(\$450 + \$250))	<u>0</u>	<u>336</u>
	\$6,700	\$6,364
20% mark-up	<u>1,340</u>	<u>1,273</u>
Estimated Selling Price	<u>\$8,040</u>	<u>\$7,637</u>

The controller stressed that given a selling price, there will be no effect on net income. But, the realistic pricing of an improved lot in which the tax saving was separately recognized gave them an additional competitive advantage in fixing selling price without losing their goal of target mark-up. Although this argument is rather weak, it indicates the practical use of tax savings by developers.

Joint Cost Allocation Methods

Reg. 1.61-6 provides that where a large tract of land is subdivided and sold in parts, the cost of land and improvements must be equitably apportioned among the several lots and gain or loss computed and reported upon the disposition of each lot. What is an equitable apportionment of cost and when the allocation is to be made creates a problem for developers in computing taxable income, especially when a developer is not permitted to wait until the entire tract is developed and all lots are sold.

For allocation of cost of land, the Tax Court ruled that the cost of subdivided land must be allocated to the various lots as of the date the land was acquired.¹⁴ The method of allocation of land cost which is considered equitable by the Internal Revenue Service and the courts is based on the relative values of the parts.¹⁵ There has been a case in which assessed value of each lot was accepted as the base for allocation of the total cost in the absence of a better method.¹⁶

¹⁴Wellesley A. Ayling, 32 TC 704 (1959).

¹⁵Fairfield Plaza, Inc., 39 TC 706 (1963).

¹⁶Cullinan J.S., 5 BTA 996 (1928).

The selling price of each lot has also been approved as a method of allocation in another case, in which it was decided that selling price was reasonable as nothing had occurred from the date of purchase to the time of sale to alter the relative values of the frontages.¹⁷ Here a subdivision involved interior lots away from the waterfront and a few exterior lots on the water-front; it was determined that the total cost of a group of lots should be partly allocated to interior lots as well as to water-front lots, on a ratio of one-to-three (based probably on value), rather than on the basis of area of each lot. In yet another case the Court used the following formula based on the tentative price of the unsold portion of land to compute the fraction for allocating the cost of land.¹⁸

$$\frac{\text{GRLS}}{\text{GRLS} + \text{TSPUL}} \times \text{COL}$$

Where:

GRLS = Gross Receipts from sold lots

TSPUL = Tentative selling price of unsold land

COL = Cost of land

It has been established that a developer may allocate the entire cost of land and land development on salable lots.¹⁹ In other words, a developer has to eliminate parcels of land set aside for roads and other public or recreational purposes. Even when a part of

¹⁷ R.M. Clayton, 15 TCM 1956-21.

¹⁸ R.W. Ewing, 17 TCM 1958-15.

¹⁹ Country Club Estates, 22 TC 1283 (1955).

the land is conveyed to a non-profit country club and improvements are installed thereon in order to enhance the value of the remaining property to make developed lots more salable, a developer can allocate a portion of the cost of land or improvements to lots whose value is enhanced by that expenditure. The allocable improvements may even involve a dam, a golf course, a lake or other recreational facilities.²⁰ However, if the developer retains title or ownership and control of the facility, and does not part with property, then these costs are not allocable to the lots.²¹

Since the Treasury regulations do not specifically define what could be considered an equitable method of allocation, the burden of proving a method of allocation which is equitable has fallen on developers. Robert L. Berge, who has worked on tax planning aspects with developers, pointed out that when there are varied structural and locational features in a tract, a developer can substantiate his method of allocation more readily if he splits the cost of land at the time of buying between two or more parts, especially when these projects may be developed separately. "The greater portion of the land cost of the entire development might be allocated to lots the developer feels are most valuable and (he) could counter an argument that the allocation should be made ratably over the entire project".²²

The survey results also indicate that developers use four methods of allocation which have been accepted as equitable by the

²⁰Rev. Rul. 68-478, I.R.B. 1968-35, 34.

²¹Estate of M.A. Colline, 31 TC 238(1959), also, Rev. Rul. 60-3, 1960-1 CB 284.

²²Robert Berge, "Special Tax Problems of Participants in Real Estate Developments," Taxes-The Tax Magazine, February 1967, p. 164.

Internal Revenue Service. The four methods are:

1. Tentative selling price of each lot
2. Frontage feet of each lot
3. Number of lots in a subdivision
4. Area of each lot

During interviews the controllers of the companies stated that they generally decided what method is equitable and that their allocation method has not been turned down by the Internal Revenue Service. Even the number of lots method of allocation, which is used by the majority of the companies has been accepted as equitable.

Subsequent Adjustment of Improvement Costs

If a developer sells subdivided lots before the development work is completed, he may include in the total cost of lots an estimated future expenditure for improvements to a subdivision.²³ The estimated future costs must be those to which the developer is contractually obligated, and which are not recoverable through depreciation. He will be required to furnish schedules showing the following data and information to establish the correctness of the estimated costs:

- (i) An accurate description of each class of proposed improvements and definite evidence that the developer is contractually obligated to make such improvements.
- (ii) An estimate of the maximum period within which the improvements will be completed.
- (iii) Full details regarding the method of estimating the total cost of each class of improvements

²³ Herzog Bldg. Co., 44 TC 65(1965) & Treasury Memo. 4017, XII-I CB 60.

along with evidence to substantiate the correctness of the estimated cost.

- (iv) A detailed statement showing the amount expended and charged to improvement reserve account each year since acquisition of the tract on each class of improvement that was included in the cost of lots sold in prior years (for computing gain from those sales).
- (v) A plat or map of the entire tract and a detailed statement showing the portion of the total cost of each class of improvements allocated to each lot or subdivision of the entire tract.

In cases where contractual improvements have been completed or the time period estimated by the developer has elapsed and the improvements contracted have not been completed and there is a balance in the improvements reserve account, the developer incurs extra tax liability for prior years in which future estimated cost was included in the cost of sold lots. The tax liability is determined upon the basis of the amount actually expended and the cost of lots sold is recomputed by allocating the actual amount spent.

However, if the developer can show that improvements for which he is contractually liable could not be completed in the estimated period or five years whichever is shorter, he is allowed to file a waiver of the statute of limitations in the prescribed form so that his tax liability can be ascertained at a later point in time, in case his actual expenditure is lower than the estimated

amount allocated to lots sold in the prior periods.

The survey results indicate that the companies either (i) do not estimate future costs and create a reserve for future improvements or (ii) allocate subsequent extra expenditures to unsold lots. Further investigation during interviews with controllers and other executives of the companies indicated that very few executives were aware of the above particular provision. Some executives who were aware of the provisions pointed out that it was difficult to comply with the strenuous requirements of preparing extra schedules. Instead, they adopted a practical method of allocating future additional costs which were not known at the time of embarking a project, over unsold lots and including them in inventory cost of the unsold lots.

Recognition of Revenue From Installment Sales

The timing of revenue from installment sales has been one of the most controversial and hotly debated issues since the passage of the Income Tax Act, 1913. "Recognition was given the installment method in the acts of earlier years too, but the method of computation was not outlined Treasury Decision 2090, December 14, 1914, held that profits were to be taken when the sale was made. The Regulations of 1916-1917 relaxed the provision. They permitted the percentage collection method to be used in cases where the vendor retained title; where title passed, the ordinary sale method was still required. In the Regulations of subsequent years and in several board decisions, it was decided that income on installment sales could be reported on an installment basis regardless of whether or not the title has

passed.²⁴

In the current Code, Section 453 allows developers to report the income on the installment basis in the period when installments are collected, provided collections in the year of sale do not exceed 30% of selling price. The reported profit is that proportion of gross profit which installments received during the year bears to the total contract price. In other words, the amount of each installment collected is broken down into two components -- cost recovery component and profit. This measure was considered a relief measure enacted by the congress to allow the taxpayer to pay the tax after he received an installment in cash rather than to advance it initially from his own funds.²⁵

The survey shows a wide divergence between the recognition of revenue for general accounting and tax purposes. All companies that recognized (for accounting purposes) revenue from installment sales at the time of signing the sale contract and/or receipt of the down payment used the installment method for tax reporting. One of the reasons to support the practice of recognizing revenue for book purpose at the time of signing the sale contract is that the installment receivables are pledgeable.

During discussion with some of the executives of the companies, the question was raised about treating the amount of the

²⁴ Charles Gaa, Taxation of Corporate Income, University of Illinois Press, Urbana (1944). Board of Tax Appeals is predecessor of the Tax Court.

²⁵ An elaboration of this appears in Prendergast, 22 BTA 1259 (1931).

loan received by assignment of installment receivables as revenue recognized under the 'disposition' provision of section 453(d).²⁶

The basic position of the Internal Revenue Service was set in Rev. Rul. 65-185, 1965-2 CB 153. It was concerned with a question as to whether a taxpayer who had reported income using the installment method and borrowed a sum equal to the balance on the installment note from a finance company disposed of his installment obligation. The installment note was used as collateral security for the taxpayer's note to the finance company with identical terms. The finance company was responsible for the collection of payment from the original buyer of the taxpayer and the taxpayer was responsible only in case of default of the original buyer. In this case, the Internal Revenue Service contended that the financing arrangement was little different, except in form, from an outright sale of an installment obligation with recourse or other guarantee of payment and thus was a 'disposition' of such obligation.

As expected, developers disapproved the recognition of revenue for tax purposes in spite of the additional argument that cash is now received by developers and no situation calling for tax relief remained. One of the controllers pointed out that under the 'disposition' notion, all funds received on the pledging of assets should be treated as proceeds received on sale of the assets.

Technically the treatment of borrowed funds against installment notes as a loan has merit since a developer is still responsible

²⁶Section 453(d) and Reg. 1.453(l) provide that if an installment obligations is sold or otherwise disposed of, gain or loss shall result.

for collecting the remaining installments and also primarily liable for the amount borrowed from the bank. In almost every case, developers have been borrowing blanket sums using installment receivables as collateral, and terms of borrowed funds are not necessarily related to the balance payable on those receivables. Repossession of lots in case of default is the responsibility of a developer rather than of the bank. These features generally do not give the developer's pledging or assigning installment notes the taint of closed transaction. The following statements of two tax planning experts who analyzed the Internal Revenue Service's position concluded that assignment of installment receivables will not be automatically treated as 'disposition':

"(From the tax planning consideration point of view), it is evident that mere assignment or pledging of installment receivables as collateral security should not ipso facto trigger off the recognition of income under section 453(d). However, it is equally clear that if the assignment in a pledging situation embraces the characteristics of a closed transaction, in which the borrower receives substantially the face amount of the receivables at the time of assignment, the transfer is vulnerable to a service challenge that a 'disposition' has been effected."²⁷

"Despite the (Internal Revenue Service's) hard line in Rev. Rul. 65-185, it appears clear that installment obligations can be used as security for an extension of credit without activating section 453(d). The chief aim of the taxpayer will be to avoid casting the transaction in a context wherein it acquires sale-like consequences."²⁸

²⁷ Mulvey, Bernard, "Avoiding the 'Disposition' Trap when Installment Receivables are Pledged", The Journal of Taxation, September 1969, p. 150.

²⁸ Meade Emory, "Disposition of Installment Obligations: Income Deferral, Thou Art Lost and Gone Forever", Iowa Law Review, June 1967, p. 970.

Partial reimbursement of cost of roads, sewers, etc. and refunds of utility deposits

In the following situations partial reimbursements of expenditures incurred by a developer for roads, sewers, etc. and refunds of utility deposits can arise:

1. Where the subdivision regulations provide for sharing of cost of streets, main roads, water systems, etc., between a city and a developer.
2. Where a developer is required to install an over sized water main system or storm sewers which will serve the needs originating outside his subdivision.
3. Where a developer is required to make payments to a gas or electric utility company to induce extension of its services to a subdivision; and the deposit is refundable based upon a stated percentage of gross revenue from the sale of services to residents or upon the number of connections of service.

For situations (1) and (2), the subdivision regulations of many cities are not very specific about reimbursement of partial expenditure and lengthy negotiations are necessary to ascertain the amount of reimbursements which will be forthcoming. In some situations where bureaucratic complexities must be overcome before payment, reimbursements may be made after all lots in a subdivision are sold and profit reported for tax purposes. Similarly, refunds of utility deposits depend upon contractual arrangements between a developer and a utility company. The clause usually terminates payment after the expiration of a fixed period, whether the developer has sold

all lots or not. This creates a problem for developers to employ accounting procedures which reckon the recovery of cost of the above items before reporting taxable income.

As far as inclusion of the original cost of roads, sewers, etc. or deposits paid to utilities for extension of service is concerned, the income tax point is cleared up by Rev. Rul. 60-3 CB 284 and Reg. 1.1011-1. A developer may include the entire expenditure and utility deposits in computing the cost of improved lots even though he might later receive repayment of all or part of such payment, provided he does not hold title to such facilities and such expenditure is directly related to improvement of lots for purpose of sale. However, there is some ambiguity in the treatment of partial reimbursements and utility refunds. Gerald Brighton suggested the following possible treatments, although his discussion was concerned only with utility deposit refunds.²⁹

1. Reimbursement is not income because it is:

- (a) Refund of a 'prepaid asset' separate from the development costs. (This has been overruled in Divine Jr., DC TEM, 7/2/62).
- (b) Return of capital and therefore should be deducted from the cost of development of a subdivision.

2. Reimbursement is income because it is:

- (a) Received in the normal course of business
- (b) "Recovery income" to the extent of the tax benefit from an earlier deduction, under authority of Section 111.

²⁹ Gerald D. Brighton, "Choosing the correct Treatment for Subdivider Utility Deposits Refunds", The Journal of Taxation, September, 1969.

In cases where all lots are sold within the contracted period and the entire amount of a utility company deposit is refunded, there will be no effect upon the total reported income from a subdivision, whether the refund is treated as income or a reduction in the cost of development. However, the timing differences will be important for computing periodic income for tax purposes.

The survey results show that only 6% of the companies treated reimbursement and utility deposit refunds as income of the period when the amount was received. In these cases, the amounts involved were a low percentage of the initial outlay. However, one of the companies capitalized the deposits paid as a 'prepaid asset' and amortizes it over the life of the asset. Since the title of the facilities, which could be separately identified, belonged in this case to the company, it could avoid Rev. Rul. 60-3 CB 284 and the judicial ruling under the Divine Jr. case. Ninety four percent of the companies do not consider partial reimbursement as income, because it is a return of investment to be credited to the subdivision account or the item of expenditure account. Generally, a receivable account to the extent of expected reimbursements or refunds is opened. The balance which will not be recovered is included in the cost of improved lots on a pro-rata basis. In cases when the contracted time period between a developer and a utility company expires before the entire amount is reimbursed and all lots are sold, the inventory value of unsold lots or the work in progress is increased by the unrecovered balance. As to refunds which are paid after all lots in a subdivision are sold, mostly in subsequent periods, when reversing of entries and recomputation of taxable income is not feasible these

are treated as miscellaneous revenue.

Valuation of Repossessed Lots

Section 1038 and the Treasury regulations under section 1038 provide that:

- (1) The nature and amount of gain on repossession of lots does not vary when lots are sold on the installment plan or other deferred payment sale basis.
- (2) Recognition of losses on repossession are not allowed; also no bad debt deduction is allowed when lots are repossessed by a developer to satisfy the obligation of a defaulter.
- (3) Application of the rules is mandatory.
- (4) Recognition of gain is limited to the lesser of the following two amounts:

- (i) Difference between the profit at the time of sale and (a) the amount of profit already reported on installments received by a developer, and (b) repossession costs

Original profit on a lot	\$250
Less: Reported gain on installments received	<u>100</u>
Gain on repossession	<u>\$150</u>

- (ii) Difference between the amount of installments collected and (a) the profit reported as realized on the collected installments, (b) repossession costs

Payments received	\$500
Less: Reported gain on installments received	<u>100</u>
Gain on repossession	<u>\$400</u>

Rev. Reg. 1.1038-1(h) is also applicable to a developer to compute the value of a repossessed lot. Examples in regulation 1.1038-1(h) illustrate first the determination of indebtedness extinguished by reacquisition of property so that adjusted value of the indebtedness at the date of reacquisition of the lot can be computed. Secondly, the sum of money spent in connection with reacquisition and any gain recognized on reacquisition are added to the adjusted basis to arrive at the value of the repossessed lot. In other words, the value of the lot is computed in two steps:

Step 1: Adjusted Value of the obligation = Balance due on note at the date of reacquisition Less Unreported gain on installments not collected at the date of reacquisition.

Step 2: Value of repossessed lot = Adjusted value of obligation Plus gain recognized on reacquisition (or Minus loss on reacquisition) Plus cost of reacquisition.

The survey results indicate that developers use the following five methods for valuing repossessed lots:

- (i) Balance due on contract
- (ii) Market price of repossessed lot or (i) whichever is lower
- (iii) Original cost or (i) whichever is lower
- (iv) Original cost
- (v) Original cost or market value whichever is lower.

None of the above methods is in fact acceptable for valuation of repossessed land for tax purposes. Consequently, for tax purposes, developers have to value each repossessed lot separately. Since the majority of them use the installment method for tax reporting purposes, they do not find it inconvenient to revalue those lots as required under section 1038 for tax purposes.

Revenue realized from sale of sand, gravel, timber, etc.

If a substantial amount is realized on the sale of sand, gravel, timber, etc. and the terms of sale indicate that these are royalties or payments for a lease contract or rentals received in the ordinary course of business, the proceeds are treated as ordinary income of a developer. However, if the contract covering the transfer of an interest in sand or gravel properties indicates that payment is sale price of the property (i.e., sand, gravel, etc.) rather than a rental charge or royalty, capital gains treatment is possible under Code section 1221. In L.L. Gowans,³⁰ the gain was allowed as capital gain on the grounds that the primary motive was not the exploitation of deposits but the preparation of the property for developing a real estate subdivision. In this case, although payments were to be made monthly by a company to remove all of the "black sand" underlying a described property, the primary motive was considered important in determining the nature of the gain. Similarly, in a recent case, A.T. Dingman³¹, proceeds from the sale of fill from a site which was

³⁰L.L. Gowans, 246 F.2d 448 (CA-9, 1957).

³¹A.T. Dingman, 303 F.Supp. 110 (1969).

to be used as an industrial building site was allowed as capital gain. In this case, the subcontractor was not only required to pay for the fill, but also to grade the land and replace the top soil.

The survey results show that due to subcontracting features in the industry, whereby subcontractors charge the price of grading after deducting the amount of revenue they might realize from the sale of such products, this item of revenue is of relatively small importance to developers. Impliedly, the revenue is treated as a reduction of cost of developing a parcel of land, since only the actual expenditure incurred on grading, etc. is included in the cost of improvements. On the other hand, surprisingly, where the amounts are substantial, developers treat revenue realized as miscellaneous ordinary revenue rather than revenue subject to capital gains treatment.

