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THE UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

A COMPUTER SIMULATION MODEL UTILIZING SELECTED FINANCIAL PLANNING VARIABLES

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

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degree of

DOCTOR OF PHILOSOPHY

Ъу

PATRICIA C. CHRISTMORE

Norman, Oklahoma

1975

A COMPUTER SIMULATION MODEL UTILIZING SELECTED FINANCIAL PLANNING VARIABLES

APPROVED BY

DISSERTATION COMMITTEE

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A COMPUTER SIMULATION MODEL UTILIZING SELECTED

FINANCIAL PLANNING VARIABLES

CHAPTER I

INTRODUCTION

To many individuals the term "estate planning" brings to mind the problems of transmitting vast fortunes to the appropriate beneficiaries with the least possible tax cost. The subject does include these aspects, but further encompasses a much larger territory as indicated by the following definition:

Estate planning is planning for coordinated production of income, accumulation and preservation of wealth, and utilization of the income and wealth to create, maximize, maintain, and improve the personal happiness and comfort and financial security of the planner's family during and after his lifetime.

It is with this larger definition of estate planning that this study is concerned. Specifically, attention will be directed to the lifetime accumulation of wealth and the production of income and cash flows necessary to "create, maximize, maintain, and improve the personal happiness and comfort and financial security of the planner's family during...his lifetime." Implicit in the definition are the ideas that successful estate planning of the ex ante nature must begin

well in advance of the estate owner's demise and that personal factors are of paramount importance throughout the planning process. Elaborate schemes which limit themselves to financial considerations only and ignore the estate owner's personal goals do him and his family a great disservice and render such schemes all but useless. Accumulation plans as well as dispositive plans must first conform to the estate owner's desires, and then attention may be directed to the appropriate means of accomplishing those desires.

Purpose of Study

The purpose of this study is to develop a computer simulation model to aid the tax or financial planner in projecting future values, incomes and cash flows to a designated future time. The information so developed can then be used as a basis from which various plans for the disposition of the estate can be developed. Or, alternatively, the planner can use the model to facilitate the accomplishment of the estate owner's lifetime financial goals by evaluating the anticipated effects of various investment plans or business changes in terms of value, income and cash flow at a given future time.

Need for Study

There are several reasons for undertaking a study of this nature. The most important reason is that the potential for computer-assisted tax planning has been largely overlooked, particularly in its application to individuals. The computer has been utilized in recent years to relieve the tax practitioner of the more mundane chores involved in the preparation of certain tax returns, but as a planning

device, it has been almost totally ignored. A properly designed program can relieve the planner of the burdens of involved and repetitious calculations and allow him to devote his time and energies to the creative aspects of tax planning. In fact, it was pointed out in a recent article that computer-assisted tax planning may well be essential in the near future:

The surface has only been scratched in possible applications of the computer as a tax planning tool. Those who begin to participate in computer usage today will be able to continue exploration and adoption of these undiscovered uses, while those practitioners who avoid the commitment may be unable to remain in the race for a relevant tax practice.²

In addition to focusing attention on the use of the computer in tax planning, this study emphasizes an area of estate planning which is frequently taken as given—that of building up one's lifetime wealth, comfort, and security. This involves exploring the impact on the estate owner's future financial position if alternative ways of conducting the owner's business and investing excess funds are considered. Needless to say, projections and estimates involving future values are fraught with uncertainties and inherent lack of total preciseness. Nevertheless, future events must be recognized and dealt with if goals are to be successfully met, and avoiding projections because of inevitable impreciseness can render impossible meaningful plans for the future disposition of the estate.

A final reason for this study is that tax practitioners have all too often confined their services to preparation of the annual tax return with only occasional attention given to piecemeal tax planning. An opportunity to extend services to the client has been ignored. The

development of a computer simulation model that brings together the major variables affecting individual financial wellbeing will aid the tax planner in determining, with a minimum of additional work, the current and expected influence on income, cash flow, and wealth of various financial decisions. Such information should prove beneficial to an individual attempting to accomplish specific lifetime goals, whether or not he wishes to pursue possible estate plans.

Scope

The scope of this study will be limited to those factors which appear to most directly affect the character and amount of an individual's financial position. Accordingly, the relevant variables selected for inclusion in this study are:

I. Personal Information

- A. Marital status, dependents, special factors to be considered concerning spouse or dependents
- B. Personal living expenses, itemized deductions and exemptions, and the amounts by which these are expected to change over time
- C. Personal financial goals in terms of desired wealth, income, and cash flow at a designated future time

II. Information Relating to Business Interests

- A. Form of organization and attitudes toward conducting business in an alternative form
- B. Business net income and estimated growth or decline over time

- C. Cost and fair market values and estimated rates of change over time
- D. Cash flow generated by businesses
- E. Tax credits passed through to business owner

III. Information Relating to Investments and Liabilities

- A. Cost and fair market value with estimated change in value over time for each investment or group of similar investments
- B. Income and cash flow generated by each investment or group of similar investments
- C. Outstanding balances of liabilities
- D. Deductions and cash outflows attributable to liabilities
- E. Rate of return required on excess funds
- F. State income taxes as a percentage of total federal tax
- G. Tax credits produced by investments and available to the owner

Some of the variables are not quantifiable by nature and cannot be functionally related to those that are quantifiable. These factors are, nevertheless, important in the development of alternatives since they include the personal preferences and wishes of the individual for whom planning is being performed. The simulation model will allow the planner to evaluate quickly how planned actions are expected to affect the owner's financial status both now and in the future, but the decisions themselves will be made by the responsible planner in

consultation with the estate owner. The repetitious tasks and functions will be performed by the machine, the decision-making functions can best be accomplished by the planner.

The role of program planning has been outlined in the following terms:

The role of program planning and analysis should be placed in its proper perspective. It is not a decision-making function. It is a method to identify relevant courses of action and clarify their respective implications in terms of costs and benefits. In this sense, it is a tool to sharpen the judgment and intuition of the decision-maker. In addition to cost and benefit factors, there are numerous qualitative factors that must be considered. The qualitative factors may be over-riding ones in some decisions. But, as a minimum, analysis of the program plan can supply some insight into the effects of selecting particular activities, and assist in generating plans which may be more effective in the attainment of organizational objectives.³

Methodology

The study will be performed using a computer program which is a generalized simulation of an individual's economic situation. It encompasses his business, investments, net income and cash flow generated by each, and his personal living expenses, functionally relating the variables so that it can simulate the operation of an individual's financial status. Beginning with the actual assets, liabilities, and personal spending habits and needs of the owner, it simulates his future state by yearly intervals for the designated number of years, based on the assumption that present policies and environment will remain unchanged. The estimated financial position at the designated time horizon is then compared with the desired financial goals, thus giving a measure of the divergence of the two. If, for example,

anticipated cash flow is revealed to be inadequate to meet expected demands, it may be possible to take remedial action now to prevent that undesirable development. Alternative investment plans or business operations can be quickly tested to determine their impact on estimated future liquidity.

The data to be utilized in the simulation model will be gathered on input forms and will consist of the variables previously indicated. The model will be tested for utility and flexibility as well as for mechanical accuracy by gathering sets of information for four individuals with varying ages, business and investment interests, degrees of wealth, and personal requirements. Computer results for one set of data will then be compared to the results obtained by manual calculation to verify the accuracy of the model-generated output. Throughout the study, attention will be directed toward the development and testing of a program that will be utilitarian in addition assuring arithmetic accuracy. Utilitarian aspects will be demonstrated by varying investment input data for two persons in order to observe the expected result on net worth, income, and cash flow at the end of the planning horizon.

During the span encompassed by the planning horizon, it is anticipated that funds will be generated in excess of those required for personal living expenses. A decision must be made concerning the investment of those funds and their influence on the generation of additional income and cash in future years. The model provides for the reinvestment of excess funds at the rate of return required by the individual estate owner. The owner with conservative expectations

would tend to choose a lower rate of return, while the owner who has more optimistic outlooks on investment opportunities would regard a higher rate of return as appropriate.

The simulation model will be designed to accomodate planning for as many as thirty years. However, a maximum planning horizon of ten years is recommended for three reasons. First, projecting values and environments into a very distant future greatly reduces the accuracy of the projections. Secondly, ten years is of sufficient length for many proposed changes in investments and business operations to have produced their major effects. Lastly, personal wishes and circumstances can change drastically. Since the model is designed to facilitate the accomplishment of personal goals, it is essential that goals for a reasonably predictable period be utilized.

Limitations

within the restricted area of this study, other limitations must be recognized. The projections generated by the computer program can only be as accurate as the information contained in the input document and only as flexible as the program permits. The reliability of the input data will probably be superior for those individuals with a relatively stable business and investment history. Anticipating the probable future course of an established business would generally be less hazardous than would be the case if the owner repeatedly changed from one venture to another. The active commodity trader, for example, would not be a suitable individual for inclusion in this model due to the volatility of his investment income and cash flows. They cannot

be predicted with any assurance of reliability. However, if his commodity activities can be separated from other investments, financial planning could be limited to only those more stable activities.

As to flexibility, it is not feasible to allow for all possible types and quantities of investments in which individuals may involve themselves. Nevertheless, major categories have been provided for and in sufficient quantities that investments can, in some cases, be dealt with separately, but where this is not possible, they may be grouped into investment categories with each group being handled as a separate undertaking.

As has been pointed out, the main emphasis of the program developed as a result of this study will be the lifetime development of an individual's estate. Accordingly, the program will be referred to in future chapters as "BUsiness and Investment Lifetime Development" (BUILD).

FOOTNOTES

- 1. Charles J. Gaa, "Some Important Considerations in Estate Planning,"

 Aspects of Contemporary Accounting, University of Florida,

 1966, p. 45.
- 2. Harley M. Courtney and Patricia C. Elliott, "Computing for tax planning," The Tax Adviser, May, 1974, p. 297.
- 3. J. A. McNicole, "Program Planning and Operations Analysis,"

 <u>Canadian Chartered Accountant</u>, October, 1967.

CHAPTER II

COMPOSITION OF THE INPUT FORM AND THE OUTPUT REPORTS

Many factors affect the future financial wellbeing of individuals. Some factors are of a nonquantifiable nature and may serve to circumscribe what would otherwise be a larger range of workable choices. Others can be expressed in numerical terms and be functionally related to each other in such a way that present and future financial positions can be approximated. Both kinds of variables are necessary for the preparation of financial projections and the development of attractive business and investment alternatives.

Information pertaining to major factors of both kinds can be gathered on the input form utilized with the simulation model. Only those variables which can be expressed numerically, however, have been incorporated into the computer model. Qualitative factors, although not included in the machinations of the program, must, nevertheless, be given due consideration when the program output is evaluated and plans for future financial changes are developed. The influence of non-numeric data on the owner's overall plans and responsibilities may be of over-riding importance.

The result of the program computations is presented on a series of reports, one summarizing the owner's present status, and

one for each year in the estate owner's planning horizon. An additional report compares certain projected valuations with the owner's desired values for these areas. The discrepancies between the two sets of data provide insight into potential future strengths or weaknesses. If unfavorable divergences appear, BUILD may be used to test the effect of proposed changes to bring about a closer matching of the two sets of data.

Input Form

An input form has been presented in Chapter IV for each set of data for the persons participating in testing the model. Each form consists of eleven pages and is divided into three main sections. The first section is two pages in length and contains background information pertaining to the estate owner, his family, business activites, and attitudes toward certain types of changes. The second section is eight pages in length and is designed to gather quantitative data relative to personal living expenses, business and investment costs, market values, incomes and cash flows, and estimated annual rates of change in certain of these values. The third section consists of one page on which are placed the estate owner's financial goals at a given future time. These data are manipulated by the program in such a way as to provide projections of future values for investment and business undertakings and comparison of these values with the predetermined goals.

Nonquantifiable Data

Although the nonquantifiable data cannot be incorporated

explicitly into the workings of the model, it is, nevertheless, necessary that the planner be aware of this information and consider it carefully as program output is evaluated. Data in this category fall into two main groups—that dealing with personal preferences and responsibilities and that pertaining to business preferences and needs.

Personal. The input form is designed to gather data concerning the client's spouse, children or other dependents, and such other information as might be helpful in understanding the restrictions imposed upon the estate owner or the directions required of future investment or business plans. Dependents' ages, health, and educational needs may be noted, as well as their other sources of wealth if these exist. Any information that affects the scope of the client's financial planning may be noted.

Business. If the client is engaged in business, background information may be desirable. For example, the nature of the business activity and the legal form in which it is conducted, as well as attitudes of the sole proprietor, partners, or fellow shareholders toward changes in form or activity necessarily influence the type and degree of planning to be done. In some cases, personal data about business associates will be important, and planning will include those associates. Such would be the case if stock redemption agreements or qualified pension and profit-sharing plans were being considered.

Personal and Business Documents. The accumulation of meaningful data for preparation of useful quantitative input will be greatly facilitated by the acquisition of certain documents. Most important among these are prior years' tax returns, both personal and business, existing formalized agreements between partners or shareholders, and trust, wills, or other instruments affecting the accumulation or distribution of the client's property. Not only will such documents aid in locating existing assets and liabilities, but also more accurate data on income, cash flow, and rates of changes in these amounts can be determined and utilized in the second, quantitative, section of the input form.

Quantitative Data

Through interviews with the estate owner and examination of pertinent documents, numerical data relating to the owner's investments and business activities can be developed and placed on the input form. The data so developed will then be key-punched, read into the computer, and processed in accordance with the programmed instructions outlined in Chapter III. Since the output can only be as accurate and useful as the input data, it is imperative that this data be developed carefully. Precise placement of the various data on the form is explained in future chapters.

Numeric data can be grouped in one of four categories:

personal financial information, business financial information, investment information, and financial goals of the estate owner. The
categories utilized and details required by any particular estate
owner will be determined by the type and extent of his interests.

<u>Personal Financial Information</u>. Included in this category are estimated annual living expenses, estimated itemized deductions

and exemptions, and expected annual percentage changes in amounts over the planning range. These categories are not mutually exclusive, since a portion of annual living expense will probably be spent on items qualifying under the Internal Revenue Code as itemized deductions. No attempt should be made by the planner to eliminate this "double counting" since the program will use the data for different purposes.

In addition to the data indicated above, this category includes space for the estate owner to indicate the planning horizon to be used. The program is designed to accommodate planning for as many as thirty years, although a much shorter period may be found more useful and reliable in many situations. Since the accuracy of projected data may tend to diminish as it is projected farther into the future, a shorter planning horizon will tend to yield more reliable results. If an extremely long period is chosen, the results should be viewed as an indication of the general direction in which the owner's financial affairs are heading rather than being considered an infallible calculation of the precise status at a given future time. With any time horizon other than an extremely short one, annual review of input data and reports generated for reasonableness and continuing accuracy would appear to be very desirable.

A final bit of information to be included in this category is the tax table to be used throughout the program. Two choices are provided. If tax calculations are to be made assuming the owner is single, a "1" is placed in the space provided. If the tax table for a married individual, filing jointly, is to be used, a "2" is placed

in the proper place on the input form. All calculations of annual income after taxes will then be made in accordance with the instructions contained in this section of the form.

Business Financial Information. Included in this group of data is information concerning five areas important to or indicative of the financial wellbeing of a business. The first area is the owner's capital investment. This includes not only his initial and subsequent capital contributions, but also a provision for internal growth through anticipated annual increases (or decreases) in the capital balance. Such changes are expressed by placing an appropriate percentage rate of change in the place provided.

A second kind of necessary business information is an estimate of the fair market value and expected annual rate of change in this amount over the planning horizon. A great deal of judgment and care will be necessary in arriving at a reasonable figure. Expert appraisal may be necessary or the client's estimate may be used depending upon the complexity of the underlying assets and the client's future plans for disposal or retention of the business interest. If the business is service oriented, as many professional activities are, assets used in the production of income may constitute a rather small part of total value.

Of importance in reflecting financial wellbeing is the annual net income of a business. For purposes of the input form, only that portion of income allocable to the estate owner should be included. There may be partners or others with interests in the total income, but their portions are excluded. In developing a

useful income figure, prior years' income statements or tax returns can be consulted in addition to any pertinent current information that may be available. Unusual, nonrecurring items may be eliminated if, in the judgment of the preparer of the input form, a more representative figure will result. The projected annual rate of change in income will depend upon such factors as anticipated general economic conditions, the outlook for the business sector with which this enterprise is connected, and specific, unique factors that have a bearing on the future profitability of the particular business undertaking in question.

Annual cash flow generated by the business can be developed from many of the same sources used to develop the income information. If the business is other than a sole proprietorship, only the portion of cash flow available to the estate owner for further investment in the business or for personal use and investment is of importance for input form purposes. The rate at which cash flow is expected to change over time will be influenced by such factors as future changes in profitability, the method of asset depreciation used, and additional business investment in new depreciable facilities.

The final kind of data required is an estimate of the annual tax credits available to the business owner. In the case of a corporation not electing Subchapter S treatment, no tax credit due to business investments will be available to offset the tax liability of the individual shareholder. The other forms in which the business may be conducted will result in a pass through of investment credit as well as tax credits arising from WIN program employees or foreign

taxes. If credit is passed through, the owner should estimate the annual amount and the rate at which it is expected to change during the planning period. In view of the eratic history of investment credit legislation, he may well decide to estimate the amount and rate of change conservatively.

Investment Financial Information. A third category of quantitative data contains information pertinent to a variety of investments in which the owner may have interests and liabilities for which he may be obligated. Specifically, the types of investments provided for are: cash (checking accounts and time deposits), notes and receivables, stock holdings, bonds, life insurance, real estate, employee benefits, salary, and other assets and receipts. The types of liabilities provided for include mortgages on realty and miscellaneous other liabilities and disbursements.

The information required for each classification of asset or liability depends upon its characteristics. For many assets, their costs, estimated fair market values, income produced, and annual cash flow generated is necessary in addition to estimates of rates of change in values. Certain investments such as life insurance, for example, will not typically produce income and will, in fact, have negative cash flows. Notes and receivables, on the other hand, may have income and cash inflow, but will be decreasing in principal and face value due to the periodic receipt of payments on the face amount. Likewise, certain liabilities will decrease over time as payments are made. These cash outflows are broken down into the part representing principal and that consisting of interest depending upon the interest

rate applicable to the liability. The total payment is a cash outflow, the principal portion reduces the outstanding balance of the liability, and the interest portion is a negative income item.

In addition to gathering information concerning assets and liabilities, the form provides space for listing sources of investment tax credit or other credits other than those available through the business interest, the rate of return required on reinvested cash flows, and the state income tax expressed as a percentage of the federal tax. Other sources of tax credit are necessary to include in order that a complete tax calculation can be made for each year in the planning horizon. The rate at which these amounts will change over time depend, as they did in the case of business tax credits, not only on investment choices but also on the vagaries of future tax legislation. For these reasons, conservative estimates may be appropriate for many estate owners.

The rate of return required on reinvested cash flow is the minimum interest rate the estate owner requires on new investments. This rate is used by the program to calculate the income and cash inflow arising from the cash flow created the previous year. To the extent actual investments yield greater or lesser incomes and cash flows, some inaccuracy will be introduced. This will be minimized, however, if the rate of return is carefully chosen and, in any case, the error will be less than would occur if no estimate were made of future earnings.

The state income tax as a percentage of the total federal tax should be estimated and placed on the input form as Item N. This

figure is necessary for the preparation of a calculation of annual after tax cash flow for each year in the planning horizon.

Financial Goals. The final page of the input form contains space for the estate owner to place financial goals desired at the end of the planning period. These goals can be stated separately for business and investment interests. In the first part of the financial goals section, desired annual income and cash flow are listed for the business or professional interest and for investments. In the second section, the desired sources of net worth are listed in terms of cost and market value generated by business interests and investments.

Precise agreement of predetermined goals and projected results of financial activities in unlikely. However, if the estate owner will carefully consider the goals he has set for himself and will refine them sufficiently to include them in the form required by BUILD, his understanding of his goals and the possibilities of their accomplishment should be enhanced.

It may be necessary for the planner to work closely with the estate owner throughout the process of completing the input form. As a minimum, the planner will thoughtfully review the data for reasonableness, comparing it to information of which he has direct knowledge. Since the careful development of input data is crucial to the realization of useful output, the planner may need to aid the owner extensively in developing information in a form that may be unfamiliar to him. For example, cash flow and income may be nearly synonomous in the owner's mind, although they must be separately developed and used by BUILD. In other situations, the opinion of appraisers or

other experts may be necessary to develop realistic factors for such data as percentage changes in fair market value of real estate holdings or current value of other investments.

Reports Generated

EUILD produces a series of reports based on the data contained in the quantitative sections of the input form. The first report is a statement of the estate owner's present business and investment interests and the income and cash each produces. Next, a series of reports is produced based on projected financial data. The final report compares the projected financial data with the goals the estate owner expressed on the final page of the input form. If congruence between expected results and goals is high, the estate owner may be satisfied with expected results and not wish to explore ways of improving his financial situation. A high degree of divergency, on the other hand, may indicate the desirability of exploring other ways of deploying assets in order that more satisfactory results may be obtained. In this case, BUILD can be useful in quickly testing the effects of various proposals on the expected overall financial picture.

Present Financial Status

Net Worth. The first report is essentially a balance sheet in which individual assets and liabilities are gathered, grouped into the various categories provided on the input form, and expressed in terms of cost or principal in the first column and fair market value in the second column. The costs of all assets are totaled, and from

this is subtracted the total principal of outstanding liabilities.

By a similar method, the fair market values of all the assets are totaled, and the total fair market values of liabilities is subtracted. The results of these procedures is the net worth of the estate owner in cost and fair market value.

Income. Taxable income or loss attributable to each type of asset as well as the deductible expenses associated with the various liabilities are gathered in column three. By summing the income from assets and subtracting the total deductions resulting from liabilities, a net income figure is derived. This figure is not identical to taxable income since itemized deductions and exemptions have not been deducted. It does correspond, however, to the adjusted gross income figure provided for in the Internal Revenue Code.

Cash Flow. In the final column is listed the cash flow produced or required by each category of asset or liability. Occasionally this may be the same as income, but in many situations it will differ. Certain investments, for example, produce cash inflows that exceed taxable income due to the deductibility of certain noncash expenses for tax purposes. An example of such an investment is found in assets that are depreciated over their useful lives, the depreciation being a deductible expense that does not require the present outlay of cash. Other investments, such as life insurance policies, may be expected to produce only the negative cash flows of premium payments with no portion being tax deductible. Conversely, liabilities may be expected to require cash outflows that exceed the tax deductible portion attributable to interest. The sum of positive

and negative cash flows results in the net cash generated by business and investment activities. This is not the same as cash available for reinvestment since personal living expenses and federal and state income taxes have not yet been deducted.

Projected Financial Data

Report Number 2 is a series of reports, one for each year in the estate owner's planning horizon. These reports begin with the data contained in Report Number 1, but project it to future years using the information developed with regard to estimates of changes in value, expected earnings, and cash flows. The data projected for each year is arranged in a format similar to that used for Report Number 1 with a few rather important differences with respect to taxable income, after tax cash flow, and investment of cash flow.

Taxable Income. In Report Number 1, the income figure was the sum of taxable income and deductible expenses attributable to business interests and various groups of investments. To find taxable income, the business and investment income must be reduced by the itemized deductions and exemptions of the estate owner. Data concerning these amounts are contained on page three of the input form together with information concerning their expected rate of change over the relevant time span. In addition to computing the expected income for the particular year covered by the report, BUILD computes the corresponding expected deduction for exemptions and itemized deductions. The amount is subtracted from projected income to arrive at taxable income for that year.

After Tax Cash Flow. For each year in the planning horizon, BUTID computes the cash produced or required by business or professional interests, investments, and liabilities. From this figure, it is necessary to deduct cash required for the estate owner's personal living expenses and federal and state income taxes to arrive at cash available for future investments. The amount available each year will necessarily vary in accordance with the projected cash available from investments, the income taxes attributable to expected income, and the projected amounts needed for the personal living expenses of the estate owner and his family.

Investment of Cash Flow. Cash available for investment from the first year of the planning period is included with the assets of the second year under the category labeled "Investment of Cash Flow." The first report of the Report Number 2 series will not register an amount under that heading. Succeeding years, however, will state the amounts produced in previous years. Since precise investment plans for excess cash are not known, some assumptions must be made with regard to the income and cash flow that these funds will produce for the use of future years. The rate of return required by the estate owner and specified in the input form is used to project the contributions of cummulative excess funds to future taxable income and cash flows.

Comparison of Projected Financial Data and Goals

Report Number 3 highlights those variances existing between projected financial information and goals aspired to by the estate

owner. These differences are displayed in four areas—cost, fair market value, income and cash flow—for both business interests and investments.

Assuming the goals have been realistically determined and the underlying data carefully and accurately developed, the existence of a significant disparity presumes some type of corrective action. The precise action to be taken is contingent upon several factors, the principal ones of which include opportunities for alternative action, qualitative, personal constraints, and the area in which the divergence exists. For example, if expected cash flow is less than that desired, the estate owner may have opportunities to improve the variance. The means selected to accomplish this, though, may affect some other variance. The type of investment that improves cash flow may simultaneously reduce taxable income, or may be of the type that reduces cost due to the return of investment. On the other hand, investment alternatives may be such that opportunities existing for the improvement of fair market value variances may produce no improvement in cash inflows. Under these conditions, the estate owner will have choices to make, but, as a minimum, he will have information which may provide insight into the consequences of his decisions.

Summary

An input form has been developed in order that substantially all major factors affecting personal estate building may be gathered for each owner. The form allows for both qualitative, personal information which will shed light on the restrictions or directions

required of future estate modifications, as well as numeric data concerning the owner's financial interests of a personal and business nature and certain changes in this data that are expected to take place over the planning period.

Based on the data contained in the input form, three reports are produced. The first is a statement of the estate owner's current position expressed in cost, estimated fair market value, income, and cash flow generated. The second report is a series of statements prepared for each year in the period under consideration. The program instructions call for annual projected data in the areas of cost, fair market value, taxable income, and after tax cash flow. The final report compares the data projected for the end of the planning period with that desired. Unfavorable variances between the projected values and the owner's goals indicate that possible corrective action may be desirable. Favorable variances give a measure of assurance that goals are likely to be realized. BUILD does not prescribe the type of corrective action to be taken, but it does indicate that such action may be necessary, and it does allow the owner certain information to aid him and his planners in the decisionmaking process.

CHAPTER III

DESCRIPTION OF PROGRAMMED INSTRUCTIONS

BUILD instructions call for accumulation and computation of cost, fair market value, income, and cash flow data relating to investments, business interests, and personal items. The data put into the program or computed by it are used to produce a series of reports designed to aid the estate owner and his advisers in assessing his present financial position or selecting and implementing future corrective measures. This chapter will describe the computations BUILD is instructed to make and the procedures it will follow in generating and utilizing information.

<u>Calculations of Cost, Fair Market Value,</u> <u>Income and Cash Flow</u>

For purposes of preparing a balance sheet on the owner's present position and in order to project his position so that proforma financial statements can be prepared for each year of his planning period, financial input and data from which future projections can be made is necessary. It is essential that this information be carefully gathered since it is an inventory of assets, liabilities, incomes, and cash flows upon which present and future calculations

will be based and upon which important financial and personal decisions may turn.

Calculations for Business Interests

Cost. Business cost is the owner's unrecovered investment in a business undertaking. For sole proprietorships, the concept corresponds to owner's capital. In a corporate undertaking, the cost of the purchase of stock is the appropriate figure. Cost of an investment in a Subchapter S corporation or in a partnership is the initial investment increased by additional investments and undistributed earnings, or reduced by losses and withdrawals. The present cost figure is placed on the input form and used by the computer in the preparation of Report Number 1.

For reports on projected future cost, data must be presented from which the computer can calculate appropriate future amounts. If the business venture is operated as a sole proprietorship, partnership, or Subchapter S corporation, expansion will require future investment by the owner or retention of business income for internal growth. If additional investment is necessary, or if less cash withdrawals are made due to business expansion, the rate at which cost is expected to increase will be placed on the input form and used to calculate future cost. Since increases in cost reduce cash available to the owner, cash flow will be reduced each year by the increase in investment.

If the business is organized in the form of a non-electing corporation, changes in expansion will not be reflected by the

individual shareholder except in the form of larger or smaller dividends flowing from the corporation and in changes in market value of his stock investment. Additional capital investment by the shareholder will simply be reflected when additional purchases of shares of stock are made.

Fair Market Value. An estimate of the current fair market value of the business interest will be placed on page three of the input form. The ease or difficulty with which this figure can be determined will depend in large measure on the form of the business undertaking and the underlying assets. For a service-oriented professional person, the fair market value of the business may be relatively insignificant in comparison to that of an organization whose income is produced by business assets. Expert appraisal may be needed in the latter situation as well as in determining an appropriate rate of change in value over time. Another factor that will impact upon value is the continuity of the business in the event of the owner's death or retirement. If family members or business associates will continue its operation, value will be that of an ongoing business rather than that applicable to a liquidating interest.

Income. For purposes of report preparation, income will be taxable income adjusted for any nonrecurring items. Although prior years' income tax returns provide clues for determination of a suitable figure, the estate owner can undoubtedly furnish insight into selecting a representative amount. In addition, his closeness to changing conditions in his business and its environment will aid the estate owner in establishing a suitable rate of change in expected

income over the time horizon. Given the present taxable income and an assumed rate of change in income, BUTLD will compound the present income each year in the planning period.

Cash Flow. Annual cash inflow produced by the business activity is listed on the input form along with other information relating to business wellbeing. As with the determination of income, a representative figure which eliminates nonrecurring cash drains or sources will produce the most useful figure for planning purposes. Computer instructions direct the increase or decrease in the initial figure as the result of two influences over the planning period. First, an estimated rate of change in cash flow over time is developed and applied to the initial figure by means of a compounding procedure similar to that used in compounding value, cost, or income. Secondly, increases or decreases in cost will affect annual cash flow. Increases in cost imply reductions in cash available to the business owner, and, therefore, result in reductions of cash flows. On the other hand, if disinvestment is taking place, cash flow will be increased.

Investment Calculations

On Report Number 1 are presented the historic costs or outstanding balances for each investment group along with their fair market values, incomes, and cash flows. Data related to individual investments are placed on the indicated spaces on the input form.

The information is keypunched, read into the computer, and then summed and a total reported for each group under the proper column of each

report. The computer totals business and investment costs and from this subtracts the total outstanding liabilities. The result is owner net worth expressed in terms of historic cost. A like procedure is followed in totaling fair market values and subtracting outstanding liabilities to arrive at net worth in terms of fair market value. For some purposes this may be a more useful manner of expression. Taxable income or loss produced by assets and liabilities is also summed as is the cash flow utilized or produced by the various business and investment interests.

The manner in which amounts in each of these areas are projected to future years depends upon the nature of the obligation or property itself. Therefore, the investment categories provided for on the input form will be separately considered below, or, if the instructions for calculating future amounts are similar, groups of like assets will be described together.

Cash. Cash investments are primarily of two types—demand deposits which produce neither income nor cash flows and time deposits which produce both. For purposes of this program, it has been assumed that demand deposits remain at a constant amount. Time deposits, by contrast, will increase at the rate assigned to that deposit. Each year's interest will be added to the principal and the new principal will then earn interest in future years. Interest income generated each year will be picked up by the computer as taxable income. Cash flow in an amount equal to the interest income will be produced, but it will not be listed in the reports with other cash sources. Rather, this amount will be automatically reinvested at its original rate of

interest and added to the principal on deposit.

Notes and Receivables. Program instructions call for the outstanding balance of each separate note or receivable to be reduced each year by the portion of each payment that applies to principal. The input data required is composed of the outstanding balance at the present time, the total annual payment to be received, and the interest rate. BUILD computes the interest income and the payments on principal and reduces the outstanding balance by the principal portion. If the note extends for a longer term than the planning horizon, a new declining balance is reported for each year. Should the note be fully paid before the end of the planning span, no further calculations will be made. The outstanding balance will have been reduced to zero. Both cost and fair market value each year are reported at the outstanding balance calculated for that year.

Income for the current and future years will be calculated by the computer. The outstanding balance of each note will be multiplied by its respective interest rate, and the result will be included with other taxable income. Interest income will decline each year as payments are received on the principal of the note.

Cash stemming from notes and receivables will be determined by reference to the annual payments received. The total amount of each payment will be considered cash inflow irrespective of the portion that applies to interest or principal. This figure will remain constant over the relevant planning period.

Shares of Stock. Cost of shares of stock will remain at the historic cost figure for Report Number 1 and all subsequent reports.

There is no provision for increasing or decreasing the cost of stock investments over the time span. Fair market value, however, will be compounded at the rate provided for in the input form. Each separate stock investment or group of similar stocks will increase or decrease in value at the stated rate.

Income and cash flow attributable to stock investments will be identical amounts determined by the cash dividends distributed to shareholders. There is no provision for increases or decreases in these amounts.

Bonds. In the input form, bonds are listed at their original costs adjusted by amortized premium or discount to their carrying values as of the current date. Carrying value for future years will be calculated by BUILD. If the bonds were purchased at a price in excess of the face value, the excess (premium) will be reduced over the years to maturity until cost (carrying value) equals the face amount. When this occurs, the bonds have reached maturity and the estate owner will receive cash for the bonds.

If the bonds were purchased at a price less than face value, the discount will be added over the years to maturity to the carrying value of the bonds until the carrying value equals the face value. At this point, the bonds have reached maturity and cash is received for them.

The only items of information needed on the input form are the present carrying value, the effective yield of the investment, number of years to maturity, and the nominal interest rate. The amount of premium to be subtracted or discount to be added is determined by the difference between the cash interest received and the taxable income earned as specified by the effective yield. Each year's taxable income will change as the carrying value increases or decreases. The precise amount will be calculated by the computer. Cash flow will be found each year by summing total cash interest receipts and adding to this the face value of any matured bonds as calculated above.

Fair market value for bonds will be considered the same as carrying value, since the method of determining income outlined above assumes the bonds are being held as long-term investments. Accordingly, temporary fluctuations in market value are of less concern than might otherwise be the case.

Life Insurance. For the first report, both cost and fair market value are reported at the current cash surrender value of the life insurance policies. Although actual cost may differ considerably from cash surrender value, the latter figure appears to be the more relevant one since insurance includes elements of nondeductible personal expense and reflecting such amounts in a balance sheet would be of little value to the estate owner and his planner.

Increases in cost and market value will occur each year in accordance with the percentage rate applicable to each policy. The rate of increase in value is applied to the annual premium payments and then added to the previous cash surrender value in arriving at a new, adjusted value.

The annual cash outflow will be the sum of annual premium payments on each policy. There is no provision for changes in these

amounts over the planning horizon.

No allowance has been made for taxable income arising from life insurance or for deductible expense. Relatively few insurance policies produce dividends in excess of the premiums paid and thereby give rise to taxable income. Also, premiums paid on personal life insurance policies are not tax deductible.

Real Estate. Cost of real estate is the historic cost of the property. This will remain unchanged over the planning period. Determination of current fair market value may require expert appraisal as may the ascertainment of an appropriate rate of change in value for each property or group of similar property. Value will be compounded annually at the rate specified.

Income to be reported for each property is its taxable income without regard to deductions due to indebtedness incurred in purchasing or carrying the property. Likewise, cash flow will not reflect payments made on such indebtedness. These adjustments are handled in the section entitled "Mortgages on Realty" and are collected with other liabilities. Income will differ from cash flow by the amounts resulting from depreciation or other non-cash expenses. The amounts so reported on the input form will remain unchanged over the period covered.

Employee Benefits. This category is intended to include such investments as employee retirement plans that build up the estate owner's equities through either the employer's contributions, the employee's contributions, or a combination of the two. Cost for these purposes is the employee's total investment in the plan. It is

expected that the cost will eventually be recovered by the employee upon retirement or by his beneficiaries in the event of his death. This is in contrast to life insurance policies which require a cash outlay, only part of which may build up assets obtainable by the policy owner.

The fair market value of the benefit depends upon several factors and must be separately determined for each investment. If the employer's contributions to the plan vest in the employee, they, along with any earnings of the plan will increase the value of the asset. If the only portion of value obtainable by the employee is his contributions and earnings, a lower rate of increase in value will be in order.

Normally, such plans will produce no immediately taxable income, but taxation will occur when the benefits are withdrawn upon retirement. In the case of a tax-sheltered annuity, the effects can be shown in an alternative way. The employee benefits section of the input form could reflect negative income in the amount of the employee contribution and the salary section of the form could report the salary from which the payment is made at the entire amount, unreduced for the payment.

Cash flow, if any, is expected to be negative for each employee benefit plan. Only the amount invested by the employee will be placed on the input form, and this amount will increase the cost of the plan each year. If withdrawals are being made from the plan, fair market value will reduce at the rate specified, and cash flow will, in that case, be positive.

Salary. There is no provision in the program for cost or fair market value with respect to salaries. Income and cash flow may be the same, but occasionally this will not be the case. For example, if the employee authorizes payroll deductions for contributions to tax-sheltered annuities, the amount of taxable income will be less than the cash inflow. The amount of the deduction will then be shown as a negative cash flow in the employee benefits section. Or, as described above, taxable income and cash flow could be reported as the same figure, with the portion used for the annuity shown as a negative income in the employee benefits section. Both income and cash flow will be compounded at the rate provided on the input form. The chosen rate will reflect employment and promotion policies of the employer to the extent these can be determined.