Use of Multiple Corporations

The survey results show that the use of multiple corporations as subsidiary companies is very common in the land development industry. Eighty seven percent of the sample companies owned one or more subsidiary corporations to perform various functions of development. Both tax and non-tax related reasons underlie the use of multiple corporations, although the taxation consideration seems to have been the most significant factor in multiplying organizations in the industry.

(a) Tax advantages

1. Splitting of Income between multiple corporations:

Taxation considerations in the use of multiple corporations are apparent in the working of two opposing forces on the industry.

On the other hand, almost every article or book written on tax planning before the enactment of The Tax Reform Act of 1969, on tax planning for real estate developers has advocated the judicious use of multiple corporations to gain tax advantages.³² Under the Tax Reform Act of 1969 such savings in income tax will be phased out through 1970-1975. Also many court decisions concerning the use of multiple corporations involved developers of real estate with grandiose schemes of a large number of multiple corporations for one or more subdivisions. Many court decisions have been decided against developers, which in chain reaction has led to a tightening of the Federal income tax law.³³

Every executive interviewed during the company visitations believed in the tax advantages of multiple corporations and stressed that in many situations taxation considerations have dictated the use of multiple corporations.

³²As a sample, the following narrate the theme: Frankel, Samuel F. "The Special Tax Problems of the Builder Who Operates in Corporate Form", The Journal of Taxation, January 1967, p. 50; Jones, Robert, "Tax Problems of Real Estate Developers-Acquisition Through Disposition", The Journal of Taxation, January 1966, p. 32; LeRoy H. Cole, "Accounting for Real Estate Developments", The Journal of Accountancy, October 1960, p. 63; Collins, William E., "Forms of Organization for Subdividers", American Bar Association, Section of Taxation Bulletin, January 1965, Part 2, p. 25; Kaplan, Morris A., "Multiple Corporations", p. 54 in Irving Schreiber (Ed). How to Plan for Tax Savings in Real Estate Transactions, The Macmillan Company (1969).

³³The following articles give an excellent discussion on the historical development and present status of the law. Frankel, Samuel (footnote 32); Paley, Robert J., "Multiple Corporations Face Ever Increasing Attack: Realty Developments Vulnerable," The Journal of Taxation, March 1968, p. 130-7; news comment, "Income Tax Aspects of Real Estate Developments," West Virginia Law Review, April 1961 (also condensed in Monthly Digest of Tax Articles, October 1961, p. 61-6).

2. Position prior to the Tax Reform Act of 1969

Before the passage of the Tax Reform Act of 1969, the principal advantage of using multiple corporation was to obtain additional surtax exemption and accumulated earnings credit. Under section 11(d), a bonafide corporation is entitled to an exemption from surtax on the first \$25,000 of its taxable income. Even where a certain common ownership existed between corporations, Code section 1562 provided for 6% additional normal tax which worked out to only 28% normal tax compared to an earlier 30% normal tax. In addition, section 535(c)(2) allows each such corporation a minimum credit of \$100,000 which may be applied against the amount of undistributed income of the corporation before the accumulated earnings penalty tax will be applicable.

The tax benefits arising from organizing a business into multiple corporations have been denied or limited under one or more of the following different sections:

(i) Sham Theory under Section 61:

In order that corporation be considered a bonafide corporation for tax purposes, it is necessary that it is established for some business purpose or it is engaged in substantive business activity. Therefore, whenever a developer uses multiple corporations, it is necessary for him to establish that separtae corporations are not merely 'shams'. If proved shams, the income which is reported by several corporations is attributed (under section 61) to the corporation that actually earned it.

The landmark decision that multiple real estate corporations might be shams was in Aldon Homes, Inc.³⁴ In this case, Aldon Homes, Inc. was a real estate corporation which organized sixteen corporations to develop a single tract of land and transferred several lots to each of the corporations. Each corporation had a separate office, kept separate sets of books and operated separate bank accounts. But the control of these corporations was in the hands of one or more members of the management group of Aldon Homes, Inc. and no separate employees were employed by them. The Tax Court did not recognize the existence of multiple corporations and allocated the entire income of these corporations to Aldon, who was an individual taxpayer. The Tax Court reasoned that these corporations lacked any substantial business purpose and were merely shams organized only for tax benefits. Therefore, the income was entirely attributable to the activities of Aldon. The same reasoning was applied in the case of Shaw Construction Co.³⁵ In this case, Shaw and his wife were the sole stockholders of Shaw Construction Co., and eightyeight separate corporations were organized by them and their family members. These corporations acquired title to lots in several subdivisions, which were transferred to them by Mr. and Mrs. Shaw or Shaw Construction Company. The development corporations were organized with a minimum amount of capital and had no other assets or employees or separate telephones. The court regarded these multiple corporations as shams, primarily to obtain tax benefits and the entire net income was attributed to Mr. and Mrs. Shaw.

³⁴ Aldon Homes, Inc. TC 582 (1959).

³⁵ Shaw Construction Co., 323 F. 2d 316 (CA-9, 1963).

(ii) Section 269 attack: Section 269 is frequently applied to prevent any deduction, credit or allowance if control of the corporation was acquired principally for evasion or avoidance of income tax.

Section 269 provides that if any person or persons acquire-- directly or indirectly-- control of a corporation or property of another corporation which was not controlled immediately before such acquisition by the acquiring corporation or its stockholders, with a principal purpose of avoiding or evading income tax by securing the benefit of deductions, credits or other allowances which would not otherwise be available, the Commissioner may disallow such deduction, credit or other allowances. For the purpose of this section control is defined as the ownership of stock 'possessing at least 50% of the total voting power of all classes of stock entitled to vote, or at least 50% of the total value of the shares of all classes of stock of the corporation.'

In the application of section 269, the acquisition of the requisite degree of control does not automatically result in loss of the additional surtax exemption unless the 'principal purpose' of the acquisition is tax avoidance.³⁶ However, it may be noted that even if a tax avoidance purpose is found, the Commissioner has authority under Section 269(b) to allow the exemption in part of such allowance if it will not result in actual evasion or avoidance of tax. Also, under section 269(h)(1) the tax benefit may be distributed, apportioned or allocated between or among the corporations and/or properties.

³⁶James Realty Co., 280 F.2d 394 (CA-8, 1960).

For example, the Tax Court upheld the commissioner's apportionment of a single surtax exemption to sixteen corporations in Kessmar Construction Co.³⁷ In this case the factual situation was almost identical to the Aldon Homes, Inc. case. Here, the promoters of a housing development formed the sixteen corporations to hold title to lots and to contract for construction of houses. A building corporation controlled by the promoters constructed and sold the houses. The Court found that the sixteen corporations were formed for the purpose of avoiding tax and allowed only one surtax exemption.

(iii) General Power under Section 482: If a corporate entity cannot be disregarded, section 482 has been used to prevent splitting of income between multiple corporations controlled by one organization. "The basic thrust of this section is to prevent artificial shifting of income, deductions, credits and allowances between two or more organizations or businesses owned or controlled by common interests".³⁸ Also, this section can be used by the Commissioner to enforce a clear reflection of the income of any organization. The Treasury regulations define an organization to include any kind of organization-- a sole proprietorship, a partnership, a trust, an estate, an association or a corporation. Also, the definition of trade or business is expanded to include any 'trade' or 'business' activity. Since the term control is not defined under section 482, as in the case in section 269, the Treasury regulations give an all-inclusive definition of

³⁷ Kessmar Construction Co., 39 TC 778 (1963) aff'd, 336 F.2d 865 (CA-9, 1964).

³⁸ Robert J. Paley, Multiple Corporations, Chapter 49 in J.K. Lasser's Income Tax Techniques, Vol. 5, p. 49.07.

control to include any kind of control, "direct or indirect, whether legally enforceable and however exercisable or excessive". It is reality of the control which is decisive and not its form or the mode of its exercise.³⁹ This section is very broad and can apply to almost any type of inter-company transaction.

Section 482 has not been used to a great extent to disallow a multiple corporate structure as used by developers, although section 482 was brought up in the Kessmar Construction Co.'s case, discussed in the previous section. In recent years, two other interesting cases have come up in the courts which involved the invoking of section 482. The first one, J.R. Land Co.,⁴⁰ involved the tax liability of three multiple corporations under single control. In this case the three corporations were used in rotation to conduct a real estate development business so that no corporation had taxable income of over \$25,000 in any year. When one corporation was active, the other two were dormant. The method of limiting income was to allocate to each corporation options held by Mr. Adam (who controlled the three corporations) on various building sites within a single tract of land. The court held that the principal purpose of creating three corporations was avoidance of tax by securing the benefit of additional surtax exemptions, and reallocating the income and expenses of the three corporations to one corporation. In the second case, B. Forman Co. Inc.,⁴¹ the issue involved inclusion of imputed interest on loans

³⁹Reg. 1.482-1.

⁴⁰J.R. Land Co., F 2d 607 (CA-4, 1966).

⁴¹B. Forman Co., Inc., 54 TC 88 (1970).

given to a third company formed by two other corporations which owned 50% of the stock in the third corporation. In this case, the third corporation constructed a small shopping center that was of mutual benefit to all three corporations. Both stockholder corporations made loans to the third corporation without charging interest. The Internal Revenue Service contended that two corporations were in fact a partnership and controlled the third corporation. The Tax Court reversed the service and held that neither of the two corporations had the requisite control of the third corporation. For this purpose, 'control' was considered to mean actual, practical control, rather than depending upon the percentage of stock ownership. It was reasoned that to treat the two unrelated corporations as a partnership would impart a common objective test and would require an unwarranted elasticized reading of the statute.

(iv) Limitations under section 1551:

Section 1551 is limited in its application solely to disallowance of the surtax exemptions and the \$100,000 accumulated earnings credit. The conditions for application of section 1551 are: (1) A transfer of property other than money; (2) creation of a transferee corporation for the purpose of acquiring such property or where transferee corporation was not actively engaged in the business at the time of acquisition of the property; and (3) control is acquired by transferer or transferers in the transferee corporation during any part of the taxable year. For purposes of section 1551, two tests were applied to determine control; (1) acquisition by five or fewer individuals of that inactive corporation by owning at least 80% of the total combined voting power of all classes of stock to vote, or

at least 80% of the total value of shares of all classes of the stock of each corporation and (2) five individuals must own either more than 50% of the total combined voting power of all classes of stock entitled to vote or more than 50% of the total value of all classes of stock of each corporation in essentially the same proportion.

Section 1551 is not applicable if the transferee corporation is able to establish that the major purpose of forming the additional corporation is not for tax reduction and there exists business reasons. In Hiawatha Home Builders, Inc., a separate corporation was formed to construct homes for a cement and masonry corporation and the court held that the separate corporation could claim a surtax exemption since it was not established for splitting income.⁴²

(v) Other limitations: Sections 1561, 1562 and 1563, which were added by the Revenue Act of 1964 provide additional restrictions on tax benefits from splitting income among multiple corporations. Section 1561 provides for automatic denial of multiple surtax exemptions and only one exemption is allowed in 'controlled group' situations solely by virtue of the existence of common ownership of the corporations involved irrespective of whether any transactions have occurred between the corporations, or reasons for existence of the corporations as separate entities, and irrespective of whether the corporations are engaged in similar or related businesses. A 'controlled group' includes (a) a parent-subsidary group where at

⁴² Hiawatha Home Builders, Inc., 36 TC 491 (1961); Also in footnote number 26, Robert J. Paley, op. cit., p. 49.03(2) cites cases where taxpayers have achieved victories.

least 80% of the stock of the subsidiary is owned by the parent;
 (b) brother-sister group where two or more corporations are each at least 80% owned by one individual, estate or trust; (c) a combined group where there are three or more corporations and each of which is a member of parent-subsidiary group or brother-sister group, and one of which is a common parent corporation.⁴³

It may be pointed out that the committee reports for the Revenue Act of 1964 stressed that the above provisions are supplementary to sections 269, 482, and 1551.⁴⁴ In fact, these provisions specifically regulate the surtax exemptions allowable to multiple corporations.

4. Position after the Tax Reform Act of 1969

(i) Restrictions under section 401 of the Tax Reform Act of 1969: Section 401 of the Tax Reform Act of 1969 finally eliminated substantial multiple corporation tax benefits except during the transitional phase-out period from 1970-1974. For taxable years beginning in 1975, amended section 1561 provides that the component members of a controlled group of corporations are limited to only one \$25,000 surtax exemption, and to one \$100,000 accumulated earnings credits. This restriction is applicable to a controlled group of corporations of the following types:

- (a) The parent-subsidiary group
- (b) The brother-sister group
- (c) The combined group

⁴³Reg. 1.1563-1(a); How the requisite percentage of stock should be determined is explained in Reg. 1.1563-2.

⁴⁴H. Rep. No. 749, 88th Cong., 1st sess., 1964-1 (part 2), CB 242; Also see Reg. 1.1561-1(b).

There is no change in definition of parent-subsidary controlled group since the previous definition in section 1561 was apparently inclusive enough to require no change. It includes one or more chains of corporations connected with a common parent corporation through 80% ownership, either by way of voting power or value of stock. The combined group also remains the same, that is, three or more corporations, each of which is a member of a parent-subsidary group or brother-sister group, and one of which is a common parent corporation. The definition of brother-sister group is changed and significantly expanded. The new definition is very closely comparable to the definition under section 1551. The expanded definition includes two or more corporations which meet the following two tests:

- (1) The same five or fewer persons (individuals, estates, and trusts) own 80% or more of the total combined voting power or total value of shares of all classes of stock of each corporation, and;
- (2) the same five or fewer persons own more than 50% of the voting power or value of the aggregate of the stock of each corporation, when the stock of each person is considered only to the extent it is owned identically in each of the corporations. For example, a person owning 40% stock of one corporation and 60% of another corporation is considered as owning 40% of each corporation identically and only 40% of each would be considered for 50% ownership test.

To ascertain ownership for the definition of a controlled group, the excluded stock ownership provisions of section 1563(c)

and constructive ownership rules of section 1563(e) are to be met.

In other words, a careful examination of all stockholdings of individuals, corporations, partnerships, trusts, estates and private foundations is necessary to determine what percentage of voting power is owned, and whether two or more corporations might constitute a controlled group.

A new section 1564 and the transitional rules under section 1564 provide that the surtax exemptions and the accumulated earnings credits elected by the controlled group will be phased out over the five year period from 1970 through 1974. During this period, one full \$25,000 surtax exemption and \$100,000 accumulated earnings credit will be allowed to the member which is elected by the component members. For the other members of the group, the surtax exemption and the accumulated earnings credits are gradually reduced during the transitional period to the following amounts:

Taxable years including December 31	Surtax Exemption	Accumulated Earnings Credits
1970	\$20,833	\$83,333
1971	16,667	66,667
1972	12,500	50,000
1973	8,333	33,333
1974	4,167	16,667
1975	0	0

During the transitional period, the 6% additional tax penalty imposed on the first \$25,000 of income of each corporation of a controlled group which claims multiple surtax exemptions is applicable, but is imposed only on the reduced amount claimed during the year. Thus, in the year 1971, a component which elected the full exemption

will pay 22% plus 6% tax on all income up to \$25,000 and a 48% above that amount. The other component members will pay 22% plus 6% on income up to \$16,667 and 48% tax on all income above that amount.

It may be pointed out that since section 401 amended sections 1561 and 1562, it is implicit that the transitional rules under section 1564 do not limit the attack on multiple corporate structures under sections 61, 269, 482 and 1551 as discussed in the previous section during the transitional period.

The above restrictions imposed by the Tax Reform Act of 1969 clearly indicate what one author called the "demise of multiple corporation benefits, (which was) initiated partially in the Revenue Act of 1964, and finally completed by the new Act."⁴⁵ Or as another writer puts it:

"The tax practioners' compulsion to widen 'loopholes' to their outermost limits has resulted in the effective elimination of virtually all the substantial tax advantages of multiple corporate structures Moreover (section 401) will eliminate the source of much litigation and the subjective 'major purpose' investigation ... and abuse of the tax benefits of multiple corporations."⁴⁶

(ii) Relief measures for controlled groups:

Two liberalized provisions are enacted in the Tax Reform Act of 1969.

⁴⁵ James S. Eustice, "Corporations and Corporate Investors", Tax Law Review, May 1970, p. 560.

⁴⁶ Jerome H. Kringle, "Coping with the 1969 Act's tough new rules for corporate groups", The Journal of Taxation, March 1970, p. 136-39. Also there is an interesting discussion of new rules in Forrest W. Brown, Jr., "New Rules Hit Affiliated Corporations: Action Needed this Year to Minimize Added Tax Burdens", Taxation for Accountants, July 1970, p. 168-171.

(1) Section 1564(b): This section provides that during the transitional period, a controlled group may elect to increase its dividend received deduction under section 243 from 85% to 100% at a rate of two and one-half percent per year even when the controlled group is claiming the additional but reduced amount of surtax exemption. However, it is stipulated that the controlled group must have made an election under section 1562 before April 22, 1969, and the dividends must be paid out of earnings and profits of taxable years ending December 31, 1970 through December 31, 1974. In other words, a newly formed group will not be entitled to this additional benefit because it will not have an election filed with the Internal Revenue Service. Also, if the controlled group is an affiliated group according to the definition of section 1504(a), it is not entitled to the additional benefit because requirements under that section are not the same as requirements under section 1561.

(2) Consolidated return election: Another relief measure relates to the filing of a consolidated return by multiple corporations. Previously, if a parent-subsidary controlled group of corporations which had made an election to claim multiple surtax exemptions now wanted to file a consolidated return, it was required to terminate that election. Also, in the consolidated return, the net operating loss of any member of such group was not to be carried over and deducted against the income of other members of such group. The loss could only be applied against the income of that member which sustained the loss. The provisions of the Tax Reform Act of 1969 allow corporations which had elected multiple surtax exemptions to file a consolidated return, waive its multiple exemption for prior years,

and use prior net operating losses against income of other members of the group. In other words, the group will automatically forego any part of the additional surtax exemptions during the transitional period because of its termination of the election. To take advantage of this relief measure, the group must decide promptly, since a consolidated return for the taxable year 1970 must be filed to be entitled to get the benefits. The revised returns have to be filed from the date the election was effective for the group.

(b) Non-tax advantages: The following are non-tax advantages of the use of multiple corporations:

(i) Limited liability: This reason is advanced when a corporation is engaged in speculative as well as non-speculative ventures. Because of limited liability of corporations, the assets of one corporation engaged in non-speculative ventures are shielded from the risks of the business of another corporation engaged in speculative ventures. Also, "this may be useful or even essential in obtaining outside debt financing where a creditor has more confidence in one business, or one phase of business, than another phase, and (he) is unwilling that cash or assets acquired with the credit (he has) furnished be subject to risks of another business."⁴⁷

Investigations during company visitations, however, showed that the advantage of limited liability existed only in theory. In practice, the owner or parent company was required to guarantee the obligations of the affiliated companies. In case of default of a subsidiary or affiliated company, the parent company can suffer

⁴⁷ Martin Worthy, "Multiple Corporations", Fourteenth Annual Tulane Tax Institute, (1965), p. 138.

substantial damage to its credit standing and general reputation.