Other Assets and Receipts. Assets and sources of income or cash not included in other sections of the input form may be listed in this category. Provision is made for cost, estimated fair market value and changes in value, taxable income, and cash flow. Cost will remain constant at the original figure placed on the input form.

Fair market value will compound at the rate indicated for each asset in this category. No allowance is made for income and cash flow to change over the planning period. Therefore, if the amounts are not constant each year, an average or representative amount should be used for each.

Mortgages on Realty. As the name indicates, this section includes indebtedness incurred on the purchase or carrying of real property. Cost and fair market value in Report Number 1 are the

current outstanding balances of the liabilities. The balances will be reduced over time as a result of periodic payments.

Three kinds of information are necessary to fulfill the computer instructions: current outstanding balances of the liabilities, annual payments on each, and the interest rate applicable to each. From this information, BUILD is instructed to compute the tax deductible interest expense for each obligation by multiplying the outstanding balance of the liability by its respective interest rate. The interest expense, subtracted from the total payment made on the obligation, results in the portion of the payment that applies to principal. This portion is then subtracted from the carrying value of the liability to arrive at a new, reduced balance.

Although interest expense will be declining each year, cash outflow will remain the same. It is composed of the entire payment made
on each debt. When the outstanding balance of any debt has been
reduced to zero, BUILD will cease computations for that debt.

Other Liabilities and Disbursements. This category is designed to include liabilities not associated with real estate holdings as well as any other sort of obligation extending over a period of time. The outstanding balance of the liability is reported as both cost and fair market value. Some types of disbursements may not involve an enforceable claim against the estate owner but may be of the nature of a moral obligation. One of the participants in testing the program had this sort of disbursement due to the support of an elderly relative. A principal amount was not due, but annual payments were made. Since these payments did not include interest and principal elements, the

the cut-off of the payments was governed by the number of annual payments to be made. When it is unknown how long payments will continue, one can assume they will continue at least as long as the planning horizon and indicate in the appropriate column on the input form a number of payments in excess of the number of years in the planning period.

owed, the applicable interest rate is inserted in the form and calculations similar to those described in the previous section are made. The deductible interest expense is calculated based on the reducing principal of the debt and the corresponding interest rate, and cash outflow is determined by reference to the amount of annual payment to be made.

Instructions for Preparation of Report Number 1

Report Number 1 is assigned the function of gathering four categories of information on assets and liabilities currently owned. The four types of information are: cost or carrying value, fair market value, taxable income or deductible expense, and cash inflows or outflows. In the previous section, general outlines of the instructions followed by BUILD in arriving at these figures have been described. In this section, the instructions for compiling Report Number 1 will be outlined.

Accumulations of Cost

BUILD is instructed to compile a balance sheet in Report Number 1 based on the historic costs and carrying values of assets and outstanding balances of liabilities. The amounts reported are the beginning data placed on the input form. BUILD will sum by categories all amounts placed in the cost columns of the input form. For example, if the cash section of the form reports balances for three checking accounts and two savings accounts, the program will instruct the computer to add together the five amounts and report their total in the cost column of the first report in the investment category labeled "Cash." A similar process is followed for each of the remaining asset categories. A summation is then made of the separate investment totals, and the result is listed as "Total Assets" in the cost column. Similarly, outstanding balances of liabilities are summed for the two categories "Mortgages on Realty" and "Other Liabilities and Disbursements." The two category totals are added together and the summation reported as "Total Liabilities" under the cost column. "Total Liabilities" is then subtracted from "Total Assets" to arrive at the estate owner's net worth calculated in terms of historic cost.

Accumulations of Estimated Market Value

The BUILD program calls for accumulations of estimated fair market values by asset or liability category. The amounts used in the first report are those contained on the input form. In some cases the values will be the same as costs. This will be so for cash, notes and receivables, long-term bond investments, life insurance, and mortgages and other liabilities. In other cases, estimated fair market values may bear little resemblance to cost. As with cost accumulations, values of assets are summed by category and from this is subtracted the

total value of liabilities. The result is owner net worth in terms of estimated value.

Reporting Taxable Income

A report on the estate owner's present circumstances requires information on his current income produced by business interests or investments. The current annual income from each of these sources is listed on the input form. The computer sums income by categories and places it on Report Number 1 in the third column. Since negative income is produced by liabilities, this is deducted from the normally positive income produced by assets, and the result is reported at the bottom of the third column of the first report. This is not income upon which federal and state taxes will be calculated, since personal expenditures for itemized deductions or exemptions have not yet been deducted.

Reporting Cash Flow

Cash produced or required by each type of asset or liability is obtained from the original data placed on the input form. Occasionally, income and cash flow will be the same, as when taxable income is totally received in the form of cash inflows or deductible expenses are completely paid for with cash. Other types of obligations and assets, though, may produce very dissimilar amounts. For cash accounts, income and cash flow would be the same, but the program is designed to add interest income to the principal of the cash invested, therefore, no cash inflow is reflected for these investments. The sum of cash outflows yields cash flow arising from business and investment

undertakings. This is not the same as "After Tax Cash Flow," since cash required by personal living expenses and income taxes have not been deducted.

Preparation of Reports on Projected Financial Status

A report on financial status will be prepared for each year in the planning period designated on page three of the input form. All amounts used in preparation of these reports will be those calculated according to the instructions designed for each type of asset or liability and discussed earlier in this chapter. Four additional types of calculations to be made are those pertaining to determinations of taxable income, federal and state taxes on that income, cash required for personal living expenses, and after tax cash flow.

Computations of Costs

Cost, for the report prepared for the end of the first year of the planning period, is the original cost increased or decreased in accordance with the instructions previously outlined. Cash investments will be increasing each year as a result of the compounding interest calculation BUILD is instructed to make. Notes and receivables, in contrast, will usually be decreasing as payments are received. Other costs will remain unchanged if no provision has been made for specific changes.

At the end of the first year, all costs calculated for that year or carrying over from original input data will be summed and the newly calculated carrying values of liabilities will be subtracted to arrive at projected cost of net worth at the end of that year. A similar procedure will be followed in subsequent years with one important exception. For all years after the first year, another asset category called "Investment of Cash Flow" will be added. For the second year, the amount to be included in this category will be the after tax cash flow generated in the first year. In the third year of the planning period, that category will include the amounts generated the first year, amounts earned on that sum during the second year, plus after tax cash flow produced in the second year. Subsequent years include the cash flows produced in prior years plus the earnings on those amounts compounded at the rate provided for on page ten of the input form.

Accumulations of Market Values

Estimated fair market values for the first year and subsequent years will be calculated in accordance with the instructions discussed earlier. Some values will be the same as cost, others will be increasing or decreasing over time depending upon their characteristics and economic environments. Fair market value of "Investment of Cash Flow" will be the same as its cost and will be calculated as described previously.

At the end of each year, all values calculated for that year or carried forward from the original data will be summed and the values of the liabilities will be subtracted to arrive at projected fair market value at the end of the year. New values will be calculated and displayed for each year of the Report Number 2 series.

Calculation of Taxable Income

Taxable income and deductions for each year are either computed according to the instructions outlined or are carried forward from the original data in those cases in which annual average income from an investment has been used. In addition to the deductions and income arising from investments and liabilities, one other type of calculation must be made to arrive at income subject to tax. On page three of the input form, information has been gathered relating to the estate owner's estimated annual itemized deductions and exemptions and the rate at which these are expected to change over time. For Report Number 2 for the first year, this deduction is the amount shown on the input form increased or decreased at the rate given. The amount so calculated is subtracted from taxable income attributable to assets and liabilities to arrive at income subject to federal and state income taxes.

Calculation of After Tax Cash Flow

The calculation of cash flow available for future investment requires the computation of two additional kinds of data: federal and state income taxes arising from taxable income and cash required for personal living expenses of the estate owner and his family. The cash flow due to investments and liabilities is calculated for each year in accordance with the instructions previously discussed. For some liabilities or assets, cash inflow or outflow will be the same as income, but for others it will be quite different due to the separation of income elements from return of capital.

Federal and State Income Taxes. The input form indicates the tax schedule to be used in computing federal income taxes. State taxes are calculated as a percent of federal taxes with the appropriate percent indicated on page ten of the input form. Also contained in the input form are various tax credits arising from business or investment activities. BUILD is instructed to compute the federal income tax, calculate and add to this amount the correct state income tax, and subtract from this sum the total tax credits given in the input form or calculated from the information given for the various credits. The result is the estate owner's estimated tax liability for the year.

This is a negative cash flow on the report for that year.

Personal Living Expenses. On page three of the input form, the estate owner estimates the annual cash needed for the personal living expenses of himself and his family. This may include expenditures for items that are tax deductible as itemized deductions. No effort should be made to eliminate such amounts from personal living expenses since total living expenses will be used by the program for a different purpose than will itemized deductions. A space is also provided in which the owner can estimate the rate of change of living expenses over the planning horizon. If a rate is provided, it will be used to compound annual living expenses in arriving at estimated amounts for future years. The amount provided or computed will be reported in column four of the annual reports for the Report Number 2 series. Cash produced by investments and business interests will be reduced by the income taxes on that year's income and by personal living expenses of the estate owner and his family. The resulting

total is "After Tax Cash Flow" which will be reported as "Investment of Cash Flow" in next year's report.

Comparisons of Projected Financial Status and Goals

The final set of programmed instructions calls for the preparation of Report Number 3, Comparison of Projected Financial Status with Desired Financial Goals. In this report, financial goals are compared in four areas with the expected values in those areas as shown in the final report of the planning horizon for the Report Number 2 series.

On page eleven of the input form, the estate owner is asked to state the financial goals he wishes to reach at the end of the planning period. The goals are grouped according to business and professional sources, and are expressed in terms of cost, fair market value, income and cash flows arising from those origins. These goals are then compared to the projected amounts in each of these areas, and the differences are reported. If the estate owner regards the disparities as significant, he may wish to explore methods of improving his expected future financial state. The precise means by which he can achieve an improved condition cannot be identified by the BUILD program. However, as a minimum, insight can be provided into the consequences of selecting particular, alternative activities. The program can sharpen the decision-making abilities of the estate owner and his advisers.

Summary

In this chapter, a general outline has been drawn of the

instructions contained in the BUILD program. The program uses the data contained on the input form to prepare Report Number 1, a statement which expresses the estate owner's current financial status with regard to cost, estimated fair market value, income and cash flow.

The computer is further instructed to utilize input data to calculate future costs or carrying values, project market values, and estimate income and cash flows arising from business activities and other investments. The results of these projections and calculations are presented on Report Number 2. A separate report is prepared for each year in the planning horizon established by the estate owner. The data contained in the final report of the second series is then compared to the owner's predetermined financial goals and a measure of disparity is obtained. If the variances should prove to be unfavorable, the program can be used to quickly test the impact of various strategems designed to improve the owner's financial condition or meet his personal requirements.

CHAPTER IV

TESTING PROCEDURES FOR COMPUTER SIMULATION MODEL

Procedures for testing the BUILD program were designed to accomplish two objectives: assure accuracy and establish its utility. The mechanical accuracy of the program was established during the development and testing by manual calculations of the computer-generated output. The ability of the program to conveniently handle a wide range of realistic circumstances was determined by the careful selection of individuals whose data would be used for testing.

Selection of Persons for Program Testing

Four individuals were found who exhibited the desired diversity. Those persons selected varied considerably in age, type of profession or business interest, present investments and opportunities for alternative investments, degree of wealth, and nonquantitative, personal factors. Ages range from 37 to 65, and present net worths vary from \$90,000 to \$2,100,000. Business interests and professions represented include a medical doctor, an engineer and his business-owner wife, a salaried chief of maintenance for a large public institution, and a semi-retired bank executive. Investments consist of such diverse interests as life insurance policies, part ownership

of an orange grove, and inventories of raw turquoise and geodes.

Those persons kind enough to participate in the development of this program have been assured complete anonymity. Accordingly, each will be referred to only by the client code assigned, and specific descriptions of property locations or other identifying references will be eliminated. Further, names of dependents, businesses, and business associates will be changed to insure privacy.

Range of Ages

Requirements of Different Ages. In selecting individuals with suitable data, a wide range of ages appeared to be desirable for two primary reasons. First, if the program is to be helpful in the accumulation of a lifetime estate and in making more efficient use of existing resources, estates of persons in various stages of estate development should be included. Then, if different needs or requirements due to age differences were manifested, program modifications might be possible to accomodate those differences. If individuals of varying ages could not be accomodated through BUILD, this limitation would then be recognized.

Modular Use of BUILD. Secondly, if persons of various ages do have different requirements, insight could be gained into the use of the simulation model as part of a modular approach to financial and tax planning. For example, younger persons in the beginning or midst of building or accumulating an estate, might tend to be interested in additional programs which would aid in overall estate growth. Such a person might wish to explore the long-term impact of

incorporating his business and establishing a pension plan more attractive than that available to an unincorporated enterprise. Or, he could be interested in a program that aids him in deciding whether to lease or buy equipment needed in his business. Either of these types of programs could be developed and used in conjunction with BUILD. A model already exists which can aid the salaried corporate executive in choosing the most attractive compensation package given his tax bracket, current cash requirements, and personal preferences. Programs available or to be developed in such areas as these could very well be integrated with BUILD in the overall development of an individual's lifetime security.

An older person might wish to pursue alternative ways of disposing of his estate at a given future time. In such circumstances, he would be interested not only in the amount of the probable future estate, but the proportions contained in various categories of assets. The program could be used to answer such questions as: What will be the projected value of the estate for tax purposes? Or, what degree of liquidity can be expected if present types of investments are continued or certain new ones undertaken?

Several programs which would aid the estate owner in developing various plans for the disposition of his estate are already available for noncommunity property states. Such programs could use as input, the projected data developed through BUILD and thus extend the modular approach to lifetime financial planning to include ex ante estate planning as well. Diversity of Professional or Business Interests

By selecting test data from individuals with diverse professions and businesses, it would appear that the program could be made flexible and adaptable to a broad spectrum of conditions and circumstances. Accordingly, the program was tested with the data of persons exhibiting a substantial amount of occupational variety. FDY 001 is employed as head of maintenance for a large state facility. ROR 001 is an internist who has been in practice for about five years. The third set of test data was furnished by HAN 001 and is actually that of two persons, a husband and wife, each of whom has separate business or professional interests. He is an engineer with a hobby that may develop into a full-time business, and she is the owner-manager of two pre-school nursuries and kindergartens and has substantial investments in real estate. The final set of data is that of WEA 001, a semi-retired bank executive who participates in a wide range of financial activities.

Although the participating individuals necessarily do not represent all possible professions or businesses, it appears that diversity sufficient to establish program flexibility is represented. It seems that little extra realism or adaptability would be gained by the addition of numerous other sets of data.

Differences in Net Worths

Extent of Net Worths. The four persons participating in the testing and development procedures provided large variations in the sizes of their respective estates. In terms of cost and fair market

value, net worths presently are:

	Net Worths				
Estate Owner			Fair Market Value		
ROR 001	\$	90,535	\$	105,935	
HAN OOL		276,972		318,671	
FDY 001		94,431		101,960	
WEA 001	2	2,114,930		3,809,970	

Sources of Wealth. FDY 001 has relied entirely on salary to provide funds for living expenses and investments. Those investments that have been undertaken have been heavily concentrated in savings accounts, mutual funds, and employee reitrement plans. He has never owned real property other than the two building lots which were purchased two years ago. Even his home has been provided by his employer as part of his compensation.

ROR 001 has only recently begun to accumulate funds with which he can invest. Some resources were required in his medical practice, but little additional funds are expected to be necessary there. Other than that, a real estate investment, heavily mortgaged, is his main present investment. As his medical practice develops, he expects to extend the scope of his financial activities.

WEA 001 is the owner of a considerable fortune and has rather far-flung properties. Investments include farmland planted in cotton, onions, and pecans, shares of stock in various local and national companies, personal loans, rental property, and interests in an orange grove. He has been semi-retired for several years but retains a lively

interest in the augmentation and management of his many properties.

In the midst of estate accumulation is HAN 001. The husband is an engineer employed by a space technology firm. However, his undergraduate education was in geology, and his interests continue in this area. The bulk of their assets, though, are contained in the kindergartens and pre-school facilities operated by his wife, in their real estate ventures, and some stock holdings. Some diversity is present in their current portfolio, but both husband and wife have expressed the desire to be less dependent upon his salary and her continued operation of the day-care business.

Alternatives. All of the participants discussed above have alternative routes they may wish to explore. In fact, there are generally many possibilities. ROR 001, for example, expects to earn more from his medical practice than will be required for current living needs and may have continuing needs for suitable investments. As the resources available for investment expand, choices will undoubtedly also increase. WEA 001, due to his close association with the financial community of the Southwest over the years and his considerable resources, has many investment choices. FDY 001 is somewhat more limited than the other participants due to his relative lack of financial sophistication combined with rather limited resources. primary strong points, though, are that he has proportionately large amounts of liquid assets and he is eager to restructure his investments. HAN 001 has a moderate degree of liquidity and a decided preference for "local" investments, i.e., those that involve familiar situations with which they can become actively involved. Stocks, bonds, or

other intangible investments cause them a great deal of stress, and, therefore, will probably not be considered among their feasible alternatives.

Variety of Qualitative Personal Factors

To be a useful tool, BUILD must, in addition to accommodating a variety of ages, business and investment interests, and net worths, serve the needs of persons with diverse personal circumstances which may tend to direct and circumscribe the financial planning in which they engage. WEA 001, for example, is energetically involved in building his estate, but is, nevertheless, considering various ways of transmitting his wealth to his only child, an adult daughter. The daughter's circumstances are such that giving direct control to her is not considered appropriate. FDY 001, on the other hand, has continuing financial responsibility for one minor child and is concerned with meeting this responsibility as well as providing for his own forthcoming retirement. The doctor, ROR 001, has young children and a wife without professional training. He has the dual goals of providing for their immediate financial security and accumulating future Wealth. HAN 001 have adult children who are financially independent, but they are providing support for an elderly relative.

meet their obligations and realize their ambitions. It can, however, aid tremendously in the process of projecting the expected impact of plans developed by the estate owner, his tax adviser, and his financial councelor on the future financial health of the owner. As a result of

being cognizant of the owner's personal requirements, the adviser can point out characteristics of certain investments that are likely to enhance or encumber the owner's ability to realize his goals and meet his responsibilities.

Input Data for Four Participants

In this section are sets of input data for the four participants selected for developing and testing the computer model during the course of this study. Broad outlines have been drawn of the general characteristics, both monetarily and personally, of each person. These outlines will be filled in as input forms and program reports are presented for each.