(ii) Administrative advantages: Through delegation of administrative duties and responsibilities by separation of various aspects of the business into autonomous administratively convenient corporations, advantages of de-centralized management may be achieved. For example, five corporations may handle each of the following five functions, with an expert management group in charge of each corporation:

- (1) Acquisition of land and sponsorship of the overall project;
- (2) construction of off-site improvements; (3) construction of houses;
- (4) sale of completed houses; and (5) management of properties developed for rental income.

In practice, the administrative advantages will depend upon many other factors such as co-ordination between various management groups, incentives and operation methods of various managements, etc. For example, during an interview, one of the controllers pointed out that their company was able to achieve many administrative advantages without resorting to the use of a multiple corporate structure. This company did not include any subsidiaries, but had seven divisions organized under a profit center concept.

(iii) Separate corporation for specialized activities: This reason is pertinent when specialized activities such as utilities operation and the running of clubs or related recreational facilities may necessitate organizing a separate corporation to comply with the regulatory laws governing the operation of such activities. For example, a utility company is subjected to governmental regulation in operation and rate administration. A separate corporation with its own assets and liabilities will facilitate the rate administration

and compliance with regulatory provisions without causing any additional problems for the parent company which is engaged in the subdividing activity. Similarly, a golf course, or other recreational facilities may be more conveniently operated by a subsidiary rather than by a division of the parent company to meet various special state or city laws.

The survey results also indicate that almost all companies that have to supply utilities to their subdivisions have a subsidiary utility company. The regulatory framework within which they have to operate is advanced as the most important reason for organizing such companies. A few companies also have hotel subsidiaries or subsidiaries providing recreational facilities such as golf courses, lakes, etc. Along with the specialized nature of the activities of these operations, other reasons such as diversification of ownership and expertise of personnel to manage these activities are the reasons attributed for the use of multiple corporations.

(iv) Other non-tax advantages: Labor relations, customer relations, diversification, and flexibility of ownership are advanced as other reasons for the use of multiple corporations.⁴⁸ Although these reasons may provide substantial advantages in particular instances, generally in actual practice they are given minor consideration by developers. For example, usually a strong corporation is in a better bargaining position to facilitate labor relations than smaller multiple corporations; customers may like to deal with one company to solve

⁴⁸Ibid, p. 136-138; Robert P. Jones, op.cit., p. 33; LeRoy Cole. op.cit., p. 63; Kaplan, Morris op.cit., p. 54.

complex problems related to financing, construction of structures, etc. rather than with separate corporations offering each services. Diversification and flexibility of ownership may only be important for those related industries that supply the large quantities of appliances and materials to builders, or to railroad companies or petroleum companies that have options over large tracts of land that have been secured at low prices a long time ago.

CHAPTER V

THEORETICAL CONSIDERATIONS AND LAND
DEVELOPMENT ACCOUNTING TECHNIQUES

In the previous chapter accounting procedures and practices employed by developers were analyzed critically to trace the impact of income tax considerations on the selection of alternative methods in accounting for various transactions.

In this chapter, first, main assumptions and accounting concepts underlying the alternative methods and the 'accounting standards' as outlined in "A statement of Basic Accounting Theory" are reviewed briefly.¹ The brief review attempts to shed some light on the relative importance of various concepts to accommodate peculiarities of the land development business, and facilitate the application of the "accounting standards" which are proposed as evaluation criteria for accepting or rejecting a method. Later, the survey results that are summarized in Chapter III are evaluated critically and the foundation is established for proposing accounting system changes. These will be introduced in the next chapter.

Assumptions and Accounting concepts

1. Going Concern Assumption:² For recognizing the accounting entity,

¹ A Statement of Basic Accounting Theory, American Accounting Association (1966), p. 7-13.

² In accounting theory there is a semantic problem related to definition of 'assumptions', 'concepts', 'postulates', about going concern and other basic definitions. As the problem of definitions have not been finally resolved, the terms 'concepts', 'assumptions' and 'postulates' are used interchangeably.

it is generally assumed that the business entity has a long life or is intended to continue for long periods. In the absence of this assumption, the accounting procedures applicable to an entity which has a short life and must be liquidated may differ considerably as far as measurement of income and valuation of assets are concerned. The liquidation value of assets may be more relevant than historical cost, and the determination of income for sub-accounting periods may become less significant. Owners and other beneficiaries except taxing authorities may prefer to wait until the entity has completed its purpose.

In the land development industry some entities are organized for engaging in specific ventures of limited duration and others are intended to continue for a long period. Consequently the going concern assumption is of relatively different importance in selecting accounting procedures under the two different sets of intentions.

Empirical evidence gathered during company visitations shows that usually a separate set of books, either a complete set or a book showing expenses and revenue only, is kept for each specific venture. Imputed interest on capital invested is also included as a cost if co-venturer's contribute different amounts when profit is not shared in proportion to their contributed capital. Assets, (mostly land and in some cases heavy equipment) are valued at current appraised cost. The methods for timing of recognition of revenue where value of land bought by one co-venturer is different from his original cost varies widely. The legalities of joint-venture agreements dictate

the timing of recognition of income. In some cases recognition is postponed until all lots are developed; profit is shared between co-venturers in a ratio which recognizes the land value differential. In other cases the co-venturer who contributed the land recognizes the revenue at the time of contribution to joint venture based on the difference between his original cost and appraisal value. In some cases a combination of both methods is used to recognize a part of revenue at the time of starting a joint venture, and the rest of the revenue is recognized when improved lots are sold.

2. Conservatism: One of the oldest accounting conventions is that of conservatism. "The general constraint of uncertainty has served as a basis for the traditional concept of conservatism ---- (it) is generally used to mean that accountants should report the lowest of several possible values for liabilities. It also implies that expenses should be recognized sooner than later and revenues should be recognized later than sooner."³

In land development accounting two opposite forces are visible in the measurement of income and valuation of assets. When the industry was characterized by small land developers who organized as partnerships or closely held corporations, the concept of conservatism and related tax advantage had a great influence on accounting procedures and practices employed by developers. The owners of the companies were intimately connected with operations and in many cases high risk and uncertainty surrounded all aspects of development activity. Therefore, uncertainty was reflected in conservative accounting treatment. Even

³Hendriksen, Eldon S., Accounting Theory (Second edition), Richard D. Irwin, Inc., Homewood, Illinois, 1970, p. 118.

at the present time, privately held corporations place greater emphasis on this concept and use it as a guiding principle in selection from among alternative methods. On the other hand, investigation shows that the publicly owned corporations are stressing that conservatism is poor way of handling risk. For example, when recognizing revenue from installment sales many large publicly held corporations recognize revenue from these sales at the time of signing the sale contract and receipt of down payment instead of on the installment method.⁴ Publicly held land development corporation are sometimes organized by entrepreneurial, high promotion types of individuals, whose personal images as well as personal wealth are enhanced by impressive stock market price performance. Hence, the temptation is strong to adopt those accounting methods that will show rapid earnings improvements in the short run. It follows that pre-recognition of unrealized income becomes attractive in such firms. A similar tendency is apparent in capitalizing carrying charges and advertising expenditures by public corporations for book purposes.

From a theoretical point of view, the lower emphasis on conservatism seems to be a better course. The author agrees with Hendriksen's remark which follows, and suggests that relatively lower importance should be attached to this concept:

"At its worst, it results in a complete distortion of accounting data. Its main danger is that, because it is a crude method, its effects are conspicuous. Therefore conservatively reported data are

⁴Abraham J. Briloff, "Castles of Sand? An Expert Questions the Accounting Practices of Land Development Companies." Barron's, February 2, 1970, p. 3.

not subject to proper interpretation even by the most informed readers."⁵

3. Other Fundamental Concepts: Beside "going concern" and "conservatism", there are several other concepts which form the foundation of accounting as far as selecting accounting alternatives by developers is concerned. The more important ones are: historical cost, matching of revenues and expenses, consistency, materiality and objectivity. The 'accounting standards' do not include the discussion of these concepts explicitly. But, to make the 'accounting standards' operational these concepts are implied in the evaluation and analysis of various methods. Since accounting procedures and practices employed by developers are evaluated on these standards, a separate description of these at this point would duplicate later discussion. Also, since a partial adherence to some of the standards is possible to fulfill the information user needs which are unique to the industry, the discussion of concepts at the point of discussing their application may assist in deciding the appropriate degree of adherence when complete application of a standard is not feasible.

Accounting Standards

Four basic standards of accounting and five guidelines for communication are suggested in A Statement of Basic Accounting Theory. These are:⁶

1. Relevance: It requires that information must bear upon or be usefully associated with actions it is designed to facilitate or results desired to be produced. Known

⁵Hendriksen, op. cit., p. 119.

⁶A Statement of Accounting Theory, American Accounting Association (1966), Chapter II, p. 7-18.

or assumed informational needs of potential users are of paramount importance in applying this standard. The form of information and timing of presentation exerts influence on the designated actions. Also, it is considered the primary standard.

2. Verifiability: It is that attribute that requires similar measures or conclusions to be reached by two or more qualified persons who examine the same data, evidence or records. It is considered important because of diversity of interests which are sometimes opposite in nature.
3. Freedom from bias: It means that facts have been impartially determined and reported; and techniques employed in measuring data are free from built-in bias. For external reporting, even internally useful but biased information is considered intolerable.
4. Quantifiability: It relates to assignment of numbers to information being reported. Monetary as well as non-monetary measures are acceptable, provided it is meaningful and meets the other standards. However this standard places a constraint of a 'caveat' when non-quantitative information is presented to imply measurability. Therefore when such non-quantitative information in a quantitative form is reported without a 'caveat' the accountant must assume responsibility for its measurability.

The following five guidelines for communication are recommended:

1. Appropriateness to expected use.
2. Disclosure of significant relationships.
3. Inclusion of environmental information.
4. Uniformity of practice with and among entities.
5. Consistency of practice through time.

Evaluation of Land Development Accounting Procedures and Practices

1. Classification and accumulation of costs

The survey results show that the following four alternative methods are used by developers to classify and accumulate costs:

- (i) All items of land cost and land development cost are accumulated under one heading then allocated to individual lots.
- (ii) Land cost and land development cost are classified under two separate headings (viz. land cost and land development cost) but allocated in total to individual lots.
- (iii) Items of expenditure are classified and accumulated under separate headings (viz. land, roads, side walks, etc.) but allocated in total to individual lots.
- (iv) Items of expenditure are classified and accumulated under separate headings and each item or group of items separately allocated to individual lots.

When the four methods are evaluated on the relevance standard, the fourth method meets the crux of the relevance standard -- usefully associated with the action it is designed to facilitate or the result it is desired to produce. The survey results indicate that developers consider cash flow analysis, budgeting and estimating, and other managerial accounting objectives more important than preparation of the financial statements. The fourth method of classification systematically assigns original transactions at the time of exchange into various classes or groups of classes and subclasses having common significant characteristics which distinguishes a given class from other classes. Because this process extends into the allocation problem, analysis and interpretation of reports, etc. the fourth method seems to be the most relevant. It avoids additional complexities of allocating various items of costs at later points of time into unrelated subgroups when preparing analytical reports needed by management.

However when the other three standards viz. verifiability, freedom from bias and quantifiability are applied, the fourth method has a relatively lower degree of conformity to these standards than

the first and second methods in which there are one or two groups respectively. In the fourth method, occasionally quantification of attributes in various classes or subclasses may require arbitrary allocation of one amount and may cause bias. Verification may become less objective. For example a heading -- curbs and roads -- may be divided into the following sub-classes in a classification pattern:

- (a) curbs
- (b) gutters
- (c) fine grading
- (d) curbs - concrete base
- (e) road base
- (f) binder course (1st. lift)
- (g) intermediate course
- (h) surface cost
- (i) entrance and access roadways
- (j) guard rails and barriers

Also, because sub-contracting is quite common in the industry, a given sub-contract may involve more than one of the above operations. Engineering specification are helpful in the allocation process, but these are arbitrary as a basis of allocation in some cases. Considering the ultimate use of the information which is mostly for internal reporting for management, a lower degree of conformity to the standards of verifiability, quantifiability and freedom from bias is tolerable. Since relevance, the primary standard, is satisfied to the greatest degree, the functional classification offered in the fourth method seems preferable in the overall application of the standards.

Interestingly, the survey results summarized in Chapter III also confirm that 67% of the companies classify and accumulate costs under separate headings, and about 33% allocate total cost of all items over individual lots using a single basis of allocation. (Allocation methods are evaluated in a later part of this chapter.)

2. Cost of land and carrying charges

The survey results indicate that developers include the following items of expenditures in 'cost of land':

- (i) Purchase price of raw land
- (ii) Real estate taxes paid during the holding period
- (iii) Interest paid on borrowed funds invested in raw land
- (iv) Commissions
- (v) Legal expenses
- (vi) Incidental expenses.

The related question of the tax considerations involved in capitalization versus expensing of some of the above items, has already been discussed in Chapter IV.

The quantifiability, verifiability and freedom-from-bias standards for including the above items in the cost of land can easily be met because each item of cost can be determined with respect to the specific parcel of land at the time of contracting, acquisition or payment. Interest expense is easily identifiable since borrowed funds are generally in the form of secured loans against the specific parcels of land; taxes are levied on each parcel separately. Similarly, commissions and legal expenses can be related conveniently to a particular tract to meet the above three standards. Incidental expenses which include cost of options, rezoning expenses, etc. usually are also easily identifiable with a project or a tract. Occasionally, when these are of an indirect nature and therefore require allocation procedures, the materiality concept and the freedom-from-bias standard can be invoked to evaluate the inclusion of incidentals in the cost of land.

When the relevance standard is applied for evaluating the inclusion of the above six items of expenditure in the cost of a land, a discussion of arguments, for and against including those items is indicated. Because of the peculiar features of the industry, such as the nature of the raw material, land, the long periods over which that raw material must be held by developers, and the substantially large amounts of investment in it, three aspects must be considered:

- (a) Content of input cost of raw materials -- land cost;
- (b) valuation of same or part of the same raw materials, land, at the end of successive accounting periods, since a project may involve a large tract requiring many years for conversion into the final product, improved lots;
- (c) relevance from the point of view of internal reporting for determination of cost of improved lots to be meaningful to management, and for external reporting because of its effects upon the reported income measure and on balance sheet valuations.

The arguments in favor of including these items in cost of land (or what is technically termed as capitalizing carrying charges) versus not including the item (or expensing) can be briefly summarized as follows:

In favor:- (1) In order to be in the business, a developer needs raw land. Because land is a scarce resource, a rational developer has to buy large tracts in advance of his needs.⁷

If he does not buy at an appropriate time he may not be able

⁷Bennett, J.W., "Problems in Land Development Accounting," Canadian Chartered Accountant, April 1969, p. 223.

to get it or may have to pay a much higher price. The tract he purchases may be developed in five to ten years and requires investment of millions of dollars, which he has to borrow.

(2) Raw land does not produce any revenue against which expenses can be deducted or matched while the land is held for future improvement and subdividing.

(3) Developers identify one of the main objectives of the accounting system as being to provide information for obtaining the cost of improved lots which includes all items of cost associated with or identifiable with a lot. Even those who do not pinpoint cost of an individual lot stress that they view development of a tract of land as one project, and they will require determination of all costs and revenue to be associated with the project.

(4) The carrying charges can easily be identified with a parcel of land and as such must be treated as a direct cost and inventoried as part of cost of land.

Not in favor:- (1) Carrying charges may not add to the value of land. Inclusion of interest, real estate taxes, legal fees, etc. does not increase the value of land during the course of time. It is possible that the market value of land may even decrease during the holding period or an increase in market value may not be equal to the amount of carrying charges paid during the holding period.

(2) Carrying charges are period costs and therefore should be charged to the period as financing cost.

(a) Content of input cost of raw materials - land:

The three arguments in favor of capitalizing of carrying charges are relevant in order for the information to 'bear upon or be usefully associated with actions' of developers. By capitalizing the carrying charges, developers will have information available in the form which is useful in management decisions because total costs associated with their raw materials are included. Also, they must acquire land in advance of needs at the best opportunity in large tracts. The large amounts invested in their raw materials are not comparable to the investment of other manufacturing industries because the developer's raw material turnover is relatively very low. A tract of 1000 acres may be converted into improved lots in five years; and 1000 acres are substantially small when developers often hold 10,000 acres at a point in time. Capitalizing is also relevant on the second argument, since no revenue is produced currently by investment in raw land. The third and fourth arguments are obvious when the relevance standard is applied to selecting an alternative to include carrying charges as input of cost of raw materials -- land.

Both arguments against capitalizing carrying charges appear inappropriate on the points discussed in the above paragraph. The developer acquires material and applies capital and labor to them in order to create time and form utility. The costs of creating form utility are accepted as valid costs of product. Consistency requires that costs of creating time utility be treated in the same way, as valid cost of the product, not of periods. Carrying costs are valid cost of creating time utility. The argument that the carrying charges are period costs is not really relevant. Time only determines the

amount of cost incurred. The period during which these charges are incurred does not derive any benefit from the incurrence. Carrying charges are incurred with the intent of recovery in a later period when the associated revenue is to be recognized through sale. Proper matching requires, therefore, that these be deferred until associated revenue is to be recognized. The period is merely a base which is used in computing the magnitude of outflow of cash.

(b) Valuation of land: This aspect is a part of a larger issue of 'valuation of assets' which is beyond the scope of this study. However Appendix A of the Statement of Basic Accounting Theory, discusses 'making and reporting multiple measurements', and valuation of land as a fixed asset is discussed using the accounting standards as the basis. That discussion is pertinent for applying the relevance standard in the study although land is raw material rather than a fixed asset for developers. Since two values -- historical cost and current cost -- are necessary, points discussed in (a) above will be applicable for valuing land. The 'historical cost' value of land will be shown at the original purchase price plus the carrying charges incurred up to the date of presentation of the financial statements. Current cost equivalent may be computed by adjusting historical cost by 'an index of land values for the area', preferably by an index for comparable land intended to be used for similar purposes. In fact, developers are in a good position to ascertain the current equivalent cost of land because they are continuously associated with activities connected with land.

(c) Internal and external reporting: For internal reporting, capitalizing of the carrying charges is relevant for reasons discussed in (a)

above. For external reporting the users needs will dictate how the relevance standard is to be applied. In the accounting profession, the issue of needs of external users is still unresolved and hotly debated. Only tentative solutions are suggested. Most of these are based on the assumption that income statement considerations or income flows are more important than monetary valuation. Based on this assumption, capitalization of the carrying charges meets the relevance standard adequately. Along with an equivalent 'current cost' measure for the inventory of raw materials -- land, the income measurement after capitalizing the carrying charges will lead to better predictions of income flows required for evaluation of expected stock price of a company because the carrying charges are in fact a part of product (lots) cost and not an expense of the period in which they are incurred. Cost of lots to be sold will realistically include these directly associated items. Exclusion of the carrying charges from cost of improved lots will lead to misleading subsequent (as well as current) income measurement, which in turn may predict misleading values of the several elements of decision models of external users.⁸

3. Imputed Interest as an Input Cost

Imputed interest is an implied interest charge on non-borrowed funds and does not involve any cash flow or a transaction from the accounting point of view. For a developer it can be considered as a service value of funds invested in land awaiting conversion into marketable product -- improved lots. In fact it represents an 'economic

⁸To limit the evaluation of procedures and practices to a reasonable space, the elements and decision models of external statement readers are considered beyond the scope of the study.

cost' rather than 'actual cost' of funds tied up in raw materials.

The traditional accounting conventions do not consider many nontransaction data to fall within the realm of accounting. Consequently, for developers, imputed interest has not been considered as a proper item of input cost to be added to raw materials. For example, the description of the nature and treatment of land cost in The Accountants' Handbook, specifically forbids the inclusion of interest on funds invested by developers unless actually paid on borrowed funds:

"There is in general no warrant in accounting practice or in the legal structure for the inclusion in property value of hypothetical interest allowance on proprietary investment in land or other assets. The interest to be included in carrying charges should be restricted to interest on mortgages and other liabilities not particularly connected with the land or its holding."⁹

However, the broader accounting definition in A Statement of Basic Theory expresses the view that non-transaction data might be considered accounting information provided it meets the 'accounting standards'.¹⁰ Based on such broader scope, the following paragraphs attempt to evaluate two alternative methods -- including or not including imputed interest on funds invested in raw land as an input cost attachable to the cost of land.

Evaluation of including versus non-including imputed interest, under the quantifiability, verifiability and freedom-from-bias

⁹ Paton, W.A. (Ed), Accountants' Handbook (Second edition), The Ronald Press Company, New York (1932), p. 468. Also subsequent editions consider capitalization of imputed interest as improper.

¹⁰ A Statement of Basic Theory, op. cit., p. 1.

standards, is erlatively more difficult than for evaluations of the carrying charges discussed in a previous section, because of the subjectivity or uncertainty in estimating the 'opportunity cost' or 'economic cost' in the absence of a verifiable transaction.

For quantification of rate interest, apparently the 'cost of capital' of a developer, the market rate of interest paid by a developer on borrowed funds invested in other parcels of land, the pure rate of interest on risk free bonds, or the risk-adjusted rate of interest are plausible solutions. Estimation of each rate is not free from controversies and involves various schedules of subjective computations because of the existence of imperfect information which must be used to estimate each rate. But, the process of estimating imputed interest is not very different from the process of estimating the amount of bad debts or of depreciation, which are considered as input costs of a product in accounting. Partial conformity to the verifiability standard is possible where a developer has some objective evidence of the interest rate paid on borrowed funds on other parcels of land or when the funds invested in land are partially borrowed and partially non-borrowed funds. Computation of imputed interest on non-borrowed funds at the same rate as on borrowed funds makes the measurement verifiable and introduces very little or no bias. The peculiar feature of the industry where raw materials (land) is one of the main collaterals for borrowing, at least, offers a 'transaction-generated-measure' to estimate imputed interest. Therefore including imputed interest as an item of cost of land is justifiable on the above three standards.

As to the relevance standard, the inclusion of imputed interest can be justified by arguments similar to those discussed in including the carrying charges, except for external reporting purposes. For external reporting the decision models used by the external users will dictate the inclusion versus non-inclusion of imputed interest. Many decision models, while deriving a rate of return on equity funds, already take the 'service value' of the funds into account. Specifications of investor models happens to be one of the issues where no one method can be considered fully adequate until the controversy surrounding whose decision models are pertinent is resolved and the elements of those decision models are ascertained.

The survey results show a tendency to include the imputed interest as an item of input cost in internal decision-making for managerial accounting reports. About 30% of the companies include hypothetical interest at current market rate at which a company borrows funds using raw land as collateral. Even the executives of companies which do not include the imputed interest rate for internal reporting believe that this item is important because of the peculiar features of the industry but declined to include it as input cost in their own firms, in order to keep their procedures within the framework of what is currently practiced and accepted by their auditors as complying with "generally accepted accounting principles."

Interestingly, at least two controllers and their managing directors expressed the intent to include imputed interest in the future for internal reports because of their discussions with the author, which were mostly based on points outlined in the last two sections.

4. Recognition of Revenue

Recognition of revenue is viewed as actual reporting of revenue in the process of income determination. For reporting of revenue, accountants have established rules for timing of revenue. Realization and matching are the two important concepts which underlie the rules. First, the two concepts are briefly discussed in subsections (a) and (b). Later in subsections (c) and (d) the methods of recognition of revenue from non-installment and installment sales of lots used by developers are evaluated.

(a) Realization Concept

The realization concept is discussed extensively in accounting literature and thousands of words have been written to explain its meaning and implications because of its importance in accounting. "Unfortunately, there is no agreement about its precise meaning and the extent to which it is to be applied."¹¹ Several disagreements and controversies have arisen because "one of the main difficulties with the realization concept is that it means different things to different people."¹² In view of ambiguities and confusion which at times involve "emotionalism and mysticism", abandonment of the realization concept is suggested for income determination.¹³ In spite of the hurdles, and because of its paramount importance in accounting,

¹¹Salmonson, R.F., Basic Financial Accounting Theory, Wadsworth Publishing Company, Inc., Belmont, California (1969), p. 102.

¹²Hendriksen, op. cit., p. 167.

¹³Ibid., p. 168.

accountants have established rules for timing of recognition and expense for recording and reporting purposes.

The rules generally emphasize in some form the following four points:

1. Earning of revenue or happening of a 'critical event'.
2. Verifiability of measured inflows.
3. Market transaction between the accounting entity and an outsider.
4. Inclusion of all items of expenses related to earning of revenue.

Operationally, for the purpose of timing of recognition of revenue, several bases of reporting revenue are recommended based on the above four rules.¹⁴

The bases of recognition of revenue relevant to the study are:

(i) Point of Sale Basis: This is the most common basis used for recognizing revenue, since it meets the recognition rules adequately in many of the circumstances under which an accounting entity operates. Probably, this is also an accounting adaptation to uncertainty surrounding the measurement and unwillingness on the part of accountants to recognize revenue until the earning process is substantially completed or ultimately culminated. "Many reasons support revenue recognition at this point. (1) The physical delivery of the goods is a readily discernable event. (2) With the passage of title, the risk of loss from price decline or destruction passes to the buyer. (3) The revenue

¹⁴ Here only three bases which are appropriate for evaluating accounting procedures used in the land development industry will be discussed. Other bases are discussed in Hendriksen, op. cit., p. 165-176.

is measurable. (4) The earning process is substantially completed. (5) Revenue is realized even in the narrow sense of the liquid assets since either cash or claims to cash are usually received. (6) With production completed, the expenses of sale usually can be determined; thus income can be determined."¹⁵

(ii) Production Basis: In situations where the production process is spread over long periods and extends into more than one accounting period, revenue is recognized during the production process according to the portion of work completed during an accounting period. Broadly two reasons are given in support of this basis. (1) To avoid apparent distortion of reporting income because of irregular timings when the final product will be complete and sold; (2) relating operating activity for a period to volume of revenue earned. The theoretical basis is that value is created not just by selling but by the whole process of acquisition of resources and their transformation into new forms of utility. This value is created throughout the productive process, and in the going concern, value creation should be recognized as it happens, not just when the critical event occurs. However, the increased element of subjectivity in measuring the portion of work completed and ultimate cost which will be necessary to complete the entire job is considered a deterrent against timing of recognition of revenue under the production basis.

(iii) Collection Basis: Many entities which sell their product on installment plans use the collection basis as their timing device. Under this basis, although a sale has taken place, uncertainties as

¹⁵Salmonson, op. cit., p. 105.

to the realizable values of the exchanged assets may require postponement of recognition of revenue until cash is received. "Delaying the reporting of revenue beyond the sale may be justified if one of the two following criteria is met: (1) If it is impossible to measure the asset received in the exchange with a fair degree of accuracy, or (2) if additional material expenses are likely and if these cannot be estimated with a fair degree of accuracy."¹⁶ To the above two, sometimes a third justification is added. It is related to the earning effort of the entity in collecting installments over an extended period, those efforts use up some portion of earned revenue at that time, and therefore the latter should be deferred for "matching" in the collection period.

Where uncertainty of installment collection is of great magnitude, a modified collection basis related to 'cost-recovery' is suggested. Under this approach, "the first installments are considered to be a return of invested cost, and income is recorded only after all costs have been recovered."¹⁷

(b) Matching Concept

Since a going concern needs to know its income for annual or shorter accounting periods, the matching of revenues and expenses is important for income determination. The AAA Concepts and Research Study Committee on The Matching Concept considered matching as the process under which efforts are properly related to accomplishment, that is, there is a cause-and-effect relationship between reported

¹⁶Hendriksen, op. cit., p. 174.

¹⁷Ibid., p. 175.

revenue and expenses.¹⁸ "Essentially the notion of matching requires that the revenues and expenses incurred to produce them be given concurrent periodic recognition in the accounts. Only if effort (expense) is properly related to accomplishment (revenue) will the difference (income) have any significance as an indicator of the efficient use of resources."¹⁹

Matching of revenue and expenses probably presents the most difficult measurement problems for the accountant since he is dealing with uncertainties and imperfect information on many variables involved in the process. Incorrect matching of revenue and expenses leads to improper income determination.

To circumvent difficulties inherent in the matching process, general rules and criteria are established for: (1) proper assignment of inflow and outflow of resources between past, present and future; (2) classification of inflow and outflow of resources between capital and revenue items; (3) assignment of costs and revenue to an individual product or group of products in order that only realized profits be given consideration in the income statement. The interpretation and application of these rules and criteria may sometimes vary with the nature of the business and relative importance given to this concept in the industry.

(c) Revenue from Non-Installment Sale of Lots

The survey results indicate that eighty seven percent of the companies recognize revenue from lots sold on non-installment terms

¹⁸ American Accounting Association (AAA) Concepts and Research Study Committee (1964), "The Matching Concept," Accounting Review, April 1965, p. 368-72.

¹⁹ Salmonson, op. cit., p. 114.

on the sales basis, although three events-of-sale are used which signal the emergence of revenue. These are:

- (1) When the sale contract is signed
- (2) When title to the lot is transferred
- (3) When the developed lot is delivered

Only thirteen percent of the companies use "receipt of full payment basis", which is an extension of the sales basis or more appropriately 'cash basis', for recognizing revenue; and none of the companies use the production basis.

Application of the quantifiability, verifiability and freedom-from-bias standards present very little difficulty when revenue in the above case is recognized on the sales basis. The procedure is quantifiable because there is a transaction or a contract or transfer of title. It is verifiable and free from bias because a sale contract which is a 'must' in sale of a lot is very explicit in the amount payable (or paid) either in cash or in claims to cash involving relatively little or no uncertainty about collectability of cash.

When the relevance standard is applied, there might be situations where the production basis also appears to be a relevant procedure because of peculiar features in the industry such as a multi-period production process. Like the discussion of other procedures in the previous sections, the usefulness of both of the procedures -- sales basis and production basis -- has to be assessed from the view point of external reporting as well as internal reporting.

From an external reporting point of view, the sales basis appears to be more verifiable than the production basis because of problems involved in measurement of the portion of the job completed, subjectivity in estimating selling prices of lots and profit margin,

and other possibilities of manipulations. The prediction of future sales, (given other variables in many external users models to be the same) the sales basis provides relevant information because of substantial accomplishment of development work and, therefore of cost incurrences which are completed by that time.

From an internal reporting point of view, the production basis may be more relevant since developers want to know "how much did they earn" from the development activity if the project involves multi-periods. The support of such a proposition is apparent in the following statement:

From the standpoint of business management, a disclosure of income earned during a fiscal period, whether such income has been realized or not, is probably of more importance than a calculation of the amount realized. It is, it would seem, more indicative of the efficiency of the business unit during that period. Therefore, if recognition of income realized is widely divergent from the amount which may be reasonably allocable to the period as having been earned, it may be advisable to use an estimated-earnings figures rather than delay recognition until realization (on sale) is attained.²⁰

The duplication of effort and extra cost involved in preparing two sets of statements is one of the discouraging factors in the use of the production basis for internal reporting. Also, the changing conditions in the industry have forced developers to sell the bulk of their developed lots on the installment plan, especially medium and large size developers. Consequently from the overall point of view, the sales basis tends to show a greater adherence to the relevance standard than the production basis. Moreover, the developers who

²⁰ Lund, Ruel, "Realizable value as a Measurement of Gross Income", Accounting Review, December 1941, p. 375.

sell a large part of their lots on the non-installment terms generally develop even intermediate size tracts involving between 200-750 acres in such a manner that each part is completely developed before initiating improvement on the next part. This technique enables them to sell a substantially large number of lots in one or two accounting periods. By adopting such a practice, they are also automatically able to associate the development activity (or earning of revenue) and recognition of revenue on a sales basis since very little development effort in a period is related to some other undeveloped part of the tract. It is therefore not necessary to arrive at an interim valuation for partially developed lots because little value has been created during the period that has not been realized through sale in the period.

(d) Revenue from Lots Sold on the Installment Plan

The survey results indicate that out of 73% of the companies which sold lots on the installment terms, 57% of the companies use the sales basis for recognizing revenue. The events-of-sale used are: when sale contract is signed and down payment is received, or when title to lot is transferred. The remaining 16% of the companies use an installment basis which is a modified form of the collection basis for recognition of revenue. Twenty seven percent of the companies did not sell lots on the installment basis. None of the companies used the production basis or the cost-recovery-approach.

The use of either basis for recognizing revenue from installment plan sales is very controversial and application of the 'accounting standards' is a great challenge in itself. As indicated in Chapter II, even the first comprehensive article on land development accounting in 1906 discussed the issue and offered a tentative solution by way of

providing reserves for uncollectible accounts, collection charges and cancellation of contracts, if the sales basis is used to recognize revenue from installment sales of lots.²¹ The recent article by Briloff discussed the same issue and offered a present-value method to value installment receivables as one of the solutions.²²

The arguments center around application of rules and matching process mentioned in earlier part of this section.

The sales basis is considered unacceptable because of the lack of 'earning of revenue' or presence of a 'critical event' at the time of the sale of the lot as evidenced by mere 'signature on the sale contract' by the buyer of the lot, and uncertainties surrounding measurement of inflows and outflows. Because of changed conditions and increased competition in the industry, many developers, especially in Florida, California, and Texas, sell lots under installment plans on a very small down payment, with relatively lower interest rates than the prevailing market interest rate of interest, without adequate checking of credit worthiness of buyers, and with small amounts of installments spread over eight to twelve years. In many cases, developers are overzealous in nature and lots sold exist only on paper plans based on inadequate preliminary surveys. Purchasers of lots are promised possession of lots at dates ranging from five to seven years after signing the sale contracts, since virtually no work has

²¹Garret, Percy, "Notes on the Accounts of Building Land Development Companies". The Accountant, May 19, 1906, p. 640-41.

²²Briloff, Abraham J., Castles of Sand? An Expert Questions the Accounting Practices of Land Development Companies, Barron's, February 2, 1970, p. 1.

been started on those projects at the time of sale. Above all, many of such sales are accomplished by high pressure marketing techniques, viz. free flights, accommodations, luncheons, and conducted tours, etc. From the point of view of the relevance standard, it is doubtful whether the sales basis (which is in fact the majority practice) can be considered adequate, except under conditions where 'substantial performance' as evidenced by completion of significant development activity can be adequately established and the buyer's contract is secure enough (usually through significant down payment) to assure reasonable likelihood of fulfillment by the buyer. Probably the quantification, verifiability and freedom-from-bias standards can be met to a certain degree if a company has been in the development business for a sufficiently long period of time to quantify and reduce most of the uncertainties surrounding the measurement of inflows and outflows, viz. reserves for uncollectibles, collection charges, and related unexpensed items. Since relevance is the primary standard and the majority of installment sales are made without credit rating checking, on small down payments, and promised delivery dates extending into five to seven years after signing the sale agreement, the sales basis of recognition is inadequate. Selling of a lot by making a customer sign a non-binding sales contract is definitely not a critical event according to the established business norms in the industry, in contrast, for example, to the magazine publishing industry where revenue is based on subscriptions sold and the sale of the subscription is appropriate as the critical event for revenue recognition.

The installment basis is justifiable and relevant where 'earning of revenue' (by performance) is easily discernible but exchanged

assets in the form of installments receivable cannot be measured with a fair degree of accuracy because of uncertainties in collection of installments, and when additional future outflows for uncompleted improvements and collection expenses cannot be measured accurately for matching of revenues with expenses. The above reported income measure then becomes meaningless and loses its relevance, both to the external and internal users of accounting information.

In the land development industry, there appears to be a paradox. The companies which use the 'installment basis' for revenue recognition have substantially completed required improvements on lots sold on installment plans, and are reasonably assured of collection because of careful scrutiny of credit rating of buyers. They could use a point-of-sale revenue recognition basis. In their case the collection charges and expenditure on uncompleted work are not expected to be of a high magnitude and can be reasonably estimated accurately. The presence of these characteristics (on the contrary) makes the deferring of income timing device (collection basis) irrelevant; and does not bear upon the needs of management or outsiders. The practice seems to be completely tax oriented to gain a tax advantage. The accounts are kept in the same way for consistency with the tax treatment. On the other hand, companies which operate under the conditions discussed in the sales basis above should use the collection basis or some of its modified forms, but actually adopt the sales basis for financial reporting (although they use the installment basis for tax accounting). These companies view the signature on the sales contract as the 'critical event' signalling recognition of revenue, probably to impress the prospective investors with increased reported earnings-per-share

by accelerating recognition of revenue on a large portion of their sales on installment plans.

To complete the evaluation of recognition of revenue from installment sales, the other related bases of recognition or modified collection bases must also be considered.

The production basis appears to meet the 'earning of revenue' test to the greatest degree. For example, under speculative conditions, since only selling and preliminary engineering drawings activities have been completed at the time of "sale", (contract signing), only the portion of revenue which represents these activities should be recognized as revenue at the time of signing the sale contract. This procedure seems to meet the relevance standard adequately because the management and outsiders are given useful information about the revenue realized from activities completed in an accounting period. However, the quantification of measures for these activities which should be free-from-bias presents an almost impossible task. The dangers of manipulation and distortion of information with the biases of measurers and verifiers would override the relevance.

The cost-recovery approach, which is a modified form of the collection basis will not meet the relevance standard in cases where installments received are far in excess of costs incurred by developers up to a certain point in time. In those cases, in which there is no delivery of lots, sales are made on the basis of paper plans, apportionable cost of land to a lot is generally low, and the amount expended on the other improvements is virtually nothing; the installments received from non-defaulted contracts may represent advances to the developer (and customers also pay interest!), rather than a

cost-recovery of a developer. Therefore, generalization regarding this approach is not possible.