ROR 001

Input Form. The following eleven pages contain the input information for ROR 001. Contained in the first two pages of the form is any personal information relating to his responsibilities, preferences, or requirements that will add insight and clarify relevant courses of action. The remaining nine pages comprise the financial data that will be keypunched and used to produce Reports 1, 2, and 3. The time span chosen by ROR 001 is ten years, the longest of the four participants.

GENERAL PERSONAL AND BUSINESS INFORMATION

L.	Name ROR 001	_ 2.	Birthdate April 11,	1937.	
}. .	Home address	4.	Telephone		
•	Marital status <u>Married</u> 6. Spouse's	name	Linda	· · · · · · · · · · · · · · · · · · ·	
•	Spouse's birthdate May 7, 1938	-			
•	Children or other dependents:				
	Name		Relationship	Birthdate	
	a. Kevin		Son	10-23-64	56
	b. James		Son	9-14-66	
	c. Gregory		Son	11-07-69	
	d				
	e				
•	Special factors to be considered in planning for spo	use's	or dependent's care:		
	Wife's only income is from trust fund\$1,800 per y	ear.	No professional training	ng.	

	Code ROR 001		
Bus	siness name ROR 001, M.D. 11. Telephone		
Bus	siness address		
Nat	ture and form of business activity <u>Internist</u> . Sole proprietorship		
	titudes toward alternative business forms Wishes to explore possibilities		
<u> </u>	rofessional corporation.		
Nan	mes and ergs of northers or principal shareholders if applicable		
Nan	mes and ages of partners or principal shareholders, if applicable		
Nan			
		,	
Doc		Acquir	ed
Doc	cuments necessary, when applicable:	Acquir	ed
Doc a.	cuments necessary, when applicable: Federal and state individual tax returns for three most recent years	Acquir Yes X	ed
Doc a. b. c.	cuments necessary, when applicable: Federal and state individual tax returns for three most recent years Federal and state business tax returns for three most recent years	Acquir Yes X	ed

PERSONAL, BUSINESS AND INVESTMENT FINANCIAL PLANNING INFORMATION

I. Personal financial information:

			Amount	Projected Annual Rate of Change	
,	1.	Estimated annual living expenses	35,000 C1-11	<u>0500</u> (18)	
	2.	Estimated annual itemized deductions and exemptions	14,000	0600 (32)	
	3.	Number of years for which planning will be done	(-2,	10 (39)	58
	4.	Federal tax schedule to be used		(46)	
II.	Bus	siness financial information:			
	1.	Business investment cost	26,000 C2-11	0600 (18)	
	2.	Estimated fair market value	20,000	(32)	
	3.	Annual net income	84,000	0900	
	4.	Annual cash flow	(39) 85,000	0900	
	5.	Annual investment tax or other credit passed through	(53) 100	(60)	
		to business owner	(67)	(74)	

III. Financial information relating to investments:

A. CASH

-	Description	Amount	Interest Rate
Chec	cking Accounts:		
1.	First National Bank	5,500 C3-11	
2.		(18)	
3.		(25)	59
4.		(32)	Ÿ.
	•	(32)	
Savi	ings Accounts and Time Deposits:		
1.	Children's savings accounts	8,800	0575
2.	Mutual Building and Loan	C4-11 12,300	(18) 0575
3.		(25)	(32)
4.		(39)	(46)
		(53)	(60)

B. NOTES AND RECEIVABLES

	Description	Outstanding Balance	Amount of Annual Payment	Interest Rate
1.			(-0)	
2.		C5-11	(18)	(25)
		(32)	(39)	(46)
3.		C6-11	(18)	(25)
4.		(32)	(39)	(46)

C. SHARES OF STOCK

***************************************	Description	Cost	Market Value	Income	Rate of Change in Value
1.	M.W.A. Industries	7.400 C7-11	9,800 (18)	(25)	0800 (32)
2. 3.		(39)	(46)	(53)	(60)
٦.		C8-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

D. BONDS

•	Description	Carrying Value	Yield <u>Rate</u>	Cash Flow	Years to Maturity
1.		C9-11	(18)	(25)	(32)
2.		(39)	(46)	(53)	(60)
3.		C10-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

E. LIFE INSURANCE

Description	Cash Surrender Value	Annual Premium	Rate of Increase In Value
1. Mountain States	5,290	(3.250)	<u>6400</u> (25)
2. Prudentialchildren's policies	C11-11 985 (32)	(18) (1,200) (39)	3600 (46)
3.	C12-11	(18)	(25)
4.	(32)	(39)	(46)

F. REAL ESTATE

	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Value	
	1. Home	94,000	105,000			1200	
	2. Condominium-Santa Fe	67,000 (46)	(18) 75,000 (53)	(25) 5,950 (60)	(32) 9,300 (67)	(39) 1000 (74)	
	3.	C14-11	(18)	(25)	(32)	(39)	
	4.	(46)	(53)	(60)	(67)	(74)	
	5.	C15-11	(18)	(25)	(32)	(39)	_
	6	(46)	(53)	(60)	(67)	(74)	స్ట
	7.	C16-11	(18)	(25)	(32)	(39)	
	8.	(46)	(53)	(60)	(67)	(74)	
G.	EMPLOYEE BENEFITS					•	
	1.	C17-11	(18)	(25)	(32)	(39)	
	2.	(46)	(53)	(60)	(67)	(74)	
	3.	C18-11	(18)	(25)	(32)	(39)	
	4.	(46)	(53)	(60)	(67)	(74)	

H. SALARY

	Source	Income	Cash Flow	Change In Amount
1.		C19-11	(18)	(25)

I. OTHER ASSETS AND RECEIPTS

	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Amount	ů
1.	Linda'a trust fund			1.800 (25)	1,800		
2.		C20-11	(18)	(25)	(32)	(39)	
		(46)	(53)	(60)	(67)	(74)	
3.		C21-11	(18)	(25)	(32)	(39)	
4.		(46)	(53)	(60)	(67)	(74)	

J. MORTGAGES ON REALITY

	Description	Out- standing Balance	Amount of Annual Payment	Interest Rate	
1.	Home	74,000 C22-11	6,460 (18)	0775 (25)	
2.	Condominiums	50,740 (32)	5,900 (39)	<u>0800</u> (46)	
3.		C23-11	(18)	(25)	4
4.		(32)	(39)	(46)	
5. 6.		C24-11	(18)	.(25)	
•		(32)	(39)	(46)	
7.		C25-11	(18)	(25)	
8.		(32)	(39)	(46)	

K.	OTHER LIABILITIES De	AND DISBURSEMENTS	Out- standing Balance	Amount of Annual Payment	Number of Payments	Interest Rate	
		bligationshome furnishings	12,000 C26-11	5.000 (18)	(25)	1200 (32)	
			(39) C27-11	(46)	(53)	(32)	
L.	TAX CREDITS .		(39)	(46)	(53)	(60)	65
		ource			Amount	Change	Ġ
					C28-11	(18)	
					(25)	(32)	
	4.				(53)	(60)	
М.	RATE OF RETURN REQ	JIRED ON REINVESTED CASH FLOW	7			1000 C29-11	
· N.	STATE TAX AS A PER	CENT OF FEDERAL TAX		·		1400 C30-11	

· IV. FINANCIAL GOALS

A. Annual net income and cash flow desired at end of planning horizon:

		Source	Income	Cash Flow	
	1.	Conduct of business or profession	170,000 C31-11	175,000 (18)	_
	2.	Generated by investments	70,000 (25)	75,000 (32)	66
в.	Net	worth desired at end of planning horizon:			
	-	Source	Cost	Market Value	
	1.	Conduct of business or profession	40,000 C32-11	20,000	
	2.	Generated by investments	350,000	700,000	

Reports on Present and Projected Status. An examination of Report Number 1 reveals that ROR 001 has a present net worth that required an investment of \$90,535, has a fair market value estimated at \$105,935, and generates \$81,729 in income, and \$74,290 in cash flow. Changes in these figures are reflected in the series of reports presented for each year in the ten-year planning horizon. In addition, each of the reports in the series reflects the appropriate amount of itemized deductions and exemptions and arrives at taxable income. The amount of federal and state taxes is computed and deducted along with personal living expenses in deriving an after-tax cash flow figure. For ROR 001, the after-tax cash flow reported in the first report of this series is \$9,341. This amount is included in the second report of the series as "Investment of Cash Flow," and the income and cash produced in turn by this reinvested cash is assumed to be at the rate of ten percent as provided for in the input form.

At the end of the ten-year planning span, cost of investments (net of liabilities) is projected at \$378,321, projected fair market value is \$725,151, estimated income before itemized deductions is \$219,074, and cash flow is estimated at \$210,599 before living expenditures and taxes. When compared with the beginning figures, it appears that ROR 001 will make substantial increases in all four areas.

Comparison of Projected Values and Goals. Report Number 3 contains a comparison of the estimated amounts presented on the last report of the series with the desired values for these financial indicators as listed on page eleven of the input form. For this

person, unfavorable divergences are projected in three areas: cost, \$11,679; income, \$20,926; and cash flow, \$34,401. A favorable variance of \$5,151 is indicated for the estimated fair market value. As a percentage of total cost, the cost divergence is not particularly alarming—only about three percent less than that desired. The same is not true, though, for income and cash flow variances which are approximately eight percent and fourteen percent, respectively, of the desired amounts. Assuming the goals have been realistically and carefully determined, the doctor may decide that corrective action is to be undertaken. If so, the impact of various investment options can be quickly tested by altering that input affected by the proposals and comparing the expected results with his goals.

Report Number 1 is reproduced on the following page, while the series of reports on projected financial status are contained on the succeeding ten pages. Report Number 3 is found on page 80.

DATE: 04/11/75

REPORT NUMBER 1 PRESENT FINANCIAL STATUS

TTEM	cosi	ESTIMATED MARKET VALUE	INCOME_	CASH_FLOW	69
ASSETS: CASH NOTES AND RECEIVABLES	26,600	26,600	1,213		
STOCKS BONDS	7,400	9,800			
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	6,275 161,000	6,275 180,000	5,950	<4,450> 9,300	
BUSINESS OR PROFESSION SALARY	26,000	20,000	84,000	85,000	
OTHER ASSETS AND RECEIPTS TOTAL ASSETS	227.275	242.675	<u>1.800</u>	<u>91.650</u>	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	124,740	124,740	9,794	12,360	
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	12.000 3136.740> 90,535	12.000 		5.000 	

CLIENT CODE: ROROO1

PROJECTED FINANCIAL STATUS--END OF YEAR 1

ASSETS:	PROJECTED COST 27,813	PROJECTED MARKET VALUE 27,813	PROJECTED	PROJECTED CASH_FLOW
CASH NOTES AND RECEIVABLES STOCKS BONDS	7,400	10,584	1,213	44 450
LIFE INSURANCE REAL PROPERTY	8,787 161,000	200,100	5,950	<4,450> 9,300
EMPLOYEE BENEFITS Business or profession Salary	27,560	20,000	91,560	91.090
OTHER ASSETS AND RECEIPTS			1,800	1.800
INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES:	232.560	267.284	100.523	97.740
MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	122,174	122,174	9,794	12.360
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	-<130:540 -<101:546>	36,614 136,676	<u>₹11.234</u> >	\$\frac{5.000}{17.360} > \frac{80.380}{10.380}
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<14.840> 74,449	•
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			****	<34,289> ≤36.750> 9,341

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PROJECTED FINANCIAL STATUS--END OF YEAR 2

PROJECTED **PROJECTED** PROJECTED MARKET PROJECTED <u>cosi</u> INCOME ITEM CASH_ELOW _VALUE_ ASSETS: CASH 29,095 29,095 1,282 NOTES AND RECEIVABLES STOCKS 7,400 11,430 LIFE INSURANCE REAL PROPERTY <4,450> 9,300 11,299 11,299 161,000 222,462 5,950 EMPLOYEE BENEFITS BUSINESS OR PROFESSION 20,000 99,335 29,213 99,800 SALARY THER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW 1,800 1,800 303:327 247:341 109.766 106.919 MORTAGES ON REAL PROPERTY
OTHER LIABILITIES AND
DISBURSMENTS 119,403 119,403 9,590 12,360 17.360 89,559 TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW ******** ******** ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW <40,177>

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PROJECTED FINANCIAL STATUS--END OF YEAR 3

PROJECTED PROJECTED **PROJECTED** MARKET PROJECTED _VALUE_. COST INCOME CASH_FLOW ITEM ASSETS: CASH 1.356 30,450 30,450 NOTES AND RECEIVABLES 7.400 12,344 BONDS . 72 <4,450> 13,811 247,342 LIFE INSURANCE REAL PROPERTY 13,811 161,000 5.950 9,300 EMPLOYEE BENEFITS BUSINESS OR PROFESSION 30,965 20,000 108.782 108,324 SALARY 1,800 OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS 1.800 119.90<u>1</u> 344.083 20 · 136 263 · 762 16.987 LIABILITIES:
MORTAGES ON REAL PROPERTY
OTHER LIABILITIES AND
DISBURSMENTS 9,371 116,413 116,413 12,360 <17.360> 400> Z<u>II6.400</u>> TOTAL LIABILITIES 147,362 NET WORTH. INCOME. AND CASH FLOW ******** ******* ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME 222222222 FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW <46,837>

PROJECTED FINANCIAL STATUS--END OF YEAR 4

PROJECTED MARKET PROJECTED COST PROJECTED __INCOME_ PROJECTED CASH_ELOW ITEM VALUE ASSETS: 31.884 1.434 31,884 NOTES AND RECEIVABLES 13,331 7,400 BONDS LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION <4,450> 9,300 16,323 275,026 16,323 161,000 5,950 32,822 20.000 118,572 118,125 SALARY SALARY
OTHER ASSETS AND RECEIPTS
INVESTMENT OF CASH FLOW
TOTAL ASSETS
LIABILITIES:
MORTAGES ON REAL PROPERTY
OTHER LIABILITIES AND
DISBURSMENTS
TOTAL LIABILITIES
NET WORTH, INCOME, AND CASH FLOW 1,800 1.800 32.410 281.839 32.410 130.997 128.016 388.974 9,133 12,360 113,185 113,185 113.185> **ZII3.IB5**> ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME **三宝宝宝的单位双单位** FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES <54.365> AFTER TAX CASH FLOW

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CLIENT CODE: RCROOL

PROJECTED FINANCIAL STATUS--END OF YEAR 5

ITEM	PROJECTED	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED
ASSETS:				
CASH NOTES AND RECEIVABLES	33,400	33,400	1,517	
STOCKS BONDS	7,400	14,397		
BONDS Life insurance	18,835	18,835		<4,450>
REAL PROPERTY	161,000	305,832	5,950	9,300
EMPLOYEE BENEFITS BUSINESS OR PROFESSION	34,791	20,000	129,243	128,811
SALĀRY	JTY 175	20,000	· ·	· -
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW	51.160	51.160	1,800	1,800 5.116
IUIAL ASSEIS	306.586	443.624	143.626	140.577
LIABILITIES:	109,702	109,702	8,877	12,360
MÖRTÄGES ON REAL PROPERTY OTHER LIABILITIES AND	1077102	1099102	0,011	124300
DISBURSMENTS	<109.702>	<109.702>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<12.360>
TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	196, 884	333;422	134,748	128,217
	*********	******		
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			$\frac{118.733}{116,015}$	
			=========	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES				<62,724> <44.668>
AFTER TAX CASH FLOW			•	20,825

CLIENT CODE: ROROO1

PROJECTED FINANCIAL STATUS--END OF YEAR 6

IIEM	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW
ASSETS: CASH NOTES AND RECEIVABLES	35,004	35,004	1,604	
31ULK3	7,400	15,548		
BONDS LIFE INSURANCE REAL PROPERTY	21,347 161,000	21,347 340,115	5,950	<4,450> 9,300
EMPLOYEE BENEFITS BUSINESS OR PROFESSION	36,878	20,000	140,874	140,463
SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	71.985 333.614	71.985 503.999	1,800 7,198 ——157,426	1.800 7.198 154.311
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	105,942	105,942	8,601	12,360
NET WORTH, INCOME, AND CASH FLOW	227,672>	398,057	28.601> 148,824	<u> </u>
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<u><19.856</u> > 128,968	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<72,083>

_1

PROJECTED FINANCIAL STATUS-END OF YEAR 7

DATE: 04/11/75

ASSETS:	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_FLOW	
CASH	36,699	36,699	1,696		
NOTES AND RECEIVABLES STOCKS BONDS	7,400	16,791			_
LIFE INSURANCE REAL PROPERTY	23,859 161,000	23,859 378,271	5,950	<4,450> 9,300	õ
EMPLOYEE BENEFITS BUSINESS OR PROFESSION	39,090	20,000	153,552	153,167	
SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	<u>94.952</u> <u>363.000</u>	94.952 570.572	1,800 9,495 	1,800 9,495 169,312	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	101,885	101,885	8,303	12,360	
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	201,115 261,115	<u></u>	Z8.303> 164,189	12.360> 156,952	
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME					
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			•	<82,496> <u><49.246</u> > 25,210	

7

PROJECTED FINANCIAL STATUS--

PROJECTED MARKET PRGJECTED COST PROJECTED PROJECTED _VALUE_ ITEM __INCOME_ CASH_ELOW ASSETS:
CASH
NOTES AND RECEIVABLES
STOCKS 1,793 38,492 38,492 7,400 18,134 BONDS LIFE INSURANCE REAL PROPERTY <4,450> 9,300 26,371 26,371 420,740 5.950 161,000 EMPLOYEE BENEFITS BUSINESS OR PROFESSION 20,000 167,371 167,018 41,435 SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS
LIABILITIES:
MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND 1,800 1,800 120 - 162 643 - 899 120 - 162 394 - 860 12.016 12.016 12,360 97,506 97,506 7,981 DISBURSMENTS TOTAL LIABILITIES 297.506> <u>797.506</u>> 546,393 NET WORTH, INCOME, AND CASH FLOW ********* ******* \$22.309> 158,640 ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW (94.157)

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PROJECTED FINANCIAL STATUS--END OF YEAR 9

DATE: 04/11/75

ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME FEDERAL AND STATE INCOME TAXES	******	=======================================	<23.647> 175,561	<107,243>	
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	<92.780 > 336,433	631,708	27.634> 199,208	<u>{12.360</u> >	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	92,780	92,780	7,634	12,360	
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	<u>147.621</u> <u>429.213</u>	<u>147.621</u> 724.488	1,800 14,762 206.843	1,800 	
EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY	43,921	20,000	182,434	182,119	
BONDS LIFE INSURANCE REAL PROPERTY	28,883 161,000	28,883 4 68,01 2	5,950	<4,450> 9,300	d
NOTES AND RECEIVABLES STOCKS	7,400	19,584	1,071		_
ASSETS: CASH	PROJECTED COST 40,388	MARKET VALUE 40,388	PROJECTEDINCOME_	PROJECTED CASH_ELOW	
		PROJECTED			

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CLIENT CODE: ROROO1

PROJECTED FINANCIAL STATUS--END OF PLANNING HORIZION

ASSETS:	PROJECTED	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW
CASH NOTES AND RECEIVABLES STOCKS	42,393 7,400	42,393 21,150	2,006	
BONDS LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	31,395 161,000	31,395 520,636	5,950	<4,450> 9,300
BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS	46,556	20,000	198,853	198,584 1,800 17,725
INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY	177.256 466.000 87,679	177.256 812.830 87,679	17.725 226.334 7,259	12,360
OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES	<u> </u>			•
NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	25222222	**************************************	{25.065> {94,009	-
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			****	<121,704> <57.007> 31,888

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DATE: 04/11/75

REPORT NUMBER 3 COMPARISON OF PROJECTED FINANCIAL STATUS WITH DESIRED FINANCIAL GOALS

IIEM	cost	MARKET VALUE	INCOME_	CASH_ELOW
DESIRED FINANCIAL GOALS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	40,000	20,000	170,000	170,000
INVESTMENTS	350.000	700.000	70.000	75.000
TOTAL	390.000	720.000	240.000	245.000
PROJECTED FINANCIAL STATUS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	46,556	20,000	198,853	198,584
INVESTMENTS	331.765	705.151	20.221	12.015
TOTAL	378.321	725.151	219.074	210.599
DIFFERENCE BETWEEN GOALS AND PROJECTED AMOUNTS	<11,679>	5,151 *******	<20,926	<34,401>

WEA 001

<u>Input Form</u>. The input information relating to WEA 001's personal preferences and financial data is presented on the following eleven pages. Arrangement of the data follows the format described for ROR 001 and calls for a planning horizon of five years.