Revaluation of installment receivables at the end of every period and recomputation of reported revenue from the installment sales is another plausible alternative. Taggart recommended revaluation of receivables and recognition of revenue on the installment basis to overcome reporting of 'deferred revenue' as a liability on installment sales.

"The principal objection is illustrated by the puzzle presented by the figure of unrealized or deferred gross income which the usual method of installment sales accounting brings on to the books."²³

"(a complete revaluation of all contracts at the end of each fiscal year) method of accounting for income from sales is advocated to keep the books on installment basis; (it) is desirable for income tax purposes, but to divide the unrealized income item on the balance sheet into two parts, one being a valuation item against the contracts receivables, reducing them to a reasonable value and other being of net worth."²⁴

For revaluation of installment receivables, Taggart suggested a fair percentage of face value of contracts or on an actuarial basis using a rate of discount established at the time of the first valuation.²⁵

Recently Briloff vehemently criticized recognition of revenue procedures of publicly owned corporations using the sales basis, on the premise of recognition without 'earning of revenue' 'or substantial performance' with the intention of exaggerating their reported income

²³ Herbert F. Taggart, Subdivision Accounts, University of Michigan, Bureau of Business Research, Ann Arbor (1930), p. 24.

²⁴ Ibid., p. 28.

²⁵ Ibid., p. 27.

which often enters into the consolidated income of the parent companies of land development subsidiaries via consolidation.²⁶

Briloff suggests that in a case where revenue is recognized at the time of sale, computation should be based on revaluation of installment receivables at the discounted present value of the receivable. He stresses that the discounting rate should be after taking into consideration various uncertainties involved in the collection of receivables and future expenses related to collection of installments. Certainly the receivables should not be valued at the face amount of the contracts!!

Apparently revaluation of assets exchanged leads us to the basic concept of value. What rate of discount will meet the accounting standards? It will extend the evaluation to the broad and still more controversial area of whether or not accountants should accept present value as the value of an asset. Also, Briloff's method of revaluation does not show that revenue has been earned if installments are revalued. On the other hand, the sales basis without substantial performance will force developers to introduce additional estimates in computation of cost of current lots sold for associated development work which has not even been started at the time of "sale".

Based on the evaluation of various bases (or methods) of recognition or revenue, the author believes that it is impossible to identify any method which meets the 'accounting standards' satisfactorily. All bases for recognition of revenue discussed above can meet the relevance standard provided economic realities and circumstances

²⁶Briloff, op. cit., p. 3.

indicate substantial performance, since the critical event criterion is not applicable to developers. Once the primary standard of relevance is satisfied, other standards must be applied to insure that quantifiable data is free from bias and is verifiable in order not to negate the application of the relevance standard. The individual circumstances under which each basis is recommended is outlined in proposed system changes in the next chapter.

5. Recognition of 'after costs' and partial re-imbursement²⁷

Closely related to the matching concept discusses in the previous section is recognition of "after costs" incurred in subsequent periods on lots which have been sold and revenue from them recognized in earlier periods. Similarly, partial reimbursements of some items of cost in subsequent periods have the same nature of 'after costs' but have opposite magnitude - positive flow. Therefore, proper matching of revenue and expenses requires that estimated related future expenses or reimbursements be recorded at the time of recognition of revenue; and the liability or asset recorded for the estimated 'after cost' or partial reimbursement respectively. It is not appropriate to delay their recognition simply because of uncertainty. Since developers have necessary experience and engineering estimates, any reasonable estimation of probable cost for future expenses connected with development of a project can be recorded at the time of recognition of revenue. If costs are in excess of expectation, but are legitimately

²⁷ AAA 1964 Concepts and Standards Research Committee, defines 'after costs' as "cost expected to be incurred in periods subsequent to the one in which the benefits or accomplishments from them were received", op. cit., p. 371.

applicable to lots sold in earlier periods, they should be treated as loss (unrecovered past costs) rather than additional cost of unsold lots as is done by nearly one third of the companies. Only by the above treatment will the accounting procedures conform to the accounting standards, because all costs and reimbursements of costs will be included in total cost to be matched with the recognized revenue. The standards of quantifiability, verifiability and freedom-from-bias can be met to a significant degree because of the experience of developers and engineering estimates. In case these standards cannot be met, the treatment of excessive later costs (as applicable to lots sold in earlier period) as extraordinary loss or gain is relevant since it will decrease or increase respectively the prior periods' earnings automatically, and will not burden present or future periods with costs which are not really related to the earnings activities (sale of lots) of these later periods.

6. Revaluation of repossessed lots

Since a repossessed lot is now inventory of a developer, the recommendation of valuation of inventories in Appendix A of A Statement of Basic Theory is pertinent.

"The committee concludes that techniques presently used to determine current replacement cost produce information which is sufficiently verifiable, quantifiable, and free-from-bias to justify their use in stating inventories of merchandise, materials, and supplies at current replacement cost."²⁸

²⁸ American Accounting Association, A Statement of Basic Theory, Appendix A, p. 74.

In the land development industry, appraisal of vacant land -- improved or unimproved -- is a common every day practice. In fact, developers are in the best position to assess the replacement cost for revaluing the repossessed lot. These might be valued at replacement cost and any gain or loss treated as an extraordinary item.

7. Methods of Allocation of Joint Costs and Joint Costing Principles

In the land development process, different salable lots of nearly the same importance as well as those varying in importance are laid out. Some parcels which are dedicated for parks, churches or schools can be classified as by-products. Similarly, timber, gravel and other minor materials emerge as by-products. The bulk of land and land development cost are joint and cannot be traced separately to each lot on a cause-and-effect basis. Only a few items of unique cost are incurred after lots have been laid out and can be directly attached to individual lots or group of lots. Revenue is derived by sale of each individual lot and is directly identifiable to each lot except in a very few cases when lots are sold wholesale to one buyer. To ascertain periodic income and value of inventory, and to match costs with revenue realized in a given period from sale of specific lots, developers have to allocate joint costs of land and land development to individual lots. Also, it was evident during company visitations that management views determination of 'unit-lot-cost' as an important function of accounting since it is necessary for many of their managerial decisions.

The survey results indicate the use of the following techniques in allocating joint costs to individual lots:

1. Four bases of allocation, viz.:

- (i) Tentative selling price of each lot.
- (ii) Number of lots in a subdivision.
- (iii) Frontage feet of each lot.
- (iv) Area of each lot.

2. Allocation by the majority of the companies of 'all items of cost' using one of the four precedings methods.

(a) Bases of Allocation or Lot Costing Methods

Generally speaking developers have not constructed a scientific approach to the problem of allocation of joint costs in spite of an often expressed desire to know the "exact" lot cost. This failure to find a scientific approach is part of the overall general neglect of the accounting function in the industry as discussed in the first chapter. In addition, the unfortunate feeling of accountants is that it is impossible to determine individual product costs objectively when costs are incurred in lump-sum aggregates to produce more than one product. It is contended that value judgments and subjectivity, rather than self-evident truth, will be the basis for computing the product unit cost. The author agrees that the product cost which is the "ideal" cannot be computed by any of the allocation methods, and it is not possible to discover the cost. But, this should not deter accountants from arriving at a cost which is not ideal but is the result of methods of allocation which have a minimum variance from the ideal situation and are logical and reasonable under the given set of conditions. NAA Research Study No. 31 pointed out that jointly incurred costs occur in practically every industry even though they

might not be recognized as such.²⁹ Nevertheless, costing techniques based on behavior of the cost under given circumstances can be applied by identifying joint components of costs. Therefore, the impression that any figure reported is in error should not destroy the accounting motivation for developing product cost from joint cost situations. Instead, it will be appropriate to understand the limitations of such methods so that no more precision is attributed to the results than they possess.³⁰

Before the evaluation of bases (or methods) for allocation according to the 'accounting standards' it is pertinent at this point to discuss, in brief, pros and cons of the forms of allocation used by developers.

(1) Tentative Selling Price Method: In joint product accounting this method is also referred to as the joint product method, weighted selling ratio method or sales realization method. The basic assumptions underlying this method for lot costing are that each lot developed by a developer earns the same rate of gross profit and that costs are to be charged on 'what-the-traffic-will-bear' principle. By allocating joint costs under this method, lots are impliedly treated as co-products.

When this method is used, the total cost of land and land development, either in one lump-sum or as classified under suitable

²⁹ N.A.C.A (NAA) Research Study No. 31, Costing Joint Products, National Association of Cost Accountants, New York, N.Y. (1957), p. 10.

³⁰ Ibid., p. 29.

headings is divided by the weighted total of tentative selling prices of all lots, and a fixed uniform percentage is computed. The percentage is used for determining the cost of sales by applying it to the selling prices of individual lots at the time of sale and recognition of revenue.

For developers, some accountants consider this method to be more equitable than other methods, as seen from the following statements:

"The chief logical merit of the selling-price method lies in its correspondence to what must be presumed to be the intention of developers. It is unreasonable to suppose that they expect to make one rate of profit on a part of their investment and another on the rest."

"Any method of cost distribution other than that of selling price may produce the ridiculous result of a lot cost actually greater than the projected selling price. It is obviously nonsense to assume that developers deliberately subject themselves to a loss."³¹

"This approach caters to the accountant's 'visceral' feeling that the cost assigned must be related in some way to recoverability of the costs in sale prices of particular lots."³²

"(Sales price of lots) plan is generally acknowledged to be the fairest and most reasonable method of determining the cost of each lot. This method, and this alone, gives due consideration to all the factors entering into the value of a lot, such as size, location, frontage, elevation, depth, orientation and natural features, for each one of these is considered when the basic selling price is determined."³³

The main disadvantage which may arise when this method is used is that assigned costs to different lots may require adjustments when

³¹ Taggart, Herbert F., Subdivision Accounts, University of Michigan Bureau of Business Research, Ann Arbor, 1930, p. 15.

³² Gardner Jones, "Some Problems in Accounting for Land Development," Management Accounting (N.A.A.), August 1968, p. 28.

³³ Walter Mucklow, Land Accounts, American Institute Publishing Co., Inc., New York (1935), p. 29.

expected or tentative selling prices fluctuate in subsequent periods and all lots are not sold in one period. Under these circumstances a new percentage may be necessary for computation of cost of sales or for allocation of joint costs. Observations of conditions prevalent in the industry indicate that for a reasonable sized subdivision the rate of change of expected selling prices of lots of various sizes and with other features does not fluctuate widely, although in terms of absolute amounts it varies significantly (because prices of lots vary significantly). Except in rare circumstances, there are no wide fluctuations in the rate of change in prices between individual lots in different periods. If there is a slump in the industry, the percentage of expected prices fixed by developers tends to fall on all lots in a subdivision by nearly the same percentage points. In rare instances, in a subdivision, tentative prices estimated by developers remain stable for one group of lots and fluctuate widely for other groups of lots.

Mucklow offers justification of the tentative selling price method even under the above limitation. He contends, "It may be remembered that changes in the selling prices actually obtained do not affect this formula, for, if the (tentative) selling price be set at one time and be calculated fairly, and subsequent increase or decrease of price will not affect the proportions; and if a lot be sold for more than this (tentative) sale price, it increases the profit on that lot."³⁴

³⁴ Ibid., p. 29.

The another argument involves circular reasoning because it utilizes a sale price to determine the cost in order again to determine the sale price. A careful examination shows that this argument is weak because the tentative selling price which forms the basis of allocation is dependent upon the intentions of developers who incur expenditure on various lots or parcels of land with an objective of making profit. If they did not expect those prices, they might not have got involved in the project. Also, actual selling price is dependent upon many additional factors, such as timing of sale; interest rates, general economy, etc. and the cost of lot is only one factor (although an important one).

(ii) Number of Lots Method: This method is also called average unit cost method. Under this method total costs are divided by the number of lots laid out under a project, and equal cost for each lot is obtained.

This method is supported on the argument that all lots are laid out and improved by the same process; and it is impossible to say that one lot costs more to produce than another. Also, it is stressed that since the cost of a developed lot does not come into play in the price determination mechanism of a lot, the equal allocation of costs to each lot does not invalidate the method of allocation. The advantage of convenience and simplicity is another argument which is implied in its widespread use in the industry.

This method is inequitable, and does not conform to the logical requirements of developers in most cases. Even in reasonably medium sized residential subdivisions, lots differ in size, structure and locational features. A larger sized lot definitely takes up greater

quantity of land, requires larger expenditure on side walks around it and requires greater effort to grade and level than a smaller lot. Similarly a lot might have soil structure entirely different from another lot and necessitate an extra amount of expenditure to bring it to the comparable level. Location features also require extra efforts in many cases. Cul-de-sac street structure may be necessary to accommodate locational features of some lots. It definitely requires extra expenditure because of these features. In fact, this method might prove to have serious limitations in planning and directing the operations of developers. The decision-makers in the land development companies may have to rely on rules-of-thumb to determine alternatives available to physical planning and use of the land. The cost of developing a lot does play an important role as one factor in price determination of individual lots because of its high unit cost. For example, the president of the Greater Lansing Development and Engineering Association in his report to the mayor's study Committee on Utility Participation stressed that "it would be recognized that if (improvement) costs are higher, this extra cost will be turned over to the ultimate purchaser, and that he will be the loser we know of price differentials between the same homes inside and outside Lansing based on this factor."³⁵ Similarly, another renowned developer in the Detroit area in a recent talk emphasized that cost of developing land is one of the significant factors in price determination of a lot.

³⁵ Francis N. Fine, Mayor's Study Committee on Utility participation, an unpublished report by the president, Greater Lansing Development and Engineering Association, Lansing, p. 5.

He stressed that 'cost of (raw) land' is but one factor which enters into price of a lot. He said, "one of the 'myths' that has prevailed over the years, in the minds of both the professionals, as well as the "man-on-the-street", is that high (raw) land prices is one of the major factors in current "expensive homesite costs". To truly reflect the comparable costs of different parcels of land, all off-site costs should be considered as part of land (cost)".³⁶

Except on the grounds of convenience and simplicity the number of lots method for allocating joint costs and computing cost per lot is completely illogical and unreasonable unless all lots are identical. It suffers from the weakness of irrelevance and is contrary to the expressed accounting objectives of developers who would like to have the cost of a developed lot reflect the real circumstances under which it is developed.

(iii) Frontage Foot Method: This method belongs to a broad basis of allocation on physical attributes under which joint costs are allocated to products on the basis of one or more measured physical attributes related to the final product. In this method, a physical attribute -- frontage feet -- is considered as the basis for allocation. Total cost is divided by total frontage feet of salable lots to compute cost per front foot. The cost of a lot is obtained by multiplying unit-front-foot-cost by the number of frontage feet of the lot.

³⁶ Robert H. Carey, President Thomson-Brown Company, "Current Homesite Development Costs: An Estimate," an unpublished address before the Annual (1970) meeting of Greater Detroit Home Builders Association, p. 2.

The rationale behind allocation of costs on the frontage feet basis is that many items of improvements, like streets, utilities, sidewalks, curbs, water system sections, etc. are closely related with frontage of the lot. Therefore, this method will attempt to allocate cost according to benefits received by each lot from items of expenditure. Also, in the industry, frontage of lots is considered more valuable than 'backage' of lots and in many instances lots are quoted as 'so-many-dollars-per-front-foot'.

The disadvantages in allocating joint costs on this basis arise because only one factor -- frontage feet -- is considered in the allocation process. The size of the lot or the structural features of soil in the lot are not necessarily in proportion to the frontage feet. Irregular lots with big frontage and tapered backyards may not benefit from improvement expenditures in the same proportion.

(iv) Area of each lot Method: This method also belongs to 'physical units basis', and the area of each lot is used as a physical unit for allocating the joint costs. Total costs are divided by total area of salable lots to compute cost per unit-area (square feet, acres, or other measures). The cost allocated per lot is calculated by multiplying cost per unit-area by units of area in the lot.

Similar arguments outlined in (iii) above can be expressed for this method. In addition, an assumption that each square foot of land in a project costs the same amount is an inherent weakness. Location is very important in the determination even of cost of raw land. Two parts equal in area, divided from a single tract, even without any development, will not necessarily command the same value in the market; and the developer when buying raw land will consider

locational features of each parcel. Therefore, this method considers only one attribute with inherent weakness of omitting location factors and may be considered as unreasonable or irrelevant for the allocation process when variations in the distribution of physical attributes are wide.

(b) Lump Sum Allocation of Costs

Generally whenever developers refer to the allocation problem or express lack of objectivity in unit-lot-cost measures, they point out allocation of all items in the aggregate using one basis. The review of various lot costing methods conclusively shows that it is incorrect to use one method of allocation for all items in an attempt to arrive at relevant measures which will be meaningful to the users -- internal or external. It may be partially relevant under very rare circumstances where a project involves the same size lots with very few variations in location and soil structure. Also, for income measurement purposes, some developers maintain that since all lots are sold regardless of the cost allocated to these lots, the unit cost information is not necessary; ultimately all costs will be charged against revenue received and additional profit from one lot will be offset by lower profit of another. In other words, gathering of cost information is considered irrelevant.

However, it must be recognized that besides differences in timing of costs and incorrect matching of revenue and expenses for the period and consequent incorrect measurement of income, there is additional necessity for and usefulness of unit cost computations. The nature of projects developed by large and medium size developers are complex and even involve development of complete communities.

The lots vary widely in size, structure and location factor. Even the area is not measured in the same kind of units for lots developed from one tract of land for two different purposes. Industrial lots usually are measured in acres, while residential lots are measured in square feet. Similarly improvements done by a developer will vary widely when a shopping center is developed along with a residential neighborhood from the same tract. When feasibility studies are made for land planning, methods of costing of lots do affect very heavily the decision of planners, since unit cost is important in evaluating the profitability of various alternatives. A conspicuous example is placing of cul-de-sacs in developing sloping lots so that one side of the basement is at grass level for easy access to the backyard. This type of lot suits many individuals and commands relatively high prices. To plan these features, a developer must not only know the extra cost to be incurred, but must allocate related aggregate costs to appropriate lots on some logical basis, to select from alternative usage plans. In other words, land is not one parcel which must be subdivided and sold in only one manner. In present conditions, land has to be subdivided to meet the needs of various users and involves significant different outlays depending upon alternatives chosen. Identification of individual items on some appropriate basis with a specific lot or group of lots is necessary for rational planning and control of development operations. The allocation of individual items or group of items using appropriate methods is not only relevant but also facilitates quantification which possesses a higher degree of objectivity and has a lower degree of bias than lump sum allocation of all items. Perhaps the allocation of all items and the computation of unit-lot-

cost information based on one method has placed managers of development companies in the position of not being able to discern appropriate from inappropriate data. Consequently they disregard all the unit-lot-cost information and in turn seek rules-of-thumb for evaluating alternative courses of action.

(c) Allocation Methods and 'Accounting Standards'

Evaluation of pros and cons of the joint cost allocation methods used by developers indicate that objective quantification in terms of complete freedom-from-bias is not attainable. Therefore, quantifiability is viewed to conform to logical consistency based on cost behavior patterns and the matching notion. Hopefully, this point of view will make the quantified data sufficiently clear and understandable to be meaningful and useful.