GENERAL PERSONAL AND BUSINESS INFORMATION

1.	Name WEA 001 2. Birt	hdate <u>February 7</u>	. 1907					
3.	Home address 4. Tele	phone						
5.	Marital status <u>Divorced</u> 6. Spouse's name							
7.	Spouse's birthdate							
8.	Children or other dependents:							
	Name	Relationship	Birthdate					
	a. Judy Marquez	Daughter	April 18, 1942 R					
	b							
	c.							
	d							
	e.							
9.	Special factors to be considered in planning for spouse's or dep	pendent's care: _						
	Daughter is currently married to third husband. Any plans for gifts or estate transfers							
	are to be arranged in such a way that Judy will not have outrigh							
	and her husband will have no property rights.							

Clie	nt C	ode WEA 001	Page	2
10.	Bus	iness name California Citrus Fruits 11. Telephone		
12.	Bus	iness address Southern California		
13.	Nat	ure and form of business activity Partnership formed to develop orang	e grove.	
14.	Att	itudes toward alternative business forms No change in business form	is desired.	
15.	Nam	es and ages of partners or principal shareholders, if applicable		
		·		- 83
16.	Doc	uments necessary, when applicable:	Acquired	
	_		Yes No	
	a.	Federal and state individual tax returns for three most recent years		
	b.	Federal and state business tax returns for three most recent years	<u>X</u>	
	c.	Partnership agreement or shareholders contracts	X	
	đ.	Trust agreements, wills, or other documents (specify) Will and		
		trust instruments	X	

PERSONAL, BUSINESS AND INVESTMENT FINANCIAL PLANNING INFORMATION

I. Personal financial information:

		Amount	Projected Annual Rate of Change
1		66,000 C1-11 17,500 (25)	0500 (18) 0700 (32)
3		(2))	5 (39) 1 (46)
II. B	usiness financial information:		
1	Business investment cost	236,000 C2-11	(18)
2	. Estimated fair market value	245,000 (25)	1600 (32)
3	. Annual net income	18,500 (39)	<u>0800(46)</u>
4	. Annual cash flow	35,000 (53)	0600 (60)
5	Annual investment tax or other credit passed through to business owner	300	(74)

III. Financial information relating to investments:

A. CASH

Description	Amount	Interest Rate	
Checking Accounts:			
L. El Paso National Bank	6,500	,	
2. First National Bank	C3- 11 35,000		
Farmer's and Merchant's National Bank	(18) 12,000		
·	(25)		85
	(32)		
Savings Accounts and Time Deposits:			
Certificates of deposit	119,000	0750	
Certificates of deposit	C4-11 45,000	(18) 0800	
3.	(25)	(32)	•
•	(39)	(46)	
	(53)	(60)	

B. NOTES AND RECEIVABLES

	Description	Outstanding Balance	Amount of Annual Payment	Interest Rate
1.	Sale of ranch land	189,600	24,000	0700 (25)
2.	Note receivable	C5-11 21,960	(18) 3,600	(25) 1000
3.	Note receivable	(32) 18,680	(39) 1,800	(46) 0500
4.		C6-11	(18)	(25)
~ •		(32)	(39)	(46)

C. SHARES OF STOCK

	Description	Cost	Market Value	Income	Rate of Change in Value
1.	Bank stock	69,700	218,800	18.160	0500
2.	Burroughs	C7-11 46,900	(18) 127,500	(25) 9,420	(32)
۲.	Dat 1 oughs	(39)	(46)	(53)	<u>0500</u> (60)
3.	General Electric	62,400	131,200	8,150	0500
4.	Mesilla Valley Investments	C8-11 116,750	(18) 113,290	(25) 5,3 ⁴ 0	(32) 0500
		(39)	(46)	(53)	(60)

D. BONDS

	Description	Carrying Value	Yield Rate	Cash Flow	Years to Maturity
1.	Various municipals	268,000		14.300	16
2.	Greyhound Corporation	C9-11 42,460	(18) 0800	(25) 3,000	(32) 12
3.	Pillsbury	(39) 61,940	(46) 1,000	(53) 5,000	(60) 15
4.		C10-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

E. LIFE INSURANCE

	Description	Cash Surrender Value	Annual Premium	Rate of Increase In Value
1.				
2.		C11-11	(18)	(25)
٤.	<u> </u>	(32)	(39)	(46)
3.		C12-11	(18)	(25)
4.		015-11	(10)	
		(32)	(39)	(46)

F. REAL ESTATE

	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Value
:	l. City office building	472,000	650,000	39,000	73,000	1000
;	2. Ranch land	C13-11 126,000	(18) 425,000	18,000	(32) 23,000	(39) 0800
•	3. Ruidoso cabins	(46) 196,000	(53) 360,000	(60) 41,000	(67) 49,000	(74) 1200
,	4. Home	C14-11 64,000	(18) 200,000	(25)	(32)	(39) 1000
	5. Valley farmland	(46)	(53) 700,000	(60) 36,000	(67)	1200
•	6.	C15-11	(18)	(25)	(32)	(39)
		(46)	(53)	(60)	(67)	(74)
	7	C16-11	(18)	(25)	(32)	(39)
}	8.	(46)	(53)	(60)	(67)	(74)
G. 1	EMPLOYEE BENEFITS					
1	L					
2	2.	C17-11	(18)	(25)	(32)	(39)
	3.	(46)	(53)	(60)	(67)	(74)
		C18-11	(18)	(25)	(32)	(39)
L	1.	(46)	(53)	(60)	(67)	(74)

H. SALARY

	Source	Income	Cash Flow	Change In Amount	
1.		C19-11	(18)	(25)	

I. OTHER ASSETS AND RECEIPTS

	Description	Cost	Market Value	Income	Cash Flow	Change In Amount
1.	Lectures	C20-11	(18)	3,000 (25)	3,000	(39)
2.		(46)	(53)	(60)	(67)	(74)
4.		C21-11	(18)	(25)	(32)	(39)
		(46)	(53)	(60)	(67)	(74)

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J. MORTGAGES ON REALTY

	Description	Out- standing Balance	Amount of Annual Payment	Interest Rate	
1.	Office building	180,960 C22-11	29,000 (18)	0800 (25)	
2.		(32)	(39)	(46)	•
3. 4.		C23-11	(18)	(25)	90
4. 5.		(32)	(39)	(46)	
6.		C24-11	(18)	(25)	
7.		(32)	(39)	(46)	
8.	·	C25-11	(18)	(25)	
0.		(32)	(39)	(46)	•

к.		ER LIABILITIES AND DISBURSEMENTS Description	Out- standing Balance	Amount of Annual Payment	Number of Payments	Interest Rate	
	1.		C26-11	(3.05	(05)	(20)	
	2.			(18)	(25)	(32)	
	3.		(39)	(46)	(53)	(60)	
			C27-11	(18)	(25)	(32)	
	4.		(39)	(46)	(53)	(60)	
L.	TAX	CREDITS			•		٧٥.
		Source			Amount	Rate of Change	91
	1.	Ranch gasoline tax credits			200	(5000)	
	2.	Cottonland conservation projects			C28-11 350	(18) (5000)	
	3.				(25)	(32)	
	4.				(39)	(46)	
	4.		7. (2. 7. 12 12 22 22 22 22 22 22 22 22 22 22 22 		(53)	(60)	
М.	RATI	E OF RETURN REQUIRED ON REINVESTED CASH FLO	W			1000 C29-11	
N.	STAT	FE TAX AS A PERCENT OF FEDERAL TAX		·		1600 C30-11	

IV. FINANCIAL GOALS

A. Annual net income and cash flow desired at end of planning horizon:

		Source	Income	Cash Flow
•	1.	Conduct of business or profession	15,000 C31-11	40.000 (18)
	2.	Generated by investments	300,000 (25)	325,000 (32)
В.	Net	worth desired at end of planning horizon:		
		Source	Cost	Market Value
	1.	Conduct of business or profession	236,000 C32-11	500,000 (18)
	2.	Generated by investments	2,500,000 (25)	5,800,000 (32)

Reports on Present and Projected Status. Report Number 1, reproduced on page 95, indicates that WEA 001 has the following present financial status: net worth cost, \$2,114,930; net worth fair market value, \$3,809,970; net income, \$220,611; and cash flow, \$284,770. Although his assets include all categories other than life insurance and salaries, by far the most valuable type of property owned is real estate which makes up \$2,335,000 of the total fair market value. An examination of the input form reveals that judicious purchases of farmland account for the low bases of real property investments.

In the Report Number 2 series are five reports—one for each year in the relevant planning range. Over the next five years, net worth investment is expected to increase to \$2,489,667 while fair market value increases to \$6,143,980. Net income from investments is projected at \$263,545 and cash flow is anticipated to be \$324,809 before taxes and living expenses. These reports are found on pages 96 through 100.

Comparison of Projected Values and Goals. A comparison of predetermined goals with corresponding projected values reveals unfavorable variances in all points of comparison. Although annual cash flow from investments is expected to increase by about \$40,000 over the next five years, it is, nevertheless, still \$40,000 less than the desired amount. Projected cost is \$246,333 less than that desired. A closer examination of the Report Number 2 series reveals that while cash flow from investments is increasing, so are income taxes and projected personal living expenditures. Cash flow after taxes is actually decreasing over this period resulting in decreasing amounts of cash to

invest in new undertakings. It appears that a fruitful area for investigation would be investments that exhibit "tax shelter" characteristics, i.e., investments with reduced taxable income due to early write-offs of non-cash expenses but significant early returns of capital investment which could then be profitably reinvested. Report Number 3 is found on page 101.

CLIENT CODE: WEAOO1

DATE: 04/11/75

REPORT NUMBER 1 PRESENT FINANCIAL STATUS

ITEM	COSI	ESTIMATED MARKET VALUE	INCOME_	CASH_ELOW	95
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE TAISUPANCE	217,500 230,240 295,750 372,400	217,500 230,240 590,790 372,400	12,525 16,402 41,070 9,590	29,400 41,070 22,300	
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	944,000	2,335,000	134,000	183,000	
BUSTNESS ÖR PRÖFESSION SALARY OTHER ASSETS AND RECEIPTS TOTAL ASSETS	236,000	245,000	18,500 235.087	35,000 313,770	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	180,960	180,960	14,476	29,000	
NET WORTH, INCOME, AND CASH FLOW	2,114,930	3,809,970	220,611	> <u><29.000</u> > 284,770	

v

DATE: 04/11/75

CLIENT CODE: WEAOO1

PROJECTED FINANCIAL STATUS--END OF YEAR 1

ASSETS:	PROJECTED COSI	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_FLOW
NOTES AND RECEIVABLES STOCKS BONDS	230,025 217,242 295,750 373,990	230,025 217,242 620,329 373,990	12,525 16,402 41,070 9,590	29,400 41,070 22,300
LIFE INSURANCE REAL PROPERTY	944,000	2,581,200	134,000	183,000
EMPLOYEE BENEFITS BUSINESS OR PROFESSION	236,000	284,200	19,980	37,100
SALARY OTHER ASSETS AND RECEIPTS			3,000	3,000
TNVESTMENT OF CASH FLOW	2.297.007	4.306.986	236.567	315.870
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	166,436	166,436	14,476	29,000
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	2,130,571	<u><166.436</u> > 4,140,550	222, 091 >	286,870
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<u><18.725</u> > 203,366	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<144,942>

CLIENT CODE: WEAOO1

PROJECTED FINANCIAL STATUS--

ASSETS:	PROJECTED COSI	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED Cash_ELOW
CASH NOTES AND RECEIVABLES STOCKS BONDS	243,507 203,308 295,750 375,731	243,507 203,308 651,344 375,731	13,482 15,467 41,070 9,741	29,400 41,070 22,300
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	944,000	2,853,884	134,000	183,000
BUSINESS OR PROFESSION SALARY	236,000	329,672	21,578	39,326
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	72.628 -2.370.924	72.628 4.730.074	3,000 7,262 245,601	3,000 7,262 325,358
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	150,750	150,750	13,314	29,000
TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	2,220,174	4,579,324	<u>232,286</u> >	29 6, 358
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	3 2 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	**********	<u> </u>	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<152,294> <72,765> 71,299

CLIENT CODE: WEAOO1

PROJECTED FINANCIAL STATUS--END OF YEAR 3

ASSETS:	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW
ASSESS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE	258,019 188,371 295,750 377,637	258,019 188,371 683,910 377,637	14,512 14,463 41,070 9,907	29,400 41,070 22,300
REAL PROPERTY EMPLOYEE BENEFITS	944,000	3,155,950	134,000	183,000
BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW	236,000	382,419	23,304 3,000 14,392	41,685 3,000 14,392
INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	133,810	133,810	12,060	29,000
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	Z133.810> 2,309,894		<u>212.060</u> >	<u> </u>
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME		222222222	<u>\$21</u> :437>	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<159,592> <76,403> 69,852

CLIENT CODE: WEAOO1

PROJECTED FINANCIAL STATUS--END OF YEAR 4

ASSETS:	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW
CASH NOTES AND RECEIVABLES STOCKS BONDS	273,640 172,356 295,750 379,725	273,640 172,356 718,104 379,725	15,622 13,386 41,070 10,088	29,400 41,070 22,300
LIFE INSURANCE REAL PROPERTY SHOLOWER RENEELTS	944,000	3,490,620	134,000	183,000
EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY	236,000	443,606	25,168	44,186
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	213.779 2.515.250	213.779 5.691.830	3,000 21.377 263.712	3,000 21.377 344.333
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	115,514	115,514	10,704	29,000
TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	2,399,736	-5,576,514 >	253,007	729.000 315.333
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	*****		<u><22.937</u> > 230,070	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<166,868> <u><80.223</u> > 68,242

CLIENT CODE: WEAOO1

PROJECTED FINANCIAL STATUS--END OF PLANNING HORIZION

ASSETS:	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_FLOW
CASH NOTES AND RECEIVABLES STOCKS BONDS	290,455 155,184 295,750 382,012	290,455 155,184 754,007 382,012	16,816 12,229 41,070 10,287	29,400 41,070 22,300
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	944,000	3,861,474	134,000	183,000
BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW	236,000	514,582	27,181 3,000 28,202	46,837 3,000 28.202
TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY	95,755	95,755	28.202 272.786 9,241	29,000
OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	2,489,667	- (95.755) 6,143,980	263, 545	<u> </u>
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			239,003	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<174,138> <84,234> 66,437

101

DATE: 04/11/75

CLIENT CODE: WEAOOL

REPORT NUMBER 3 COMPARISON OF PROJECTED FINANCIAL STATUS WITH DESIRED FINANCIAL GDALS

IIEM	COSI	MARKET VALUE	INCOME_	CASH_ELON
DESIRED FINANCIAL GOALS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	236,000	500,000	15,000	40,000
INVESTMENTS	2.500.000	_5.800.000	300.000	325.000
TOTAL	_2.736.000	_6.300.000	315.000	365.000
PROJECTED FINANCIAL STATUS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	236,000	514,582	27,181	46,837
INVESTMENTS	_2.253.667	_5.629.398	236.364	277.972
TOTAL	_2.489.667	_6.143.980	263.545	324.809
DIFFERENCE BETWEEN GOALS AND PROJECTED AMOUNTS	<246,333	> <156,020	> <51,455)	<40,191>

HAN 001

Input Form. Input data for the third participant is contained on the following eleven pages. It differs from that of the other persons participating in the study in that both husband and wife make significant contributions to the economic wellbeing of the family, and, therefore, the data is that of two persons. It is interesting to note that dual careers presented no unusual problems insofar as preparation of input data was concerned. Neither, in this instance, were there particular difficulties in setting goals, interpreting financial reports, or determining appropriate remedial action. However, it appears that when more than one person is involved in these activities, it may be necessary that compromises be made, or, if the data lends itself to separation, separate input data and output may be desirable. The planning horizon selected by HAN 001 is six years.

GENERAL PERSONAL AND BUSINESS INFORMATION

1.	Name HAN 001, Husband and wife	2.	Birthdate November 3	1926
3.	Home address	4.	Telephone	
5.	Marital status Married 6. Spouse's r	name		
7.	Spouse's birthdate October 27, 1927			
8.	Children or other dependents:			
	. Name		Relationship	Birthdate
•	a. Donna Lea		Daughter	6-12-46
	b. David		Son	12-09-47
	c. Donna Lea Courtney		Mother	1-14-03
	d		· · · · · · · · · · · · · · · · · · ·	
	e			
9.	Special factors to be considered in planning for spous	e's	or dependent's care:	
	Children are self-sufficient adults. HAN 001 provide		-	
	VILLETON GIG BOLL BULLICION GRALOUS. HIM GOL BIOVIGO	000	ar support for bonna is	out oney.
				
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Clie	ent Code HAN 001	Pag
10.	Business name Little Playmates 11. Telephone	
12.	Business address 1000 Fairfax Road and 2318 N. Alabama	
13.	Nature and form of business activity Day-care and kindergarten facilities. proprietorship.	Sole
14.	Attitudes toward alternative business forms Would not consider any other organization.	form of business
15.	Names and ages of partners or principal shareholders, if applicable	
15.	Names and ages of partners or principal shareholders, if applicable	
	Names and ages of partners or principal shareholders, if applicable	Acquired
		Acquired Yes N
	Documents necessary, when applicable:	Yes N
	Documents necessary, when applicable: a. Federal and state individual tax returns for three most recent years	Yes N
	Documents necessary, when applicable: a. Federal and state individual tax returns for three most recent years b. Federal and state business tax returns for three most recent years	Yes N

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PERSONAL, BUSINESS AND INVESTMENT FINANCIAL PLANNING INFORMATION

I. Personal financial information:

			Amount	Projected Annual Rate of Change	
	1.	Estimated annual living expenses	21,000 C1-11	0700 (18)	
	2.	Estimated annual itemized deductions and exemptions	8,200	0500	
	3.	Number of years for which planning will be done		(39)	105
	4.	Federal tax schedule to be used		(46)	VI
II.	Bus	iness financial information:			
	1.	Business investment cost	53,300	<u>0500</u> (18)	
	2.	Estimated fair market value	C2-11 59,000	0600	
	3.	Annual net income	(25) 14,200	0800	
	4.	Annual cash flow	(39) 15,300	0800	
	5.	Annual investment tax or other credit passed through to business owner	(53) 100 (67)	(60) 0800 (74)	
				• • •	

III. Financial information relating to investments:

A. CASH

	Description	Amount	Interest Rate	
Che	cking Accounts:			
1.	Citizens' National Bank	4,500		
2.	Alamogordo State	C3-11 3,600		
3.		(18)		
4.		(25)	•	106
•		(32)	•	
Sav	ings Accounts and Time Deposits:			
1.	First National Bank	12,000	0600	
2.	Juarez time deposits	C4-11 18,000	(18)	
3.		(25)	(32)	
4.		(39)	(46)	
4.		(53)	(60)	

B. NOTES AND RECEIVABLES

	Description	Outstanding Balance	Amount of Annual Payment	Interest Rate
1.	Note receivable	10.748 C5-11	1,800 (18)	0700 (25)
2. 3.		(32)	(39)	(46)
4.		C6-11	(18)	(25)
	·	(32)	(39)	(46)

C. SHARES OF STOCK

	Description	Cost	Market Value	Income	Rate of Change in Value
ı.	Keystone S-4 (5.580 shares)	33,480	11,160		
2.	Kansas Gas and Electric (125 shares)	C7-11 2 , 053	(18) 1,537	(25) 164	(32)
		(39)	(46)	(53)	(60)
3.		C8-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

D. BONDS

	Description	Carrying Value	Yield Rate	Cash Flow	Years to Maturity
1.	Galaxy Furniture	14,286 C9-11	0840 (18)	1200 (25)	<u>12</u> (32)
2. 3.		(39)	(46)	(53)	(60)
4.		C10-11	(18)	(25)	(32)
7.		(39)	(46)	(53)	(60)

E. LIFE INSURANCE

	Description	Cash Surrender Value	Annual Premium	Rate of Increase In Value
1.	Prudential, \$45,000 policy on husband	16,420 C11-11	<u>(708)</u> (18)	. <u>9800</u> (25)
2. 3.		(32)	(39)	(46)
J.		C12-11	(18)	(25)
		(32)	(39)	(46)

F. REAL ESTATE

-	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Value
1.	Home	43,000	54,000			1200
2.	Duplexes8 units	C13-11 78,500	(18) 85,000	(25) 14,235	(32) 17,660	(39) _0600
3.	Telshor lots	(46) 11,200	(53) 42,000	(60) (300)	(67) (300)	(74) 1200
14.	Vacation home	C14-11 8,400	(18) 14,500	(25) (350)	(32) 2,600	(39) 1400
•		(46)	(53)	(60)	(67)	(74)
5.		C15-11	(18)	(25)	(32)	(39)
6.		(46)	(53)	(60)	(67)	(74)
7.		C16-11	(18)	(25)	(32)	(39)
8.		(46)	(53)	(60)	(67)	(74)
G. EMP	LOYEE BENEFITS					
1.						
2.		C17-11	(18)	(25)	(32)	(39)
		(46)	(53)	(60)	(67)	(74)
3.		C18-11	(18)	(25)	(32)	(39)
4.		(46)	(53)	(60)	(67)	(74)

H. SALARY

	Source	Income	Cash Flow	Rate of Change In Amount
1.	I & M Engineering	26,500 C19-11	26,500 (18)	0600

I. OTHER ASSETS AND RECEIPTS

	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Amount
1.	Turquoise	3,965 C20 - 11	8,400 (18)	800 (25)	800 (32)	1200
2. 3.		(46)	(53)	(60)	(67)	(74)
4.		C21-11	(18)	(25)	(32)	(39)
• •		(46)	(53)	(60)	(67)	(74)

J. MORTGAGES ON REALTY

Description	Out- standing Balance	Amount of Annual Payment	Interest Rate	
1. <u>Duplexes</u>	36,480 C22-11	3,980 (18)	0775 (25)	
2.	(32)	(39)	(46)	
3	C23-11	(18)	(25)	111
4.	(32)	(39)	(46)	,
56.	C24-11	(18)	(25)	
	(32)	(39)	(46)	
7.	C25-11	(18)	(25)	
8.	(32)	(39)	(46)	

Client Co	ode _	HAN OOL				Page 10
к.	OTH	ER LIABILITIES AND DISBURSEMENTS	Out-	Amount of		
		Description	standing Balance	Annual Payment	Number of Payments	Interest Rate
	1.	Support of Donna Lea Courtney	C26-11	3,000 (18)	<u>10</u> (25)	(32)
	2.		(39)	(46)	(53)	(60)
	3.		C27-11	(18)	(25)	(32)
	4.		(39)	(46)	(53)	(60)
L.	TAX	CREDITS				
		Source			Amount	Rate of Change
	1.		 		G0 ⁰ 11	
	2.				C28-11	(18)
					(25)	(32)

м.	RATE	Or.	RETURN	KEGUTKED	ON	KETMAEZLED	CASH	I.TOM

1000 C29-11

(60)

N. STATE TAX AS A PERCENT OF FEDERAL TAX

1300 C30-11

(39)

(53)

IV. FINANCIAL GOALS

A. Annual net income and cash flow desired at end of planning horizon:

		Source	Income	Cash Flow
	1.	Conduct of business or profession	22,000 C31-11	23,000 (18)
	2.	Generated by investments	80,000	85,000
в.	Net	worth desired at end of planning horizon:		
		Source	Cost	Market Value
	1.	Conduct of business or profession	75,000 C32-11	90,000 (18)
	2.	Generated by investments	325,000 (25)	<u>525,000</u> (32)

Reports on Present and Projected Status. On the following pages are reports relating to HAN 001's present financial status and the expected yearly values if present business and investment environments remain unchanged. Report Number 1 indicates a net worth costing \$276,972 and an estimated fair market value of \$318,671. Nearly two thirds of estate value is due to real estate investments, although the cost of those properties is slightly less than one half of the total cost of net worth. Income and cash flow are \$57,074 and \$58,036, respectively, arising from three main sources: real estate rentals, business net income, and salary. Since the latter two sources account for two thirds of their total income, HAN 001's desire to be less dependent on her business and his salary is far from realized.

At the end of the six-year planning period, net worth cost and fair market value are projected to be \$419,092 and \$621,910, respectively. A total of \$98,242 of after-tax cash flow is expected to have been produced over the years and could be directed into investments which could help the estate owners realize their personal and financial goals. Their present investments are not expected to produce more than one third of the total income or cash flow at the end of this planning period.

Comparison of Projected Values and Goals. Report Number 3, page 123, indicates mixed success in attaining desired financial goals with present investment policies. While cost and fair market value are expected to result in favorable variances, income and cash flow are considerably less than that desired. This is particularly evident

when desired investment income, \$80,000, is compared with projected investment income, \$65,485, and desired investment cash flow, \$85,000 is compared with the projected amount \$66,648.

CLIENT CODE: HANOOL

REPORT NUMBER 1 PRESENT FINANCIAL STATUS

IIEM	COSI	ESTIMATED MARKET VALUE	INCOME_	CASH_ELOH
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE	38,100 10,748 35,533 14,286 16,420	38,100 10,748 12,697 14,286 16,420	2,700 752 164 1,200	1,800 164 1,200 <708>
REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS TOTAL ASSETS	141,100 53,300 	195,500 59,000 8,400 355,151	13,585 14,200 26,500 800 59,901	19,960 15,300 26,500 800 65,016
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	36,480	36,480	2,827	3,980 3,000 <6,980>
NET WORTH, INCOME, AND CASH FLOW	276,972	<u> </u>	2.827> 57,074	58,036

DATE: 04/11/75

CLIENT CODE: HANOO1

PROJECTED FINANCIAL STATUS--

IIEM	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_FLOW	
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS	40,800 9,700 35,533 14,286 17,113 141,100	40,800 9,700 12,697 14,286 17,113	2,700 752 164 1,200	1,800 164 1,200 <708>	117
TIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY	141,100 55,965	214,150 62,540	13,585 15,336 28,090	19,960 13,859 28,090	
ITHER ASSELS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES:	3,965 318.462	9,408	800 62.627 2,827	800 65-165 3,980	
MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	35,327 	35,327 			
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	=======================================	*********	<u><8.610</u> > 51,190		
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<19,842> <22.470> 18,873	

CLIENT CODE: HANOOL

PROJECTED FINANCIAL STATUS--END OF YEAR 2

IIEM	PROJECTED COST	PROJECTED MARKET _VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELDW
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS	43,760 8,579 35,533 14,286 17,806	43,760 8,579 12,697 14,286 17,806	2,961 679 164 1,200	1,800 164 1,200 <708>
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY	141,100 58,763	234,771 66,2 9 2	13,585 16,562 29,775 800	19,960 15,047 29,775
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY	3,965 18.873 342.665 34,084	10,536 18.873 427.600 34,084	1.887 67.613 2.737	800 1.887
OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	234.084 > 308,581	<u> </u>	22.737 > 64,875	65,945
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			<u> </u>	<22,587>

CLIENT CODE: HANOO1

PROJECTED FINANCIAL STATUS--END OF YEAR 3

ITEM	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW	
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS	47,007 7,379 35,533 14,286 18,499	47,007 7,379 12,697 14,286 18,499	3,248 600 164 1,200	1,800 164 1,200 <708>	£TT.
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	141,100	257,589	13,585	19,960	Ý
BUSINESS OR PROFESSION SALARY	61,701	70,269	17,886 31,561 800	16,334 31,561 800	
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	3,965 38,189 367,659	11,800 38.189 477.715	3.818 72.863	3.818 73.929	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	32,745	32,745	2,641	3,980	
TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	332.745> 334,914		58;221>	70,949	
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	<u> </u>		<u>\$9.492</u> >		
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<25,510> 	

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CLIENT CODE: HANOO1

PROJECTED FINANCIAL STATUS--END OF YEAR 4

IIEM	PROJECTED COSI	PROJECTED MARKET _VALUE	PROJECTEDINCOME_	PROJECTED CASH_FLOW
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE	50,571 6,095 35,533 14,286 19,192	50,571 6,095 12,697 14,286	3,565 516 164 1,200	1,800 164 1,200 <708>
REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS	141,100 64,786 3,965 57,904	282,853 74,485 13,216 57,904	13,585 19,316 33,454 800 5,790	19,960 17,728 33,454 800 5,790
INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	<u>393.432</u> 31,302	57.904 531.299 31,302	<u>78.390</u> 2,537	3,980
NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	362,130 362,130	499,997	75,853 75,853 	76,208
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<28,631> <u><27.524</u> > 20,053

CLIENT CODE: HANOO1

PROJECTED FINANCIAL STATUS--END OF YEAR 5

ASSETS:	PROJECTED COSI	PROJECTED MARKET _VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW
CASH NOTES AND RECEIVABLES STOCKS BONDS	54,484 4.721 35,533 14,286 19,885	54,484 4,721 12,697 14,286 19,885	3,914 426 164 1,200	1,800 164 1,200 <708>
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION	141,100	310, 845 78,954	13,585 20,861	19,960 19,239
SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	3, 965 77, 957 419, 956	14,801 77,957 588,630	35,461 800 7,795 84,207	35,461 800 7,795 85,711
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	29,747	29,747	2,425	3,980
NET WORTH, INCOME, AND CASH FLOW	390,209	29.747> 558,883	81:781>	23.980 > 81.731
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME FEDERAL AND STATE INCOME TAXES			<u><10.464</u> >	<31,996>
PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<u><29.450</u> > 20,285

CLIENT CODE: HANOO1

PROJECTED FINANCIAL STATUS--END OF PLANNING HORIZION

ITEM	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECT ED CASH_ELQW	
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS	58,783 3,251 35,533 14,286 20,578 141,100	58,783 3,251 12,697 14,286	4,299 330 164 1,200	1,80 0 164 1,200	F
LIFE INSURANCE REAL PROPERTY	20,578 141,100	20,578 341,877	13,585	<708> 19,960	TSS
EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY	71,426	83,691 16,577	22,529 37,588 8 0 0	20,875 37,588 800	
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	3,965 98,242 447,164	16,577 98,242 649,982	9.824	91.503	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	28,072	28,072	2,305	3,980	
TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	228.072 > 419,092	28.072> 621.910	88,014	23.980 > 87,523	
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<10.987> 77,027		
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			# · · · · · · · · · · · · · · · · · · ·	<35,568> <31.511> 20,444	

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DATE: 04/11/75

CLIENT CODE: HANGOI

REPORT NUMBER 3 COMPARISON OF PROJECTED FINANCIAL STATUS WITH DESIRED FINANCIAL GOALS

IIEM	COST	MARKET VALUE	INCOME	CASH_FLQW
DESIRED FINANCIAL GOALS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	75,000	90,000	22,000	23,000
INVESTMENTS	325.000	525.000	80.000	85.000
TOTAL	400.000	615.000	102.000	108.000
PROJECTED FINANCIAL STATUS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	71,426	83,691	22,529	20,875
INVESTMENTS	347.666	538.219	65.485	66.648
TOTAL	419.092	621.910	88.014	87.523
DIFFERENCE BETWEEN GOALS AND PROJECTED AMOUNTS	19,092	6,910	<13,986X	<20,477>

FDY 001

Input Form. FDY 001's input information does not involve complex business or investment data, nor does it include unusual personal circumstances. It does present a rather typical picture of a middle income family who depends chiefly upon one provider and his salary to supply not only daily financial needs, but also provide some security for himself and his wife when he reaches retirement four years hence. This participant is very nearly at the peak of his earning capacity and does not have extensive investments or outside income. He wishes to explore ways of augmenting his income both now and at retirement through judicious deployment of his present assets. The bulk of any financial planning will have to be accomplished during the forthcoming four years. Therefore, that is his chosen planning horizon.

GENERAL PERSONAL AND BUSINESS INFORMATION

L. No	ame FDI OOI	- 2.	Birthdate January 12	<u>, 1919</u>	
3. Ho	ome address	4.	Telephone		
5. Me	arital status Married 6. Spouse's	name	Joyce		
7. S _l	pouse's birthdate August 23, 1923				
3. Ci	nildren or other dependents:				
	Name	 	Relationship	Birthdate	
a.	Deana		Daughter	7-2-58	7.7
ъ.	Charles		Son	7-11-56	J
c.	Martin		Son	9-18-53	
đ.					
e.					
). Sp	pecial factors to be considered in planning for spou	se's	or dependent's care:		
	Joyce occasionally teaches art in the local high sch	ool,	and could, if necessary	, do so on a	
	full-time basis. Deana will graduate from high scho	ol in	1976, and plans to go	to college.	
	Charles will be self-sufficient in one more year.			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ 	

	71 0-7		
10.	Business name 11. Telephor	ле	
12.	Business address		
13.	Nature and form of business activity		
14.	Attitudes toward alternative business forms		
15.	Names and ages of partners or principal shareholders, if applicable		
16.	Documents necessary, when applicable:	Acquired	
		Yes No	2
	a. Federal and state individual tax returns for three most recent year	s X	
	b. Federal and state business tax returns for three most recent years		
	c. Partnership agreement or shareholders contracts		
	d. Trust agreements, wills, or other documents (specify) copies		
	of all insurance policies	X	

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Client Code FDY 001

PERSONAL, BUSINESS AND INVESTMENT FINANCIAL PLANNING INFORMATION

I. Personal financial information:

		Amount	Projected Annual Rate of Change
	 Estimated annual living expenses Estimated annual itemized deductions and exemptions Number of years for which planning will be done Federal tax schedule to be used 	10,500 C1-11 4,250 (25)	(18) (32) (39) 2 (46)
II.	Business financial information:		
	 Business investment cost Estimated fair market value 	C2-11	(18)
	3. Annual net income 4. Annual cash flow	(25)	(32)
	5. Annual investment tax or other credit passed through	(53)	(60)
	to business owner	(67)	(74)

III. Financial information relating to investments:

A. CASH

	Description	Amount	Interest Rate	
Che	ecking Accounts:			
1.	First National Bank	1,100 C3-11	-	
2.				
3.		(18)	_	
4.		(25)	•	128
		(32)	•	
Sav	rings Accounts and Time Deposits:			
1.	Federal Credit Union	8,680	0600	
2.	Certificates of Deposit	C4-11 12,000	(18) 0750	
3.		(25)	(32)	
4.		(39)	(46)	
₹•		(53)	(60)	

B. NOTES AND RECEIVABLES

	Description	Outstanding Balance	Amount of Annual Payment	Interest Rate
1.	and the second section of the section of	C5-11	(18)	(25)
2		(32)	(39)	(46)
4.		C6-11	(18)	(25)
		(32)	(39)	(46)

C. SHARES OF STOCK

	Description	Cost	Market Value	Income	Change in Value
1.	Financial Industrial Mutual Fund	26,047 C7-11	<u>18,173</u> (18)	<u>496</u> (25)	0500
2.	El Paso Electric Co.	(39)	500 (46)	50 (53)	0600 (60)
3.		<u>C8-11</u>	· (18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

D. BONDS

	Description	Carrying Value	Yield Rate	Cash Flow	Years to Maturity
1.		C9-11	(18)	(25)	(32)
2.		(39)	(46)	(53)	(60)
3. 4.		C10-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

E. LIFE INSURANCE

	Description	Cash Surrender Value	Annual Premium	Rate of Increase In Value
1.	Great Westernchildren's policies	765	(925)	3333
2.	Great Commonwealth\$10,624	C11-11 1,783	(18) (593)	(25) 8500
3.	National Service Life\$3,000	(32) 615	(82)	(46) 5100
4.	National Life and Accident\$1,000	C12-11 284	(18)	(25) 4200
		(32)	(39)	(46)

F. REAL ESTATE

G.