On the standard of relevance, the tentative selling price method ranks at the top among the four methods. Tentative selling price, as an allocation basis, acts as a surrogate measure for most variables such as size, location, frontage feet, evaluation, depth, orientation and natural factors. However, quantification of tentative selling prices of each lot may introduce bias and may not meet the standard of verifiability.

The poorest basis of all is the number of lots -- which unfortunately is used by the majority of the companies; it fails to meet the standard of relevance. Its only virtue is simplicity. The quantification of the numbers of lots obviously is simple and requires little verification.

The frontage foot method and area of each lot method consider benefits-derived-criteria and meet the relevance standard partially

because of their emphasis on one of the physical attributes. Both methods use objective measures as the basis which are free-from-bias and are verifiable.

In manufacturing industries like petroleum refining, meat packing, mining etc., several other sophisticated methods of allocating joint costs are used.³⁷ It is possible to extend one of such methods, weighted average cost method, with some modifications related to variables and weights and to apply it to individual cost classifications suggested earlier in the chapter. In the weighted average method, each group or sub-group of expenditure, such as, those for land, roads and streets, water systems, off-site improvements, etc. is allocated to lots on the weighted average method. The variables and weights are determined to represent the reality of conditions prevailing in the industry and using a benefit-derived-criterion. Both quantitative and qualitative factors are considered in assigning weights. For example, a lot near a lake front benefits more from location factors than rear lots carved from one large tract, because of the premium placed upon frontage lots by buyers. Also, the area and frontage of a lot are necessary variables which impart benefit to the lot. Therefore, the allocation of land cost to this particular lot will be based on three variables, viz. area, frontage feet, and location. Since each is not equally important for imparting benefits to the lot, and for assigning weights to each variable, developers have to use

³⁷ Many of these methods are summarized in Robert I. Dickey, (Ed.), Cost Accountant's Handbook (second edition), Ronald Press Company, New York, New York (1960), p. 131-27.

qualitative judgment for location factors, and quantitative weights are already available in area and frontage feet measures. In other words, for allocating joint cost of raw material -- land, the allocation basis will be as follows:

$$BL = aL + bF + cA$$

Where BL = Basis of allocating land cost

a = Weight assigned to location

b = Weight assigned to frontage feet

c = Weight assigned to area

L = Location factor

F = Frontage feet

A = Area

Similarly a proposed project may involve allocation of joint cost of land to a shopping center and a residential subdivision. In this case area and location factors may be the only variables relevant for allocation. Developers can assign proper measures to weights based on their experience and the reality of the circumstances. Even selling price can be used as a surrogate measure for the location factor if no other measure is possible.

The use of carefully constructed weights, based on identified cost behavior representing the best possible measure of benefit-derived by a lot, and consideration given to several variables which impart benefit to a lot, will make the weighted average cost method of allocating individual classifications as near to ideal as possible. Since developers are using estimates extensively in their operations and have achieved a high degree of sophistication in engineering and planning activity, the measurements of weights and identification of

variables for computing basis of allocation will be relatively more objective, free-from-bias and at least varifiable by competent persons fully aware of circumstances under which those are used rather than other methods. The next chapter attempts to identify variables used for allocating each type of proposed classification and discusses some of the weights which can be assigned in a given set of circumstances. The pyramiding of unit-lot-cost from individual classifications will be more meaningful and useful for computing cost of sales and inventory value at the end of the period.

(d) Treatment of Revenue Realized on Sale of by-products -- Sand, Gravel, etc.

Sand, gravel or lots assigned for parks are of lesser importance to the developer than improved lots and can be considered as by-products. Because of lesser importance, they are assigned only a minor proportion of the total cost of the joint costs incurred in the development process. The usual accounting treatment for by-products is to determine their value and subtract it from the total joint cost of the project or items of costs if by-products can be identified with a particular item. If any additional expenditure has to be incurred after the split-off in processing by-products, the same is charged off against realized proceeds from by-products.

The survey results indicate that the majority of the companies reduce the total development cost by amounts realized from such by-products. This conforms to the normal treatment outlined above. The accounting treatment appears relevant since these products are of lesser importance and consideration is easily measurable by exchange or reduction in bid by the subcontractor in performing a task of grading or levelling.

Whenever these by-products are substantial and additional activity, such as, transporting of gravel, cutting of timber, etc., are required, these costs are charged directly against the revenue and the balance of revenue treated as a reduction of cost.

In the minority of the companies, the proceeds are treated as miscellaneous revenue after deducting direct cost related to these by-products. This treatment seems inappropriate because it is not consistent with the treatment of revenues from other sources; that is, for other sales apportionment of revenue is made to just cover related costs with the rest treated as "miscellaneous revenue". Allocation of some items of cost to by-product revenues is possible using the weighted average method suggested in the previous section and application of this is shown in the next chapter.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The first part of this chapter is devoted to a brief summary of this study. The summary is followed by recommendations for changes in existing methods which did not meet the "accounting standards". The later part of the chapter outlines the areas which need further research.

Brief Summary of the Study

A developed lot is the final product of long and complex operations requiring a series of production processes. Advances in engineering and technical aspects of land development to meet the specifications of intended use have given rise to the specialized land development industry. Although the broad purpose of the accounting function in the land development industry is to identify, measure and communicate useful information to external and internal users, the unique features of the industry give rise to many accounting problems. Many peculiar characteristics and accounting problems can be attributed to complexities of the land development process and selling techniques of developers evolved over a long period. Therefore, it was necessary first to trace the evolution of conventional accounting practices employed in the industry since 1901 and then to examine and analyze the unique features of the industry and the principal accounting problems at the present time. Chapter II

outlines the evolution of conventional accounting practices, unique features of the industry and the principal accounting problems.

The first comprehensive paper completely dealing with the accounts of land development company considers "trading in fixed assets" by a land development company as one of the distinguishing features of the industry. Other distinguishing features, which can also be considered as accounting problems outlined were: difficulties in valuation of residual assets and consequent computation of realized profits, recognition of revenue from installment sales and treatment of non-realizable assets because of exchanges of various properties in a typical sale transaction. During the later part of the second decade and the earlier part of the twenties, there was a 'crusade' towards uniform accounting systems, and the first book in the wider field of real estate accounting appeared in 1917. An improved lot was considered as 'stock-in-trade' for the first time. The Federal income tax law came into effect on March 1, 1913. It had significant effects on accounting methods used by developers, especially those dealing with recognition of revenue from installment sales and the computation of cost of improved lots. The provisions under the income tax law and the Treasury rulings under the income tax law were used as standards to solve and rationalize solutions to knotty problems connected with realization of profits and valuation of inventories.

In the post-depression period a great number of companies in many industries became publicly owned due to expansion in trade, commerce, population and advances in technology. Many of the above factors affected the land development industry but most of the land development companies were either organized as partnerships or closely

held private corporations. The joint-ventures of the twenties and thirties retained their popularity. Until recently, when the large publicly held corporations have entered in the industry, the accounting function was neglected and the procedures followed by land development companies were oriented mainly toward the fulfillment of an obligation to file tax returns.

1. Unique features of the industry: The unique features of the land development industry which are important from the point of view of examination of accounting requirements of developers are:

(1) nature of business, (2) multiperiod projects, (3) joint nature of cost, (4) excessive use of estimates because the majority of lots are sold prior to completion of contracted improvements, (5) subcontracting of the bulk of operations, (6) financing of a land development company by way of land contracts or by way of pledging installment receivable notes, (7) extensive governmental regulation at local, state and federal level, (8) taxation features, and (9) use of multiple corporations and joint ventures.

2. Principal accounting problems: Because of the unique features and the nature of the development process, there are many accounting problems. The principal accounting problems are:

- (1) Classification and accumulation of cost and revenue.
- (2) Allocation of joint cost to individual lots so that revenue realized on sale of each lot can be matched against its cost and inventory value can be computed.
- (3) Capitalization versus expensing of carrying charges.
- (4) Recognition of revenue from installment sales.
- (5) Valuation of repossessed lots from defaulted contracts.

- (6) Accounting for partial re-imbursements from government subsidies and civic agencies.
- (7) Accounting for income and expenses on developed property in interim periods until it is disposed of.

3. Land development accounting practices survey: Actual accounting procedures and practices employed by developers were gathered by means of a mail questionnaire and personal visits. The sample of selected companies consisted of 65 companies divided into two groups with 35 companies in group I located in the state of Michigan and 30 companies in group II located in other states. Thirty companies or about forty-six percent of the companies returned completed questionnaires. Ten companies that had sent completed questionnaires were visited to pursue the questions and their replies in greater depth. These companies are located in the state of Michigan. The results of the land development accounting practices survey and data gathered during company visitations are summarized in Chapter III.

The classification of companies between small, medium and large size is based on self-categorization, whereby the respondent company indicates in the questionnaire whether it is large, medium or small size. It was not possible to use the commonly used criteria of sales volume or total assets employed by the company because preliminary investigations showed that these criteria might prove seriously inadequate due to peculiar conditions surrounding the industry. Forty percent of the companies classified themselves as large, and sixty percent as medium size and no company considered itself as small. The companies are engaged in developing subdivisions for various uses, ranging from subdivisions for residential homes to complete communities with schools, shopping centers, industrial parks, etc. About fifty

percent of the companies are involved in complex projects involving complete communities. Ninety percent of the companies develop subdivisions in the state where they are located, thirty-six percent have developed subdivisions in other states and sixteen percent have been involved in development of land in other countries.

Some of the major findings of the analysis of questionnaire responses are:

- . About eighty seven percent of the companies own one or more subsidiary or multiple corporations. About fifty percent of the companies own a subsidiary company or multiple corporations for holding land until it is ready for development. About forty percent own subsidiary companies for closely related operations, such as, utility operation, hotel, motel or other recreational club subsidiary.
- . The managerial objectives of accounting, such as cash flow analysis, budgeting, estimating, profitability analysis, etc. are given higher priority than non-managerial objectives. Budgets and estimates, finding of unit cost per developed lot and cash flow analysis are considered very important objectives of the accounting function by developers. The next importance is generally assigned to the preparation of the financial statements.
- . About sixty-seven percent of the companies classify and accumulate cost under separate headings, such as, land, land grading, roads, sewers, side walks, etc. and allocate either in total to individual lots or each item or group of items to individual lots using appropriate basis. All companies

which use the above method of classification and accumulation of costs strongly emphasize the managerial objectives and about one third are involved in development of complete communities and have their operations in more than one state.

- . Real estate taxes and interest paid on borrowed funds are capitalized and included in cost of land or land development rather than treated as period cost by about forty three percent of the companies. Other items such as sales and use taxes on materials, second clearing of undeveloped land, other incidental expenses like legal fees, finders fees, commissions, cost related to option agreements, preliminary surveys, insurance expenses, etc. are expensed as period cost by the majority of the companies. Companies which expense the carrying charge as period cost mentioned 'tax advantage' as the most common reason. Also, the companies which are privately owned or closely held corporations tend to expense carrying charges and those which are publicly owned tend to capitalize the carrying charges.
- . No company includes an imputed interest charge on funds invested in land awaiting development in computing cost of improved lot or for income measurement purpose. However, about one third do include imputed interest at current market rate in their feasibility studies, in the setting of selling prices of lots, in the making of decision to hold or sell undeveloped land, and in some cost control decisions.
- . Eighty percent of the companies estimate the cost which they might have to incur in subsequent periods and open reserve

or contra accounts. In case the estimated amount proves inadequate, about fifty percent of the companies do not adjust cost of lots sold and income reported in earlier periods, but adjust the inventory value of unsold lots by including additional cost as part of unsold lots.

- . Revenue from lots sold under the non-installment sales is recognized when the sale contract is signed by forty-three percent of the companies and about thirty seven percent wait until the title to the lot is transferred to either the buyer of the lot or to the builder. Only seventeen percent of the companies recognize revenue at the time of full payment of the purchase price of lot. The popularity of two criteria viz. when the sale contract is signed, or when the title to the lot is transferred is attributable to the industry practice of transferring the developed lots on a non-installment land contract to the builder who subsequently builds the structures and sells for cash, and retires his own debt with the developer.
- . The majority of the companies that sell lots on the installment basis recognize revenue when the sale contract is signed and the down payment is received. Almost all of the companies that recognize revenue using the point of sale as the basis for recognizing revenue for accounting purposes report under the installment basis for tax reporting and defer income tax payable on revenue recognized at the time of sale in their books. The researcher did not find any relationship between the method of revenue recognition and defined objectives, or identified priorities. Or between the method of recognizing

revenue and size of the company, scope and area of operations, and number of subsidiaries owned. The extensive use of the sales basis for recognition of revenue can be attributed to the use by developers of installment notes as collateral for borrowing funds from the banks or other financial institutions.

- . About sixty percent of the companies make provision for cancellation of contracts and only three percent provide for collection charges which will be incurred in significant amounts over a five to seven year period. The majority of the companies used past experience in some form as the basis for computing the provision for cancellation of contracts. Some use percentages varying from two to twenty five percent of net installment sales as the basis. Many companies use 'guidelines' for recognition of revenue and these guidelines related to the amount of down payment received, or numbers of installments which must be received before the recognition of revenue.

- . About forty-seven companies treat partial reimbursement as reduction in the cost of the item for which the refund is made. An equal number of companies reduce the aggregate cost of land development by the amount of refund and only six percent of the companies treat such refunds or reimbursements as extraordinary revenue for the period. The treatment of partial reimbursement is not related to the method of classification and accumulation of costs or method of allocation of total costs to individual lots.

- . Varied methods are used in the valuation of repossessed land and treatment of gains and losses arising at the time of re-possession. The valuation methods used are: fair market value, balance due on the defaulted contract, market price of repossessed lot or balance due on the defaulted contract, whichever is lower, original cost, original cost or balance due on the defaulted contract, whichever is lower, and original cost or market value whichever is lower at the date of re-possession.
- . Seventy-seven percent of the companies use one method to allocate all items of cost for costing an improved lot irrespective of the type of subdivision developed or variations in size, location or physical features of the lots. Sixty-three percent of the companies use the 'number of lots' methods under which each lot is assigned the same cost and thirty-three percent use tentative selling price of each lot as the basis of allocation. Frontage foot method for allocating joint cost is used by ten percent of the companies, while area of each lot is used as the basis by twenty-three percent of the companies. No company uses assessed value of each lot method. There is no correlation between the method of classification and accumulation of costs and selection of a basis for allocating joint cost to individual lots. All the four patterns of classification and accumulation of costs and every method of allocation were used. Also there is no relationship between a method of allocation used by a company and its size, types of subdivisions developed, number of subsidiaries owned and

location of the company.

- . Generally, advertising and promotion expense, other selling expenses and administrative expenses are expensed by the majority of the companies. However, some large companies capitalize advertising and promotion expenses if it involves huge outlays on extensive promotion programs and allocate to various subdivisions or to individual lots in the final analysis at the time of the sale of the lots. An important practice was noticed in the items included in the administrative expenses. Many companies included large amounts of expenditure on survey, engineering and land planning operations in administrative expenses, especially when they had separate land survey, planning and engineering sections. In other words, expenditure on land survey, planning and engineering was treated as a period cost rather than a cost of an improved lot. Companies which employed sub-contractors for engineering and surveying work inventories such costs as an item in the cost of land or land development.
- . Seventeen percent of the companies that sell lots to civic agencies such as churches, schools, etc. do not use regular costing methods to ascertain the cost of lots sold to these agencies. The total cost of land and land development is absorbed by the remaining lots developed in a subdivision.
- . If any gravel, sand or timber is recovered on the site being developed into a subdivision, about sixty percent of the companies treat proceeds realized from sale of such materials as reduction of the cost of the subdivision. Only sixteen percent

of the companies treat such proceeds as miscellaneous revenue of the period.

4. Influence of income taxation on accounting procedures:

Taxation considerations appear to be at the very heart of the accounting methods used by a company in the industry. Due to the nature of raw materials of a developer, land, which can be classified as a fixed asset for tax purposes if a developer could meet a specified set of conditions, the industry has acquired peculiar taxation features. Other features leading to peculiar accounting procedures employed by developers arise due to the quest for tax advantages by converting ordinary income into capital gain, accelerating deduction of expenses from income and by splitting income among more than one taxable entity. Chapter IV evaluates procedures and practices employed by developers on taxation considerations. The evaluation and analysis attempts to trace the influence of Federal income tax law, the Treasury regulations and judicial rulings involving developers.

The problem of whether a developer is a dealer or an investor in real property has existed for a long time and many cases have come before various courts to decide under what conditions a developer can be classified as an investor and entitled to treat gains realized on disposition of land as capital gain under section 1221. About three and half years ago, the Supreme court's Malat decision clarified interpretation of the word 'primarily' as used in section 1221 to mean 'principally' rather than 'substantially'. However, post-Malat cases decided by various courts seem to indicate that substantial revenue and activity of a developer is heavily considered in various decisions on this point. Therefore, just because a developer is normally a

dealer in real estate does not preclude him from making other investment and rental income provided his intention at the time of acquisition of the property is well documented. In case of carrying charges, it is indicated that in spite of tax advantages obtainable by expensing of the carrying charges (such as cash flow, interest free use of funds, etc.) many publicly held corporations capitalized the carrying charges to avoid showing reduced earnings per share, which might result if large sums of interest paid on borrowed funds and real estate taxes were expensed. In the case of recognition of revenue from installment sales, there is a noticeable divergence between the recognition of revenue for general accounting and for tax purposes. For tax purposes, revenue from installment sales recognized on the installment basis is allowable under the Federal tax law. Also there seems to be some influence of the Federal tax law and the Treasury regulations on methods used to recognize partial reimbursements of cost of roads, sewers, etc. and refund of utility deposits, allocation methods used by developers to distribute joint costs on individual lots on equitable bases, valuation of repossessed lots, revenue realized from sale of sand, gravel, timber, etc.

Taxation consideration has been the dictating factor in the use of multiple corporations in the organizational set up of developers. Before the enactment of the Tax Reform Act of 1969, judicious use of multiple corporations was considered essential in tax planning because of savings in income tax which can be obtained under various provisions of the Federal income tax law. Under the Tax Reform Act of 1969 multiple corporation savings in income tax will be phased out through 1970-1975.

5. Theoretical considerations and land development accounting:

In Chapter V some assumptions and accounting concepts underlying alternative accounting methods and the 'accounting standards' as outlined in the Statement of Basic Accounting Theory are briefly reviewed. The review is followed by an examination of each method used by developers with regard to the 'accounting standards' to ascertain which of the methods does not meet these standards satisfactorily. Critical evaluation of the actual methods used by developers attempts to establish a foundation for proposing accounting system changes which do not meet the 'accounting standards' adequately.