	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Value
1.	Building lots (2)	9,500 C13-11	10,500 (18)	<u>(50)</u> (25)	(50)	1200
2.		(46)	(53)	(60)	(67)	(74)
3.		C14-11	(18)	(25)	(32)	(39)
4. 5.		(46)	(53)	(60)	(67)	(74)
5 6.	•	C15-11	(18)	(25)	. (32)	(39)
7.		(46)	(53)	(60)	(67)	(74)
8.		C16-11	(18)	(25)	(32)	(39)
٠		(46)	(53)	(60)	(67)	(74)
EMPL(OYEE BENEFITS					
1. I	Retirement fund	16.292 C17-11	28,960 (18)	(25)	(1,428)	<u>1200</u> (39)
2. E	First Investment Annuity Co.	6,865	8,600	(60)	(1,320)	0400 (74)
3		C18-11	(18)	(25)	(32)	(39)
4		(46)	(53)	(60)	(67)	(74)

H. SALARY

	Source	Income	Cash Flow	Change In Amount
1.	Head of maintenance	21,208 C19-11	<u>22,528</u> (18)	<u>0500</u> (25)

I. OTHER ASSETS AND RECEIPTS

	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Amount
1.	Mexican government obligations	10.000 C20-11	10.000 (18)	1.000	1,000 (32)	(39)
2 . 3.		(46)	(53)	(60)	(67)	(74)
4.		C21-11	(18)	(25)	(32)	(39)
•		(46)	(53)	(60)	(67)	(74)

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J. MORTGAGES ON REALTY

Description	Out- standing Balance	Amount of Annual Payment	Interest Rate	
1.	C22-11	(18)	(25)	
2.	(32)	(39)	(46)	
4.	C23-11	(18)	(25)	Ļ
5	(32)	(39)	(46)	
6.	C24-11 (32)	(18)	(25)	
7.	C25-11	(18)	(25)	
8.	(32)	(39)	(46)	

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ĸ.	OTHER LIABILITIES AND DISBURSEMENTS Description	Out- standing Balance	Amount of Annual Payment	Number of Payments	Interest Rate	
	1.	C26-11	(18)	(25)	(32)	
	2.	(39)	(46)	(53)	(60)	
	3.	C27-11	(18)	(25)	(32)	
	4.	(39)	(46)	(53)	(60)	
L.	TAX CREDITS				Rate of	 - -
	Source			Amount	Change	134
	1.			C28-11	(18)	
	2.	 		(25)	(32)	
	3.			(39)	(46)	
	4.			(53)	(60)	
1.	RATE OF RETURN REQUIRED ON REINVESTED CASH FLO	OW			0800 C29-11	
N.	STATE TAX AS A PERCENT OF FEDERAL TAX				1200 C30-11	

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IV. FINANCIAL GOALS

A. Annual net income and cash flow desired at end of planning horizon:

Source	Income Cash Flow
1. Conduct of business or profession	C31-11 (18)
2. Generated by investments	$\frac{32,000}{(25)} \qquad \frac{35,000}{(32)}$
. Net worth desired at end of planning horizon:	
Source	Market Cost Value
1. Conduct of business or profession	C32-11 (18)
2. Generated by investments	$\frac{130,000}{(25)} \frac{170,000}{(32)}$

Reports on Present and Projected Status. Unlike ROR 001 who also has a present net worth costing slightly more than \$90,000, FDY 001 is not at the beginning of his lifetime estate accumulation. From his present assets and those he can accumulate within the next four years, FDY 001 must weave a satisfactory standard of living and financial security. A review of Report Number 1 reveals few assets other than cash, some stock holdings in mutual funds, and employee retirement benefits. Current income is \$24,124, coming almost exclusively from salary with minor amounts of interest and dividends. Cash flow is \$19,657, with significant amounts diverted to the payment of insurance premiums on his children's policies and retirement plans for himself. A positive factor in his financial picture is the fact that he has no outstanding liabilities.

Over the four-year planning period, the cost of his net worth is expected to increase to \$127,912 and the fair market value is projected to be \$152,580. Anticipated income and cash flow are \$30,030 and \$25,528, respectively. Examination of the Report Number 2 series reveals that salary will continue to be the single largest source of income and cash flow, but income generated by savings accounts, previous years' investment of cash flow, and other sources will increase slightly.

Comparison of Projected Values and Goals. Report Number 3 indicates expected unfavorable divergences as follows: cost, \$2,088; fair market value, \$17,420; income, \$1,970; and cash flow, \$9,472. The latter variance is the one causing the greatest concern to FDY 001. As his salary increases over the planning horizon, he expects a much

greater amount of cash to be available each year. However, increased living expenses as his last child completes college plus an increase of about \$1,800 in annual income taxes prevent his reaching the desired result. Those sources of income he does possess are fully taxable with the exception of pension fund earnings which are not now available to him. Improvements in his projected situation will require considerable ingenuity and careful evaluation of his personal preferences and needs.

CLIENT CODE: FDY001

REPORT NUMBER 1 PRESENT FINANCIAL STATUS

DATE: 04/11/75

IIEM	COSI	ESTIMATED MARKET VALUE	_INCOME_	CASH_FLOW	138
ASSETS: CASH	21,780	21,780	1,420		ã
NOTES AND RECEIVABLES	26,547	18,673	546	546	
BONDS LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION	3,447 9,500 23,157	3,447 10,500 37,560	50	<1,619> 50 <2,748>	
SALARY OTHER ASSETS AND RECEIPTS TOTAL ASSETS	10.000 94.431	10.000	21,208 	22,528 1,000 1,000	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS					
NET WORTH, INCOME, AND CASH FLOW	94,431	101,960	24,124	19,657	

CLIENT CODE: FDY001

PROJECTED FINANCIAL STATUS--END OF YEAR 1

ASSETS:	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW
CASH AND DESCRIPTION	23,200	23,200	1,420	
CASH NOTES AND RECEIVABLES STOCKS	26,547	19,611	546	546
BONDS LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION	4,308 9,500 25,905	4,308 11,760 41,379	50	<1,619> 50 <2,748>
SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW	10,000	10,000	22,268 1,000	23,654 1,000
TOTAL ASSETS	99.460	110.258	25.184	20.783
MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	99,460	110,258	 >	 >
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<u>\$4</u>,250 >	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			会出年在报客不会 相似	<5,239> <11.340> 4,204

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CLIENT CODE: FDY001

PROJECTED FINANCIAL STATUS--END OF YEAR 2

ASSETS:	PROJECTED	PROJECTED MARKET _VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW
CĀŚĦ Notes and receivables	24,719	24,719	1,519	
STOCKS BONDS	26,547	20,596	546	546
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	5,169 9,500 28,653	5,169 13,171 45,628	50	<1,619> 50 <2,748>
BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES:	10,000 4,204 108,792	10,000	23,381 1,000 	24,836 1,000 3336
MORTAGÉS ON REAL PROPERTY OTHER LIABILITIES AND	100*135	123.487	601136	
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	108,792	123,487	26,732	22,301
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<u><4.250</u> >	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<5,794> <12.247> 4,260

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CLIENT CODE: FDY001

PROJECTED FINANCIAL STATUS--END OF YEAR 3

PROJECTED **PROJECTED** PROJECTED MARKET PROJECTED COST _VALUE INCOME_ ITEM CASH_FLOW ASSETS: 26.344 1.625 26.344 NOTES AND RECEIVABLES STOCKS 26.547 21.630 546 546 141 LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY 6,030 14,751 50,359 <1.619> 6,030 9,500 50 50 31,401 <2,748> 24,550 26,077 10,000 10,000 OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS 1,000 677 23.883 28.348 LIABILITIES:
MORTAGES ON REAL PROPERTY
OTHER LIABILITIES AND
DISBURSMENTS TOTAL LIABILITIES 28,348 23,883 118,286 137,578 NET WORTH. INCOME. AND CASH FLOW <4.250> 24.098 ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW <6,378> ZZZZZZZZZZZ

DATE: 04/11/75

CLIENT CODE: FDY001

REPORT NUMBER 2 PROJECTED FINANCIAL STATUS-END OF PLANNING HORIZION

ASSETS: CASH NOTES AND RECEIVABLES	PROJECTED COST 28,082	PROJECTED MARKET VALUE 28,082	PROJECTEDINCOME_ 1,738	PROJECTED CASH_FLOW	
STOCKS	26,547	22,716	546	546	
BONDS LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION	6,891 9,500 34,149	6,891 16,521 55,627	50	<1,619> 50 <2,748>	747
SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	10.000 12.743 127.912	10,000 12,743 152,580	25,777 1,000 1,019 30,030	27,380 1,000 1,019 25.528	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES	>	>			
NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	127,912	152,580	30,030 	25,528	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<7,056> 	

CLIENT CODE: FDY001

REPORT NUMBER 3

COMPARISON OF PROJECTED FINANCIAL STATUS WITH DESIRED FINANCIAL GOALS

IIEM	MARKET INCOME CASH_ELOW
DESIRED FINANCIAL GOALS AT END OF PLANNING HORIZON:	
SOURCE: BUSINESS OR PROFESSION	
INVESTMENTS	130.000 170.000 32.000 35.000
TOTAL	<u> 130.000 </u>
PROJECTED FINANCIAL STATUS AT END OF PLANNING HORIZON:	
SOURCE: BUSINESS OR PROFESSION	
INVESTMENTS	127.912152.58030.03025.528
TOTAL	127.912152.58030.03025.528
DIFFERENCE BETWEEN GOALS AND PROJECTED AMOUNTS	<2,088> <17,420> <1,970> <9,472>

Testing Alternative Investment Options

In the previous section, data for four individuals were presented. The input forms, reports on present and projected financial status, and comparisons of projected status with desired, predetermined goals illustrated the functioning of BUILD under a variety of situations. In this section, BUILD will be used to examine the effects of various investment and business alternatives on the projected data at the end of the planning horizon. For illustrative purposes, two individuals have been selected—HAN 001 and FDY 001. Since this section will contain revised data and reports for both persons, their input forms and reports will be identified by the client codes HAN 002 and FDY 002 to prevent confusion with their original data.

HAN 002

Input Form. Since only the quantitative data relating to business interests and investments has been changed, the input form contained on the following pages will include only the nine pages on which such data is presented. Much of the information will remain unchanged, but HAN 002 wishes to explore the effects of several changes they are considering.

The first change is noted on the card C2-67 on the input form. There, tax credits have been increased from \$100 to \$600 due to the employment of persons who are eligible for the Work Incentive Program provided for by Sec. 432(b)(1) of the Social Security Act. Under this provision, a tax credit equal to 20 percent of the pay received by qualified individuals can be taken by the employer. In

this situation, the wife is able to employ qualified people in her day-care business.

A second, more fundamental change they wish to pursue is the opening of a lapidary shop and the purchase of several tons of Mexican geodes to be held for appreciation in value and occasional sales. Accomplishing this will require the use of \$12,000 presently on deposit with the First National Bank plus a four-year, \$12,000 loan available at an interest rate of 12 percent. These changes are shown on input cards C4-11, C20-46, C21-11, C26-11, and C28-11.

PERSONAL, BUSINESS AND INVESTMENT FINANCIAL PLANNING INFORMATION

I. Personal financial information:

			Amount	Projected Annual Rate of Change	
	1.	Estimated annual living expenses	21,000 C1-11	0700 (18)	
	2.	Estimated annual itemized deductions and exemptions	8,200 (25)	0500 (32)	
	3.	Number of years for which planning will be done		<u>6</u> (39)	146
	4.	Federal tax schedule to be used		(46)	01
II.	Busi	ness financial information:			
	1.	Business investment cost	53,300 C2-11	0500	
	2.	Estimated fair market value	59,000 (25)	0600 (32)	
	3.	Annual net income	(39)	0800 (46)	
	4.	Annual cash flow	15,300	0800 (60)	
5.		Annual investment tax or other credit passed through to business owner	(53) 600 (67)	0800 (74)	

III. Financial information relating to investments:

A. CASH

	Description	Amount	Interest Rate	
Che	cking Accounts:			
1.	Citizens' National Bank	4.500		
2.	Alamogordo State	C3-11 3,600		
3.	•	(18)		
		(25)		147
4.		(32)		7
Sav	ings Accounts and Time Deposits:			
1.	Juarez time deposits	18,000	1100	
2.		C4-11	(18)	
3.		(25)	(32)	•
		(39)	(46)	
4.		(53)	(60)	

B. NOTES AND RECEIVABLES

	Description	Outstanding Balance	Amount of Annual Payment	Interest Rate
1.	Note receivable	10,748	1800	0700
2.		C5-11	(18)	(25)
		(32)	(39)	(46)
3.		C6-11	(18)	(25)
4.		(32)	(39)	(46)

C. SHARES OF STOCK

	Description	Cost	Market Value	Income	Rate of Change in Value
1.	Keystone S-4	33,480	11,160		
2.	Kansas Gas and Electric	C7-11 2,053	(18) 1,537	(25) 164	(32)
3.		(39)	(46)	(53)	(60)
		C8-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

D. BONDS

	Description	Carrying Value	Yield Rate	Cash Flow	Years to Maturity
1.	Galaxy Furniture	14,286 C9-11	0840 (18)	1200 (25)	12 (32)
2. 3.		(39)	(46)	(53)	(60)
4.		C10-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

E. LIFE INSURANCE

Description	Cash Surrender Value	Annual Premium	Rate of Increase In Value
1. Prudential policy	16,420 C11-11	<u>(708)</u> (18)	<u>9800</u> (25)
3.	(32)	(39)	(46)
4.	C12-11	(18)	(25)
	(32)	(39)	(46)

F. REAL ESTATE

Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Value
1. Home	43,000	54,000			1200
2. Duplexes	C13-11 78,500	(18) 85,000	(25) 14 , 235	(32) 17 , 660	(3 9) 0600
3. Telshor lots	(46) 11,200	(53) 42,000	(60)	(300)	(74) 1200
4. Vacation home	C14-11 8,400	(18) 14,500	(25) (350)	2,600	1,400
	(46)	(53)	(60)	(67)	(74)
5.	C15-11	(18)	(25)	(32)	(39)
6.	(46)	(53)	(60)	(67)	(74)
7.	C16-11	(18)	(25)	(32)	(39)
8.	(46)	(53)	(60)	(67)	(74)
EMPLOYEE BENEFITS	(10)	()3/	(,	(-17	
1.	C17-11	(18)	(25)	(32)	(39)
2.	(46)	(53)	(60)	(67)	(74)
3.	C18-11	(18)	(25)	(32)	(39)
4.	(46)	(53)	(60)	(67)	(74)

H. SALARY

	Source	Income	Cash Flow	Change In Amount
1.	I & M Engineering	26,500 C19-11	26,500	0600

I. OTHER ASSETS AND RECEIPTS

-	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Amount
1.	Turquoise	3,965 C20-11	8,400	800 (25)	800 (32)	1200 (39)
2.	Geodes	6,400 (46)	8,500 (53)	(60)	(67)	1500 (74)
3.	Lapidary shop	18,000 C21-11	18,000 (18)	4,000 (25)	4,000 (32)	1200 (39)
4.		(46)	(53)	(60)	(67)	(74)

J. MORTGAGES ON REALTY

	Description	Out- standing Balance	Amount of Annual Payment	Interest Rate	
1.	Duplexes	36,480 C22-11	3,980 (18)	<u>0775</u> (25)	
2.	·	(32)	(39)	(46)	
3.		C23-11	(18)	(25)	152
4.		(32)	(39)	(46)	10
5.		C24-11	(18)	(25)	
6.		(32)	(39)	(46)	
7. 8.		C25-11	(18)	(25)	
0.		(32)	(39)	(46)	

Client	Code	HAN 002	•

nt Co	de _	HAN 002				Page 10	
к.	отн	ER LIABILITIES AND DISBURSEMENTS Description	Out- standing Balance	Amount of Annual Payment	Number of	Interest Rate	
	 2. 3. 4. 	Personal loan for lapidary shop Support of Donna Lea Courtney	12,000 C26-11 (39) C27-11	(18) 3,000 (46) (18)	(25) 10 (53) (25) (53)	(32) (60) (32) (60)	
L.	1. 2.	CREDITS Source Lapidary shop			Amount 300 C28-11 (25)	Rate of Change (5000) (18)	153 153
м.	3. 4. RATE	OF RETURN REQUIRED ON REINVESTED CASH FLOW	7		(39)	(46) (60) 1000 C29-11	
N.	STAT	E TAX AS A PERCENT OF FEDERAL TAX				1300 C30-11	

IV. FINANCIAL GOALS

A. Annual net income and cash flow desired at end of planning horizon:

		Source	Income	Cash Flow	
•	1.	Conduct of business or profession	22,000 C31-11	23,000 (18)	
	2.	Generated by investments	80,000	85,000 (32)	154
в.	Net	worth desired at end of planning horizon:			
		Source	Cost	Market Value	
	1.	Conduct of business or profession	75,000 C32-11	90,000 (18)	
	2.	Generated by investments	325 , 000	525,000 (32)	

Reports on Revised Financial Status. Following the format established in the previous section, HAN 002's revised data will be presented in three reports. Report Number 1 contains the present financial status reflecting the revised input information. Report Number 2 projects their financial status, year by year, for the six years of their planning horizon. A comparison of the projected status at the end of year six with that of the comparable original report reveals that all measures of financial condition are expected to improve if the contemplated changes are made.

Comparison of Revised Values and Goals. Report Number 3 indicates that a comparison of projected values based on the revised data with the predetermined goals will show an improvement in all areas. Cash flow and income are expected to remain short of the desired amounts, but will improve by about \$4,000 annually for cash flow and \$3,000 for income. Investment in assets is projected to increase by about \$7,500 and market value by about \$38,000. It appears that the contemplated changes will result in an overall financial improvement for HAN 002. The changes would also lessen their dependence on his salary and help them accomplish this qualitative, personal goal.