High lights of the analysis are as follows:

- . The method of classification and accumulation of costs in which items of expenditure are classified and accumulated under separate headings, viz. land, roads, sidewalks, etc. and used by the majority of the companies meets the 'accounting standards' adequately.
- . Treatment of carrying charges, such as, real estate taxes paid during the holding period, interest paid on borrowed funds invested in raw land, commissions, legal expenses and other incidental expenses includable as cost of land, as expenses is inadequate and fail to meet the 'accounting standards'. Along with an equivalent 'current cost' measure for the inventory of land and improved lots, the income measurement after capitalizing the carrying charges will lead to meaningful presentation of information for internal as well as external uses.

- . The inclusion of imputed interest, which is an implied rate of interest on non-borrowed funds invested in land, meets the 'accounting standards' adequately only for internal reporting. At present time, there are many unsettled controversies about the decision models and their elements. The inclusion of imputed interest might render irrelevant various measures reported to external users.
- . For theoretical evaluation, recognition of revenue is viewed as actual reporting of revenue in the process of income determination for the period. The sales basis appears to be acceptable for timing of recognition of revenue from lots sold on the non-installment basis. Conditions in the industry show that developers who sell a large part of their lots on non-installment terms generally develop small tracts in such a manner that each part is completely developed and sold in a year or two before initiating improvements on the next part. Consequently, developers are automatically able to associate the development activity and recognition of revenue. In case of recognition of revenue from lots sold on installment plans, the sales basis of recognition of revenue (which is used by the majority of the companies) is inadequate in the majority of cases. Recognition of revenue at the time of sale is premature; it is not earned; nor can selling of a lot on the installment plan and making a customer sign a non-binding contract be considered as a 'critical event' signalling recognition. However, based on the evaluation of various bases of recognition and conditions prevalent in the industry,

it is not possible to generalize that any method which meets the 'accounting standards' satisfactorily. Also non-recognition of 'after-costs' as product cost or distribution of these costs over inventory of unsold lots is inadequate.

- . Generally speaking, developers have not constructed a scientific approach to the problem of allocation of joint costs in spite of an often expressed desire to know the 'exact' lot cost. Of the four allocation methods used by developers, namely, tentative selling price method, number of lots method, frontage feet method and area of each lot method, the tentative selling price ranks at the top when the 'accounting standards' are applied. The poorest basis of all is the number of lots methods, which is used by the majority of the companies. Allocation of all items of cost using one method of allocation is considered inadequate and may be considered as one of the main reasons why the 'unit-cost-lot' information is disregarded in planning and control of the operations by developers.

Recommendations and Proposed Changes in Accounting Methods

1. Classification pattern: In order to provide meaningful information, the method of classification and accumulation of land and land costs is recommended in which various items of expenditure on land and land improvement are grouped into classes and subclasses based on function or activity. The number of groups and subgroups which can conveniently furnish the information needed for the preparation of the financial statements, estimates and budgets and cash flow analysis will depend on the complexities of operations in each company. A general principle

of 'adequacy' of number of groups and subgroups should be the basis of breaking groups into sub-groups. On one hand, there should not be an excessive number of accounts with insignificant amounts being used for that function. Also, simplification and reduction in number of sub-groups should not conceal some significant information. Similarly, the clarity of definition as to what item of expenditure is related to the function or activity for which a specific account is opened must be given utmost importance in designing the classification pattern.

Exhibit-I outlines the suggested groups and sub-groups for land and land development costs. Some modification might be necessary to break-up or combine the sub-groups to accommodate complexities or simplicities respectively under various conditions. For example, a medium size developer engaged in development of only residential subdivisions in an established city where water and sewer facilities can easily be extended to service the subdivision, may not need groups or sub-groups related to 'community development'; or may have to group all expenditure on off-site improvements under one heading because other sub-groups may be insignificant in his case. On the other hand, a developer who is engaged in development of complete communities may be required to expand the groups or sub-groups to accommodate additional functions and activities.

The identification of expenditure scheme for various groups and sub-groups must identify the following characteristics of an activity:

- (i) Division or corporation if multiple corporations are used in an organizational structure

EXHIBIT - II. Land Cost

1. Purchase price of land subdivided into various parcels.
2. Interest charges - land account
3. Real estate taxes
4. Carrying charges
5. Imputed interest on investment in land
6. Legal costs of acquisition
7. Commissions
8. Incidental expenses-land

II. Community-wide improvements

1. Roads and streets
 - (i) Access road
 - (ii) Lateral streets
2. Sanitary sewer system costs
 - (i) Sanitary sewer plant
 - (ii) Sanitary sewer trunk lines and force main
 - (iii) Sewer pump stations
3. Water system
 - (i) Water mains
 - (ii) Storage tanks and towers
 - (iii) Water treatment plant

4. Special Improvements

- (i) Parkways
- (ii) Bridges and dams
- (iii) Lakes and parks
- (iv) Golf club
- (v) Site fencing
- (vi) Polls and recreational areas

III. Off-site Improvements

- 1. Off-site construction and easements
- 2. Other off-site expenses

IV. On-site Improvement

- 1. Land planning -- layout and planning expenses
- 2. Surveying and engineering
- 3. Clearing and grading

V. On-site Utilities

- 1. Water system costs
- 2. Sanitary sewer system costs
- 3. Gas system costs
- 4. Storm sewer system costs

VI. On-site Roads, Streets, Curbs

1. Roads and streets costs
2. Sidewalks costs
3. Curbs and gutters

VII. Miscellaneous Development Costs

- (ii) Project
- (iii) Type of sub-division in a project, namely industrial, commercial, or residential.
- (iv) Sub-section of the sub-division since sub-division may be developed in parts over multi-periods.
- (v) Activity
- (vi) Sub-activity

The above scheme of identification will facilitate preparation of and computerizing estimates and budgets, cash flow analysis and the financial statements for each sub-division or section since these reports are considered very important by almost all developers. Periodic internal reports showing progress of each section or sub-division can also be prepared without additional allocation or distribution of various cost since the original estimates and recording of actual expenditure are based on the similar classification pattern.

2. Carrying Charges: To compute the correct cost of an improved lot, it is necessary to include all items of costs connected with land, since land is raw material for developers. Therefore, it is recommended that interest on debt, real estate taxes, legal fees, commissions paid during acquisition and other incidental carrying charges should be capitalized. Capitalization of the carrying charges will enable a developer to include all items of input costs including those which are necessary for creating time utility. Because a developer has to acquire land far in advance of his needs due to scarcity of this type of resource and thus incurs the carrying charges to hold his raw materials until these can be processed and sold, he creates time utility. Also the carrying charges are incurred with the intent to recover in later periods when lots will be sold and revenue recognized.

Proper matching of costs with revenue requires that these be capitalized and deferred until revenue is recognized at the time of sale. Incidentally, capitalization of the carrying charges is also acceptable for income tax purposes by election of a developer.

3. Imputed Interest: An implied interest charge (imputed interest) on non-borrowed funds invested in raw land at market rate of interest paid by developers on borrowed funds invested in other parcels of land is recommended as an item of input cost only for internal reporting purposes. For external reporting purpose inclusion of imputed interest is not recommended because many known decision models used by investors in valuing the stock or net worth of the company, already take the service value of funds invested into account in their discounting factor. Furthermore, because internal reports are used for choosing among alternatives of selling of raw land or developing and then selling individual lots, a clearer picture can be presented when imputed interest is included rather than excluded in making a choice. For example a developer has two alternatives for either developing a parcel of land and selling individual lots and realizing 20% gain a year from today or sale of raw land at a profit of 12% now. The funds invested belong to a developer. Apparently, given all other factors as constant, the first alternative appears attractive because 8% additional gain can be realized by sub-dividing and selling individual lots. But in reality, the additional 8% profit should be considered as service value of funds invested by a developer for an additional one year, and is not additional profit derived from subdivision activity. If imputed interest is not taken into account in the selection process, the choice may be made for the first alternative

when both alternatives are the same as far as overall revenue to be realized from the two alternatives is concerned.

4. Recognition of Revenue from non-installment sales: The point of sale basis is recommended for recognition of revenue from lots sold on the non-installment basis. The event for timing of recognition should be 'signing of the sales contract' since bonafide transaction has taken place and consideration in the form of 'account receivable' can be reasonably evaluated. Generally, the sale contract specifies that developed lots sold will be security in case of default on the part of the buyer, and the peculiar conditions in the industry in which improved lots are not sold on the non-installment basis are sold to builders on land contracts reduce the uncertainty of collection to a minimum. Furthermore, the manner in which developers who sell lots on installment terms carry out the process automatically associates the development activity or earning of revenue with recognition of revenue. This process is discussed in the previous chapter.

5. Revenue recognition from installment sales: Because of the complexity and diversity of the terms of sale in contracts between a developer and a buyer of lots and the particular circumstances surrounding various sales transactions, it is pertinent to analyze the terms of sales contracts before selection of a basis of recognition of revenue. As indicated in the previous chapter, no one method can be recommended for recognizing revenue on lots sold on the installment plan. The factors must be considered in selection of the basis are as follows:

i) Point-of-sale basis: When the point-of-sale basis is used for recognizing revenue, a sale transaction must be evaluated on the

following factors. If it meets these tests then point-of-sale basis is recommended for recognition of revenue.

a) The sale contract must be binding between a buyer and a developer. Generally, a clause to that effect is present in the contract of sale which either explicitly or implicitly provides whether the buyer can rescind the contract and decline to take delivery of the lot.

b) Substantial improvements on contracted services to be rendered by a developer must have been completed at the time of signing of the sale contract. What can be considered substantial will depend upon the terms outlining contractual obligations of a developer. For example, if the terms of sale between a buyer and a developer stipulate that the developer will arrange for rezoning which involves lengthy negotiations, the sale may fail on substantial performance test because of substantial costs and uncertainty surrounding the rendering of service which must be performed by the developer. Similarly, if a large proportion of the total work on improvements is not completed by the developer at the time of signing the contract, improvements cannot be considered substantially completed.

c) Collection of consideration is reasonably assured. The reasonableness of collection can be indicated by adequate credit-worthiness of a buyer of lots or when there is sufficient security available with a developer for the balance due (e.g. title to the lot sold). A substantial

portion of the purchase price and reasonably short duration during which installments may be payable may imply reasonable assurance of collection.

d) The costs related to the uncompleted portion of improvements, collection expenses and other expenses connected with guarantees given to a buyer can be reasonably estimated with a fair degree of accuracy in order to accomplish matching of revenue and costs. The past experience of a developer, and the economic conditions under which he operates will influence to a great extent whether or not this test can be met.

(ii) Collection basis or installment method: If the following factors are indicated by a sale transaction, the collection basis for recognizing revenue from installment sales is indicated.

a) The sale contract may not be binding between a buyer and a developer.

b) Substantial improvements or services to be rendered by a developer have not been completed at least to the extent that the proportion which installments received bear to the total sale price of a lot. For example, suppose the selling price of a lot is \$6,000 and is to be paid over a period of 5 years at \$100 per month. If, at the end of the first year, the amount of services to be performed by a developer is at least one-fifth of the total services which have been contracted by the developer, he should recognize revenue of \$1200 on the installment basis. The computation of proportion of services rendered

will be dependent upon individual judgement by the developer.

c) When collection of the consideration received in the exchange is not reasonably assured. A small amount of down payment and installments to be paid over an extended period of five to seven years in small monthly installments may indicate uncertainties surrounding collection. Or when the sale contract indicates that the developed lot will be delivered only after receipt of the final installment, it may shed some doubt about collection of installments.

iii) Production basis: When the cost of land and preliminary subdividing activities constitute a large portion of the total cost of sale of improved lot, and the developer has been in the land development business long enough to be able to make dependable estimates of cost of program towards completion, the production basis can be used for recognizing revenue from installment sales. For example, a developer is developing a parcel of land situated in the down-town portion of a city, and the cost of land and cost of preliminary subdividing activities such as land planning, engineering, surveying, clearing, and grading amount to nearly 75% of the cost of sale. If there is reasonable assurance of collection at the time of sale, a developer may recognize revenue on the production basis although he has not started many of the contracted improvements. The important factor in this case would be the relatively higher value of land by virtue of the improvements made. Once a sale contract is signed and collection is assured, he can at least recognize the revenue to the extent of the value of the final product completed.

iv) As Advances: In cases where a sale is made on an installment plan to the purchaser of a specific homesite before improvements have been started, but the sale contract stipulates that improvements will be completed before delivery after a period of three to five years from the date of signing the agreement, the receipt of installments until improvements are substantially completed constitute customer's advances or deposits. It is nothing more than the placing of an order with a developer to process an improved lot for which the buyer is willing to advance a partial amount. Under these conditions recognition of proceeds as revenue is unreasonable because a developer has not earned the revenue. Aside from the non-earning of revenue, the order may be cancelled at any time by a buyer foregoing the amount of advances paid in. The developer may have to incur large amounts in collection and billing charges. Therefore, it is recommended that if the terms of agreement indicate that proceeds received by a developer can be considered as mere advances by his customers for order of homesites yet to be processed, the proceeds should be treated as advances. When substantial improvements have been completed, the collection basis should be used from that point in time.

6. Recognition of 'after costs' and partial reimbursements: 'After-costs' which may be incurred in subsequent periods but legitimately applicable to lots sold in earlier periods must be provided at the time of recognition of revenue from lots. Similarly, proper matching of revenue and expenses requires that estimated future reimbursements be recorded at the time of recognition of revenue. A corresponding liability account (a contra account) for estimated future expenses

and an asset account for any expected reimbursements must be provided to account for these items. Because of uncertainty it is not appropriate to delay their recognition. If costs are in excess of expectations, but are legitimately applicable to lots sold in earlier periods, they should be treated as loss (unrecovered past cost) rather than additional cost distributed over unsold lots.

7. Revaluation of repossessed lots: Lots which have been repossessed should be valued at current replacement cost based on appraised value of a similar type of lots and gain or loss treated as extraordinary items.

8. Methods of allocation of joint costs: The pyramiding of unit-lot-cost from individual cost classifications is recommended to compute unit cost of lots sold and inventory value at the end of the period. The weighted average method of allocation is recommended for allocating each classification. The variables and weights will depend upon the complexities of a project and sophistication of classification into various groups and subgroups. Generally, three variables, namely, location, area and frontage feet of a lot will be sufficient in formulating a weighted base for allocation. The weights for each of the variables will be based on engineering estimates (such as area of lot, frontage feet) and qualitative judgement for location factors. Even selling price may be used as a surrogate measure for location factor if no other measure is possible.

The process of pyramiding unit-lot-cost from individual classification is illustrated by Exhibit II and Exhibit III involving fairly simple and complicated projects respectively.

Exhibit-II shows a fairly simple project developed by a developer. A parcel of land in an established neighborhood and no off-site improvements or community-wide improvements is sub-divided into individual lots for single-family residential homes. In this case, the cost of land and capitalized carrying charges are classified under one group and other expenditure on land development is grouped into separate classifications such as on-site improvements, on-site utilities, on-site roads, streets and curbs, miscellaneous development costs, etc. Each group is allocated separately to individual lots using the weighted average cost method, but weights assigned to the three relevant variables, namely area, frontage feet and location may be different for allocating to each group. For example, benefit imparted by expenditure on on-site roads, streets and curbs may be more related to frontage feet of a lot. Therefore, in assigning the weights for allocating expenditure on this group, relatively higher weight will be assigned to frontage feet than area or location. Similarly, expenditure on on-site improvements may impart benefit to lots related on area of each lot. Under these cases, area may be assigned relatively higher weight than location or frontage feet.

Exhibit III illustrates a fairly complex project where more than one parcel of land are acquired for a complete project involving more than one type of subdivision, and common facilities are developed in sections over a long period. The project envisages on-site as well as off-site and community-wide improvements.

When a project involves complexities, pyramiding of unit-lot-cost from individual classifications to compute unit-lot-cost of lots sold and value of inventory of unsold lots will be done in stages.

In Exhibit III, land costing will involve four stages. In the first stage the cost of land and capitalized carrying charges will be allocated to tracts assigned for various types of subdivisions and common or community facilities such as golf course, community association properties, etc. In the second stage, the cost of common facilities plus their directly identified costs are allocated to various subdivisions. In the third stage allocated cost to the subdivisions plus their directly identifiable cost are distributed to individual sections. In the final stage, the sectional costs are allocated to individual lots or group of lots developed in each section. Furthermore, since more than one parcel of land and each parcel having different cost enter into cost of land for the project, additional elements must be considered in the process of allocation of land cost. It is related to the problem whether the cost of three parcels be aggregated and then averaged over various subdivisions on the weighted-average-method; or land cost and subdivisions or sections be identified and appropriate cost of land allocated to them on the basis of actual cost of each parcel thus identified. A plausible recommended solution will be to examine whether the additional parcels are acquired to round out the proposed development tract or to enlarge the tract for extending the project into various types of subdivisions. If acquisitions of additional parcels are for merely rounding out and can be considered minor, the total cost of land is computed by aggregating cost of all parcels of land and then allocating to various subdivisions and sections in stages outlined above. However, when acquisitions is major and for enlarging the development tract, the cost of various parcels should not be aggregated into one lump sum

EXHIBIT II

Pyramiding Process and Determination of Unit-lot-cost --- A simple Project

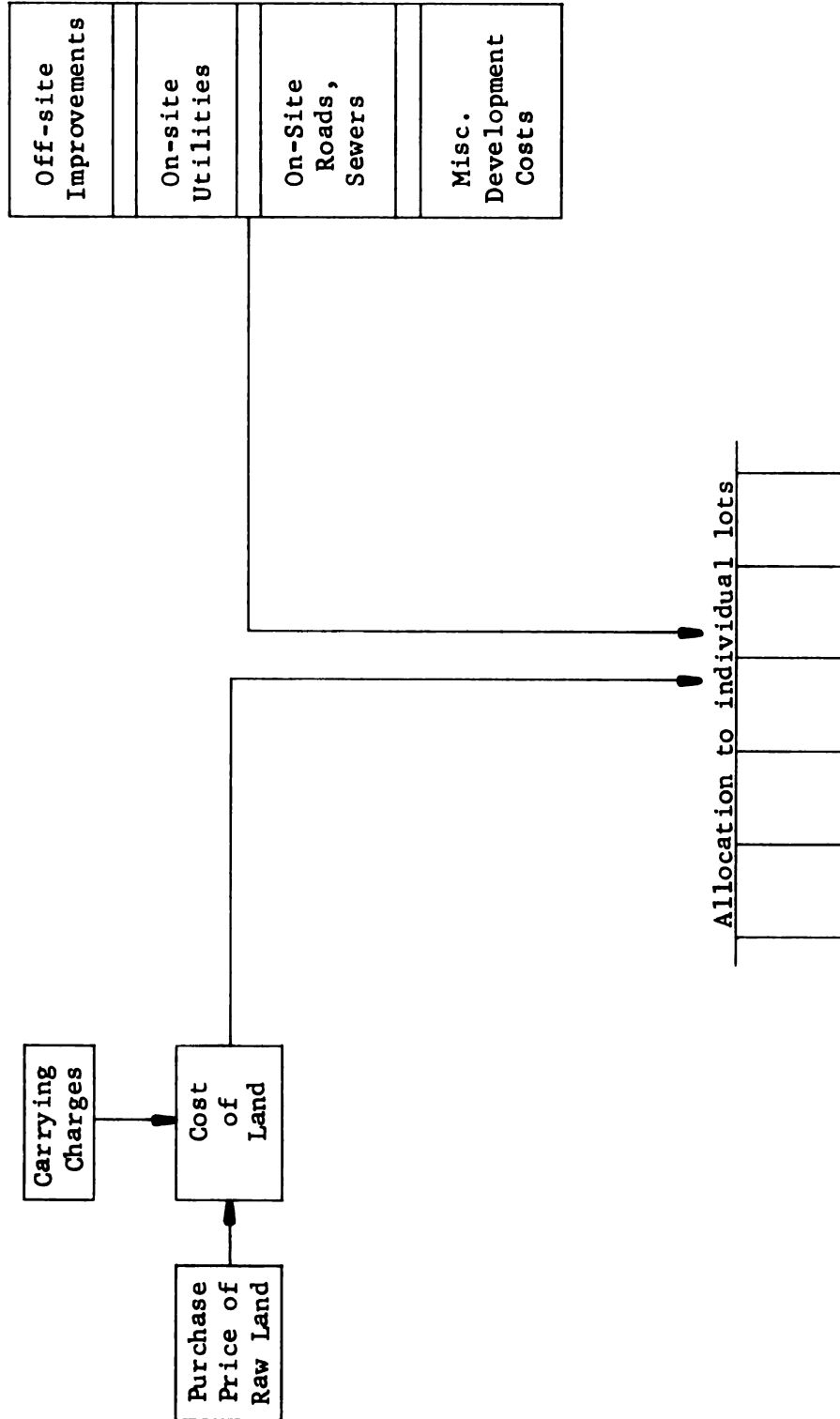
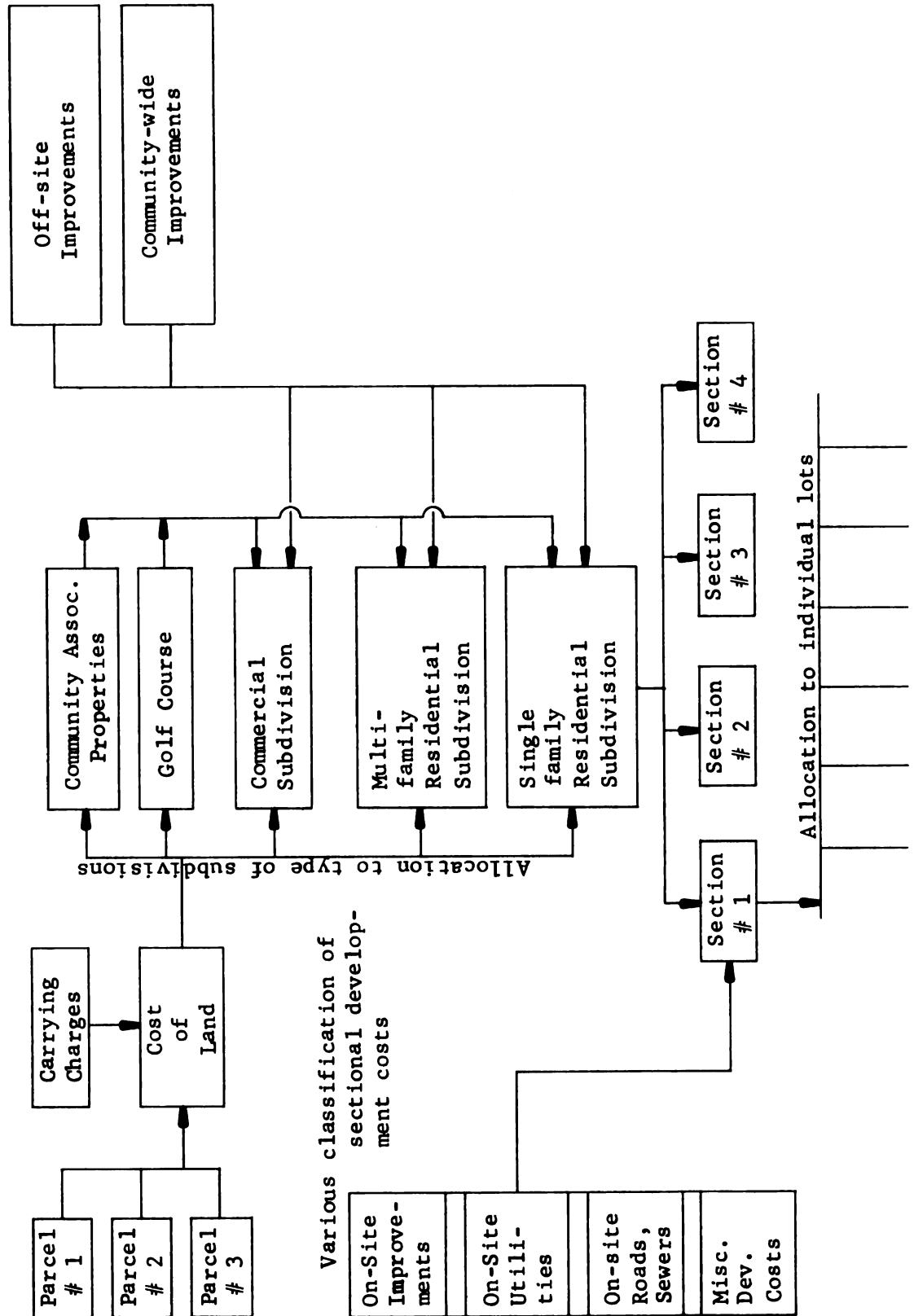


EXHIBIT III

Pyramiding Process and Determination of Unit-lot-cost -- A Complex Project



land cost whereby they lose their identity. Instead, the land and land cost should be identified separately and allocated on the basis of area of each parcel used in different subdivisions or sections. For example, an industrial subdivision may contain one or a number of industrial lots and a particular large lot may include parts of land acquired at different prices. Where the costs are identified for each of the parcels separately, the cost of land for that particular lot can be determined by assembling cost based on the area of each parcel used in that lot. Similarly, pyramiding procedures involving various stages will be used to compute cost of development. The recommended classification pattern will considerably facilitate allocation by stages, because cost which relates to improvements that benefit all lots within a project (off-site and community-wide improvements costs) and those costs which relate to sectional improvements are separately collected. The weighted-average-method of allocation of costs based on benefit received criterion will provide an equitable allocation.

In situations where facts and circumstances surrounding a project are either more complex or more simple than the two illustrations, suitable modifications can be introduced using similar logic in the pyramiding process for arriving at the unit-lot-cost.

Suggestions for Further Research

(i) The accounting system of a developer must also provide meaningful information for evaluating and controlling land development operations. There is a need to examine the role of accounting in planning and control due to peculiar features of the land development

industry. In other words, managerial accounting aspects related to management and control practices in the industry need to be explored in depth.

(ii) There is a need to explore the use of probabilistic measures in estimates for cost of sales when lots have been sold before all contracted improvements are completed, but revenue is recognized prior to completion. At present engineering estimates based on single-point estimates are used to report cost of uncompleted improvements.

(iii) Further research is needed in the direction of feasibility of designing a management information system in lieu of the traditional accounting system. In the past, land development companies were small and did not require the information to meet the dynamics of the land development industry in planning and control of their organization. In the past few years, many large corporations have ventured into the industry and there has been continual growth and expansion of these firms through domestic and foreign expansion, mergers and acquisitions. These changed environments have seriously strained the existing information provided by the accounting system. Large corporations are eager to introduce advances in technology, particularly in the field of electronic computers and use of analytic techniques for planning and control and are generating stimulating changes of a significant nature to create management information divisions in their organizational set up and to make data banks accessible by way of teletypes hooked into various departments.

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APPENDICES

APPENDIX-A

Questionnaire Guidelines

Part-I

This consists of questions regarding size and complexity of operations, and company philosophy pertaining to the segregation of accounting, engineering and other functions within an organization or within multiple corporation structure within an organization.

The size and complexity of operations are important to examine

- (a) identified expected objectives of the accounting function, and
- (b) normative objectives as perceived by the management (as detailed in Part-II). Also, the accounting problems and resultant procedures to solve those problems may be considerably dependent upon the size, complexity of operations and organizational structure of a land development company. Answers to questions in other parts will be examined in relation to responses to questions in this part.

Part-II

This part consists of two broad questions structured to identify and rank the expected objectives of the accounting function of developers. The first question is open-ended and seeks the description of the identified objectives of the accounting function in a company. The second question is a close-ended question giving a set of objectives of the accounting function as normally considered in accounting literature. One of the responses is "any other objectives" to handle

responses other than those contained in the set of answers.

Part-III

This part consists of questions regarding actual accounting practices employed by a company. In particular, questions seek responses to ascertain:

- (1) How costs and revenue items are classified and accumulated.
- (2) What is included in cost of land and land development cost.
- (3) How and why carrying charges are treated in accounts of the company.
- (4) Whether they include imputed interest in computing carrying charges and holding cost for unsold lots.
- (5) How and why revenue is recognized for accounting and tax purposes; and whether different criteria are used for each purpose.
- (6) What treatment is accorded to revenue from sale of land to churches, schools, etc.
- (7) What procedures are employed for accounting for lots sold on the installment sales basis.
- (8) How repossessed land is valued and gains and losses accounted for.
- (9) How and why income and expenses on temporarily managed property are accounted for.

Part-IV

This consists of questions regarding different costing and inventory valuation methods. The reasons behind these will be probed to ascertain whether the methods actually represent 'sound' accounting

treatment or are considered from one or more points of view. (Such as to keep records for tax purposes, or simplicity, etc.)

APPENDIX B

MICHIGAN STATE UNIVERSITY East Lansing, Michigan 48823

Graduate School of Business Administration

Department of Accounting & Financial Administration - Eppley Center

I am a doctoral candidate at the Graduate School of Business Administration, Michigan State University. I am conducting a factual examination of accounting practices and problems in the land development industry, as a basis for my thesis on "Accounting for Land Development." I am very hopeful that this study will make a significant contribution in spotlighting the accounting practices and problems, since I have found no comprehensive study of land development accounting.

I shall greatly appreciate your assistance in answering the enclosed questionnaire. Replies from a large number of companies will help to insure the reliability of data concerning the accounting practices of the industry and its unique features.

All individual replies will remain strictly confidential. All necessary precautions will be taken to ensure anonymity in summarizing the results.

Your assistance is essential in success of the study and the completion of my thesis. I shall be very grateful for your help by completing and returning the questionnaire by the middle of April.

Sincerely yours,

Arjan Sadhwani

LAND DEVELOPMENT ACCOUNTING PRACTICES SURVEY
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
MICHIGAN STATE UNIVERSITY

Instructions:

On the following pages are a series of questions. Most are followed by a series of alternative answers, so it is merely necessary to place check marks opposite the answers which apply in your particular case. When none of the listed answers apply, and for a few other questions for which it was not practical to list a series of possible answers, you are requested to fill in the requested information. All answers will remain strictly confidential.

Please answer all questions. Some questions may not be applicable to your type of system, or there may be doubt about the meaning of certain terms in a question. In either case please provide the answer you believe best answers the question, or put a question mark through the question. In this way it will be known that the question was not merely overlooked.

All replies will be valued. It is recognized that some companies have quite sophisticated accounting systems, while other firms rely on the more traditional methods of accounting for costs and revenues. Regardless of what type of system you're using, your answers will be respected and valued.

Have a pencil in hand. May I suggest that you (or the executive to whom you delegate this task) have a pencil in hand, since most of the questions can be read and answered in little more time than would be necessary for reading alone.

Your cooperation is gratefully appreciated.

Please mail completed questionnaire to:

Arjan Sadhwani, Doctoral Student
Graduate School of Business Administration,
Department of Accounting and Financial Administration,
Michigan State University
East Lansing, Michigan 48823

LAND DEVELOPMENT ACCOUNTING PRACTICES SURVEY

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, MICHIGAN STATE UNIVERSITY

STRICTLY CONFIDENTIAL

Part-I

1. Please indicate whether your company has been involved in development of sub-divisions for:

☐ Residential homes	☐ Industrial use
☐ Commercial use	☐ Residential & commercial
☐ Residential & recreational	☐ Complete community with schools, parks, shopping centers, etc.
☐ Any other (please specify) _____	
2. Does your company own any subsidiary companies or multiple corporations, independent in their operations, for the following:

☐ Purchase and hold undeveloped land until it is ready for development	☐ Management of property on fee basis
☐ Land improvement & subdivision	☐ Mortgage financing
☐ Real estate brokerage	☐ Marketing of developed lots
☐ Any other (please specify) _____	
3. Please indicate whether your company has developed or intends to develop in the near future, any subdivisions:

☐ In city where you are located	☐ In other states
☐ In county " " " "	☐ In other countries
☐ In the State " " " "	
- 4(i) How do you classify your company in the industry:
Small _____ Medium _____ Large _____
- (ii) In your industry, what factors should be considered to classify a company into Small, Medium and Large?

☐ Amount invested in current development projects	☐ Sales in dollars in a year
☐ No. of lots developed in a year	☐ No. of subdivisions developed in a year
☐ No. of Acres developed in a year	☐ No. of employees

Part-II

1. Have the objectives of the accounting function been defined in your company:

☐ Yes	☐ No
------------------------------	-----------------------------
2. If the answer to (1) is 'Yes', please describe briefly and give order of importance assigned to each objective, if any _____

3. If the answer to question number (1) is 'No', can you identify and indicate the order of importance among the following set of objectives (i.e. indicate 1,2,3,...) of accounting function in your company:

- () Preparation of Income Tax returns
- () Preparation of Income Statement and Balance Sheet
- () Cash flow analysis
- () Preparation of budgets and estimates for planning and control
- () Cost reduction and control
- () Evaluation of project profitability
- () Evaluation of performance of employees
- () Any other (please specify) _____

Part-III: QUESTIONS TO EVALUATE ACCOUNTING PRACTICES EMPLOYED BY THE COMPANY.

1. How do you classify and accumulate cost for each subdivision or a development project?

- () All cost items for land and land development accumulated under ONE heading and then allocated to individual lots
- () Land cost and land development cost separately classified under two separate headings (viz. land cost and land development cost) but allocated in total to individual lots
- () Classified and accumulated under separate headings (viz. land, roads, sidewalks, etc.) but allocated in total to individual lots
- () Classified and accumulated under separate headings and each item or group of items separately allocated to individual lots
- () Any other pattern (please specify) _____

2. What items of expenditure are included in 'Cost of Land'?

3. Under Federal Income Tax law, there is an option to capitalize or expense the following items. Please indicate whether you capitalize or expense these items. If you have done both for different projects, please indicate the most common practice:

<u>Capitalize</u>	<u>Expense</u>	<u>Items</u>	<u>Brief Reasons</u>
()	()	Property taxes-undeveloped land	_____
()	()	Second clearing-undeveloped land	_____
()	()	Interest <u>paid</u> on capital invested in undeveloped land	_____
()	()	Property taxes-developed lots	_____
()	()	Sales and use taxes on materials	_____
()	()	Other incidental expenses viz. _____	_____

4. Do you include 'imputed interest charge' on funds invested in land for computing cost of improved lot?

☐ Yes ☐ No

Please describe reasons briefly _____

- 5(i) If a subdivision or a project is developed in parts over more than one accounting period, some items of cost in subsequent periods might be legitimately applicable to lots developed in earlier period. Do you estimate these costs and include in the total cost allocated to individual lots?

☐ Yes ☐ No

Reasons (Please describe briefly) _____

- (ii) If your answer to 5(i) is 'Yes', do you allocate and adjust in subsequent periods the cost of:

☐ All sold and unsold lots

☐ Only unsold lots

☐ Any other (please specify) _____

6. When is the revenue from sale of lots on NON-INSTALLMENT SALES recognized?

☐ When the sale contract is signed

☐ When title to lot is transferred

☐ When developed lot is delivered to

☐ Any other (please specify) _____

purchaser or his agent

- 7(i) When is the revenue from lots sold on installment basis recognized?

a. ☐ When sale contract is signed

b. ☐ When down payment is received

c. ☐ When title to the lot is transferred to purchaser

d. ☐ When developed lot is delivered to purchaser or his agent

e. ☐ On installment basis

- (ii) If your answer to 7(i) is (a), (b), (c), or (d), please indicate whether provision for the following expected expenditure is made:

☐ For cancellation of contracts. Basis used _____

☐ For collection charges. Basis used _____

- (iii) Do you use any "Guidelines" for recognition of revenue from sales on installment basis? _____

8. How are partial reimbursements of expenditure on roads, sewer system, connections, utility easement, etc. treated in your accounts?
- () Reduction of cost of development of the subdivision
() Reductions of the cost of items for which the refund is made
() Extraordinary revenue for the period
() Any other (please specify) _____
9. How is repossessed land from defaulted contracts valued?
- _____
- _____
10. How are gains and losses arising because of repossessions, foreclosures and forfeiture of deposits treated?
- () Capital gains for the period
() Ordinary income for the period

Part-IV

1. In allocating joint cost of land and land development to individual lots, the following allocation methods are commonly used. Please indicate under each method the items of cost allocated, using that method as the basis of allocation. In case you use only one method for allocating all items of cost, please indicate 'all items' under the method.

(i) Tentative Selling Price of each lot	)	_____
	)	_____
	)	_____
	)	_____
(ii) Number of lots in a subdivision	)	_____
	)	_____
	)	_____
	)	_____
(iii) Frontage feet of each lot in a subdivision	)	_____
	)	_____
	)	_____
	)	_____
(iv) Area of each lot in a subdivision	)	_____
	)	_____
	)	_____
	)	_____
(v) Assessed value of each lot in a subdivision	)	_____
	)	_____
	)	_____
	)	_____

(vi) Any other (please specify)) _____
) _____
) _____
) _____
) _____

2. If there are any items of cost which arise due to special conditions for one or more lots, do you charge these items to identified lot(s) to compute the cost of those lots?

() Yes () No

Reasons: _____

3. Please indicate how you allocate the following items of cost:

Advertising Promotion Expenses

Other
Selling
Expenses

Administrative Expenses

()	()	()	... To each subdivision only
()	()	()	... To each subdivision and then allocated to each lot
()	()	()	... Charged as expenses for the period.
()	()	()	... Any other _____

4. Do you ascertain, using regular allocation methods, the cost of lots sold at nominal price or dedicated to schools, churches or to other civic agencies:

() Yes () No

5. How are the proceeds, if any, realized from dedication or sale of land to civic authorities, public utilities, etc. treated in your accounts?

() Revenue for the period when received
() Reduction of the cost of developing a subdivision
() Only the excess of revenue over allocated cost treated as revenue for the period
() Any other (please specify) _____

6. How do you treat the revenue realized on sale of gravel, sand, timber, etc. discovered during the process of development of a subdivision?

7. OTHER COMMENTS: _____