CLIENT CODE: HANOO2

REPORT NUMBER 1 PRESENT FINANCIAL STATUS

IIEM	COST	ESTIMATED MARKET VALUE	INCOME_	CASH_FLOW
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS	26,100 10,748 35,533 14,286 16,420 141,100	26,100 10,748 12,697 14,286	1,980 752 164 1,200	1,800 164 1,200
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION	16,420 141,100 53,300	16,420 195,500 59,000	13,585 14,200 26,500	2708> 19,960 15,300 26,500
SALARY OTHER ASSETS AND RECEIPTS TOTAL ASSETS	<u>28.365</u> 325.852	34.900 369.651	63.181	69.016
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS.	36,480	36,480	2,827 1.440	3,980 7.200
NET WORTH, INCOME, AND CASH FLOW	<u></u>		74.267> 58,914	57,836

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DATE: 04/11/75

CLIENT CODE: HANOO2

LIEM	PROJECTEDCOSI	PROJECTED Market <u>Value</u>	PROJECTEDINCOME_	PROJECTED CASH_FLOW
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE	28,080 9,700 35,533 14,286 17,113	28,080 9,700 12,697 14,286 17,113 214,150	1,980 752 164 1,200	1,800 164 1,200 <708> 19,960
REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW	141,100 55,965 28,365	62,540 39,343	15,336 28,090 4,800	13,859 28,090 4,800
TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	330.142 35,327 9.240	397.909 35.327 9.240	65.907 2,827	69.165 3,980 4.200 <8.180>
NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	285,575	244.567 >	<pre></pre>	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<20,077> <22,470> 18,438

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DATE: 04/11/75

CLIENT CODE: HANOO2

ITEM	PROJECTED COSI	PROJECTED MARKET 	PROJECTED INCOME	PROJECTED CASH_ELOW
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE	30,277 8,579 35,533 14,286 17,806 141,100	30,277 8,579 12,697 14,286 17,806 234,771	2,197 679 164 1,200	1,800 164 1,200 <708> 19,960
REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	58, 763 28, 365 18, 438 353,147	66,292 44,356 18,438 447,502	16,562 29,775 4,800 1.843 70.805	15,047 29,775 4,800 1.843 73.881
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES	34,084 	34,084 	2,737 1.108 <3.846>	3,980 4,200 <8.180>
NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	312,915	407,270	66,959 <u><9.040</u> > 57,919	65,701
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			•	<22,957>

CLIENT CODE: HANOO2

IIEM	PROJECTED COST	PROJECTED MARKET <u>YALUE</u>	PROJECTEDINCOME_	PROJECTED CASH_FLOW
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE	32,716 7,379 35,533 14,286 18,499	32,716 7,379 12,697 14,286 18,499	2,439 600 164 1,200	1,800 164 1,200 <708> 19,960
REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW	141,100 61,701 28,365 37,140	257,589 70,269 50,015 37,140	13,585 17,886 31,561 4,800 3:714	16,334 31,561 4,800 3,714
TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	32,745 	32,745 32,745 	75.950 2,641 	78.825 3,980 4.200 <8.180>
NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	<u>\$47</u> ; <u>449</u> 	465,160	72;51 6/ 63; 678	70,645
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<25,994> <25,724> 18,927

CLIENT CODE: HANOO2

11FM	PROJECTED COST	PROJECTED MARKET VALUE	PROJECTED INCOME	PROJECTED CASH_FLOW
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE	35,423 6,095 35,533 14,286 19,192	35,423 6,095 12,697 14,286	2,707 516 164 1,200	1,800 164 1,200 <708> 19,960
REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW	141,100 64,786 28,365 56-067	282 + 853 74 + 485 56 + 404 56 + 967	13,585 19,316 33,454 4,800	17,728 33,454 4,800
INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES	31,302 	31,302 31,302 31,302 31,192 30:110	81.349 2,537 	3+960
NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	370,737	527,392	78,489 	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW				<29,298> <27.524> 19,002

CLIENT CODE: HANOO2

IIEM	PROJECTED COST	PROJECTED MARKET _VALUE	PROJECTEDINCOME_	PROJECTED CASH_ELOW	
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS LIFE INSURANCE REAL PROPERTY	38,428 4,721 35,533 14,286 19,885 141,100	38,428 4,721 12,697 14,286 19,885 310,845	3,005 426 164 1,200 13,585	1,800 164 1,200 <708> 19,960	161
EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS LIABILITIES: MORTAGES ON REAL PROPERTY	68,025 28,365 75,069 	78,954 63,616 75,069 618,501 29,747	20,861 35,461 4,800 7,506 	19,239 35,461 4,800 7,506 89,422	
OTHER LIABILITIES AND DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME	279.747 395,665		·	23.980> 85,442	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			2 3 3 8 2 2 2 2 2	<32,714> <u><29,450</u> > 23,278	

CLIENT CODE: HANOO2

REPORT NUMBER 2 PROJECTED FINANCIAL STATUS-END OF PLANNING HORIZION

IIEM	PROJECTED COST	PROJECTED MARKET _VALUE	PROJECTEDINCOME_	PROJECTED CASH_FLOW	
ASSETS: CASH NOTES AND RECEIVABLES STOCKS BONDS	41,764 3,251 35,533 14,286 20,578	41,764 3,251 12,697 14,286 20,578	3,336 330 164 1,200	1,800 164 1,200	با
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	20,578 141,100	20,578 341,877	13,585	(708> 19,960	162
BUSINESS OR PROFESSION SALARY	71,426 28,365	83,691 71,762	22,529 37,588 4,800	20,875 37,588 4,800	
OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	98.347 454.650	98.347 688.253	93.366	95.834 95.513	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	28,072	28,072	2,305	3,980	
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	<28.072> 426,578	<pre><28.072> 660,181</pre>	\$2: <u>305</u> >	(3.980) 91,533	
ITEMIZED CEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<10.987> 80,074		
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	<36,484> 	
AFTER TAX CASH FLOW					

CLIENT CODE: HANOO2

REPORT NUMBER 3 COMPARISON OF PROJECTED FINANCIAL STATUS WITH DESIRED FINANCIAL GOALS

IIEM	COST	MARKET VALUE	INCOME_	CASH_ELOW
DESIRED FINANCIAL GOALS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	75,000	90,000	22,000	23,000
INVESTMENTS	325.000	525.000	80.000	85.000
TOTAL	400-000	615.000	102.000	108.000
PROJECTED FINANCIAL STATUS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION	71,426	83,691	22,529	20,875
INVESTMENTS	355.152	576.490	68.532	70.658
TOTAL	426.578	660.181	91.061	91.533
DIFFERENCE BETWEEN GOALS AND PROJECTED AMOUNTS	26,578	45,181	<10,939	<16,467>

FDY 002

Input Form. The client code FDY 002 will be used to indicate the input form and reports based on proposed changes in FDY 001's financial activities. Only pages three through eleven of the input form have been included here since the first two pages contain only qualitative information that will not change.

FDY 002 wishes to explore ways in which he can more profitably utilize his existing resources and make his approaching retirement more secure and enjoyable. Since he is an active person and enjoys the activities associated with maintaining property, FDY 002 is particularly interested in the impact that purchases of rental properties would have on his pro forma financial picture.

Should he decide upon this course of action, several changes in input data will be required. He proposes to use the \$12,000 currently invested in certificates of deposit, some of the funds presently in the Federal Credit Union, plus the cash surrender value he would receive by cancelling most insurance policies to purchase equities in three rental properties. The properties so acquires have been placed on the input form on C13-46, C14-11, and C14-46. The mortgages he would assume are shown on C22-11, C22-32, and C23-11. The cash surrender value received by cancelling the children's policies will be given to them and placed in their savings accounts.

PERSONAL, BUSINESS AND INVESTMENT FINANCIAL PLANNING INFORMATION

I. Personal financial information:

			Amount	Projected Annual Rate of Change	
	 2. 3. 4. 	Estimated annual living expenses Estimated annual itemized deductions and exemptions Number of years for which planning will be done Federal tax schedule to be used	10,500 C1-11 4,250 (25)	(32) (39) 2 (46)	165
II.	Bus	siness financial information:			
	1.	Business investment cost	C2-11	(18)	
	3.	 3. Annual net income 4. Annual cash flow 5. Annual investment tax or other credit passed through to business owner 	(25)	(32)	
			(53)	(60)	
	5.		(67)	(74)	

Client Code FDY 002

III. Financial information relating to investments:

A. CASH

	Description	Amount	Interest Rate	
Checki	ng Accounts:			
1. F	irst National Bank	1,100		
2		C3-11		
3		(18)		
4.		(25)		166
		(32)		
Saving	s Accounts and Time Deposits:			
1. <u>F</u>	ederal Credit Union	5,200 C4-11	<u>0600</u> (18)	
2				
3		(25)	(32)	
4.		(39)	(46)	
		(53)	(60)	

B. NOTES AND RECEIVABLES

	Description	Outstanding Balance	Amount of Annual Payment	Interest Rate
1.		C5-11	(18)	(25)
2.		(32)	(39)	(46)
3		C6-11	(18)	(25)
		(32)	(39)	(46)

C. SHARES OF STOCK

	Description	Cost	Market Value	Income	Rate of Change in Value
1.	Financial Industrial Mutual Fund	26,047	18,173	496	0500
2.	El Paso Electric Co.	C7-11 500 (39)	(18) 500 (46)	(25) 50 (53)	(32) 0600 (60)
3.		C8-11	(18)	(25)	(32)
4.		(39)	(46)	(53)	(60)

D. BONDS

	Description	Carrying Value	Yield Rate	Cash Flow	Years to Maturity
1.		C9-11	(18)	(25)	(32)
2.		(39)	(46)	(53)	(60)
3. 4.		C10-11	(18)	(25)	(32)
₹•		(39)	(46)	(53)	(60)

E. LIFE INSURANCE

	Description	Cash Surrender Value	Annual Premium	Rate of Increase In Value
1.	National Life and Accident	284 C 11-11	<u>(17)</u> (18)	4200 (25)
2. 3.		(32)	(39)	(46)
٥. لاء		C12-11	(18)	(25)
• •		(32)	(39)	(46)

F. REAL ESTATE

••		Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Value	
	1.	Building lots (2)	9,500 C13-11	10,500 (18)	<u>(50)</u> (25)	<u>(50)</u> (32)	1200	
	2.	Two bedroom rental house	12,500	12,500	480	1,200	060 0	
	3.	Duplexes	(46) 16,800	(53) 16,800	(60) 525	(67) 1,600	(74) 0600	
	4.	Rent homeeast	C14-11 9,800	9,800	(25) 200	(32) 750	(39) 0600	
	_		(46)	(53)	(60)	(67)	(74)	
	5.		C15-11	(18)	(25)	(32)	(39)	
	6. -		(46)	(53)	(60)	(67)	(74)	169
	7.		C16-11	(18)	(25)	(32)	(39)	
	8.		(46)	(53)	(60)	(67)	(74)	
G.	EMPI	LOYEE BENEFITS					•	
	1.	Retirement fund	16,292	28,690		(1,428)	1200 (39)	
	2.	First Investment Annuity Co.	C17-11 6,865	(18) 8,600	(25)	(1,320)	0400	
			(46)	(53)	(60)	(67)	(74)	
	3.		C18-11	(18)	(25)	(32)	(39)	
	4.		(46)	(53)	(60)	(67)	(74)	

H. SALARY

	Source	Income	Cash Flow	Change In Amount
1.	Salaryhead of maintenance	21,208 C19-11	22,528 (18)	<u>0500</u> (25)

I. OTHER ASSETS AND RECEIPTS

	Description	Cost	Market Value	Income	Cash Flow	Rate of Change In Amount
1.	Mexican government obligations	10,000 C20-11	<u>10,000</u> (18)	1.000 (25)	1,000	(39)
2. 3.		(46)	(53)	(60)	(67)	(74)
4.		C21-11	(18)	(25)	(32)	(39)
4.		(46)	(53)	(60)	(67)	(74)

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J. MORTGAGES ON REALTY

	Description	Out- standing Balance	Amount of Annual Payment	Interest Rate	
1.	Two bedroom rental home	7,300	720	0525	
2.	Duplexes	C22-11 10,400	(18) 936	(25) 0575	
3.	Rental homeeast	(32) 5,920	(39) 624	(46) 0475	
4.		C23-11	(18)	(25)	171
5.		(32)	(39)	(46)	1
6.		C24-11	(18)	(25)	
		(32)	(39)	(46)	
7.		C25-11	(187	(25)	
8.		(32)	(39)	(46)	

ĸ.	OTHER LIABILITIES AND DISBURSEMENTS Description	Out- standing Balance	Amount of Annual Payment	Number of Payments	Interest Rate	
	 Children's gifts in lieu of insurance Children's gifts in lieu of insurance 4. 	C26-11 (39) C27-11	(18) 300 (46) (18)	(25) 3 (53) (25)	(32) (60) (32)	
L.	TAX CREDITS Source	(39)	(46)	(53) . Amount	(60) Rate of Change	T(5
	1			(25) (39) (53)	(18) (32) (46) (60)	
М.	RATE OF RETURN REQUIRED ON REINVESTED CASH FLO	W		()3)	0800 C29-11	
N.	STATE TAX AS A PERCENT OF FEDERAL TAX				1200 C30-11	

IV. FINANCIAL GOALS

A. Annual net income and cash flow desired at end of planning horizon:

		Source	Income	Cash Flow	
٠	1.	Conduct of business or profession	C31-11	(18)	•
	2.	Generated by investments	32 , 000 (25)	35,000	173
в.	Net	worth desired at end of planning horizon:			
	سيسيد	Source	Cost	Market Value	
	1.	Conduct of business or profession	C32-11	(18)	
	2.	Generated by investments	130,000	170,000	

Reports on Revised Financial Status. Report Number 1 has been prepared based on the assumption that FDY 002 has carried through his plans for investing in three rental properties. The immediate effect of carrying out this plan will be a decrease of about \$3,000 in the cost of his investments. This is due to giving the children the money received for surrendering their insurance policies and to using some cash for a nonrecurring personal expenditure. Income is expected to decrease due to the deduction of interest expense arising from the mortgages on rental property. Cash flow, however, should increase by about \$2,000 as a result of the receipt of rental income and the lack of payments on insurance policies.

At the end of the four-year planning horizon, it is projected that he will have more than made up the initial \$3,000 difference in investment cost, and will, in fact, have increased his net worth over that projected in the FDY 001 reports. Fair market value is expected to increase substantially, \$14,000, even though projected rates of increase in value are a relatively modest six percent for the rental properties. Taxable income in the fourth year is shown to be down slightly, but after tax cash flow is anticipated to be almost \$4,000 greater under the revised data.

Comparison of Revised Values and Goals. If the proposed changes are carried out, FDY 002 will continue to reflect unfavorable variances in three measurement areas, but they will not be as large as expected under the present situation. Cost of net worth is expected to have a slight positive variance, fair market value is projected to be much improved with a \$14,000 increase. Taxable income will be less

than before due to the partial sheltering of rental income by depreciation deductions. Annual cash flow should be substantially improved if the proposed changes are made.

The proposed changes appear to be desirable from several viewpoints. First, they are expected to improve FDY 002's financial situation in the manner discussed above. Secondly, they should continue to provide supplemental income after retirement. Lastly, rental property seems to fulfill FDY 002's desire for involvement in useful employment after retirement, and this is an area in which he has some expertise and interest.

DATE: 04/11/75

CLIENT CODE: FDY002

REPORT NUMBER 1
PRESENT FINANCIAL STATUS

ITEM	cosi	ESTIMATED MARKET VALUE	_INCOME_	CASH_FLOW
ASSETS: CASH CASH CASH CASH CASH CASH CASH CASH	6,300	6,300	312	
NOTES AND RECEIVABLES STOCKS BONDS	26,547	18,673	546	546
LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS BUSINESS OR PROFESSION	284 48,600 23,157	284 49,600 37,560	1,155	<17> 3,500 <2,748>
SALARY OTHER ASSETS AND RECEIPTS TOTAL ASSETS	10.000 114.888	10.000 122.417	21,208 1,000 24,221	22,528 1.000 24.809
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND DISBURSMENTS	23,620	23,620	1,262	2,280
NET WORTH, INCOME, AND CASH FLOW	\$23.620> 91,268	<u> </u>	<u> </u>	<u><2.880</u> > 21,929>

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PROJECTED FINANCIAL STATUS--END OF YEAR 1

PROJECTED **PROJECTED** PROJECTED MARKET PROJECTED YALUE. INCOME COST CASH_ELOW ITEM ASSETS: CASH 6,612 312 6.612 NOTES AND RECEIVABLES 26,547 19,611 546 546 BONDS LIFE INSURANCE
REAL PROPERTY
EMPLOYEE BENEFITS
BUSINESS OR PROFESSION
SALARY
OTHER ASSETS AND RECEIPTS
INVESTMENT OF CASH FLOW <17> 53,206 41,379 3.500 48,600 1.155 <2,748> 25,905 22,268 23,654 10,000 10,000 1,000 TOTAL ASSETS
LIABILITIES:
MORTAGES ON REAL PROPERTY
OTHER LIABILITIES AND 117.955 31.099 25.2HI 25,935 1,262 2,280 22,602 22,602 DISBURSMENTS TOTAL LIABILITIES <22.602> {222,402> 31.262> NET WORTH, INCOME, AND CASH FLOW ********** ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME ******* FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW

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DATE: 04/11/75

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PROJECTED FINANCIAL STATUS--END OF YEAR 2

PROJECTED PROJECTED PROJECTED CASH_ELOW **PROJECTED** MARKET TTEM COST _VALUE_ INCOME_ ASSETS: 6,942 6,942 330 NOTES AND RECEIVABLES 26,547 20,596 546 546 BONDS 3,500 LIFE INSURANCE REAL PROPERTY 178 298 57,103 1,155 48,600 EMPLOYEE BENEFITS BUSINESS OR PROFESSION <2.748> 28,653 45,628 23,381 24,836 SALARY OTHER ASSETS AND RECEIPTS
INVESTMENT OF CASH FLOW
TOTAL ASSETS
LIABILITIES:
MORTAGES ON REAL PROPERTY
OTHER LIABILITIES AND 10,000 10,000 1,000 1,000 7.483 48.050 27.010 21,529 21,529 1,209 2,280 OTSBURSMENTS
TOTAL LIABILITIES
NET WORTH, INCOME, AND CASH FLOW (21.529) 126,521 21,209> 106,994 ********* ******* ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME ****** <5,461> FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW 主要者是2.7章章重章

DATE: 04/11/75

LIFE INSURANCE REAL PROPERTY

TAXABLE INCOME

ASSETS: CASH

BONDS

PROJECTED FINANCIAL STATUS--END OF YEAR 3

PROJECT ED PROJECTED COST MARKET PROJECTED PROJECTED CASH FLOW _VALUE. INCOME 7,292 350 7,292 26,547 21,630 546 546 <17> 305 305 61,317 48,600 1.155 3,500 <2,748> 31,401 24,550 26,077 1,000 1,216 10,000 10,000 15,210 66,113 15.210 19.355 28.817 29.574 20,399 1,152 2,280 20,399 320.399> 118.956 {20,392> NET WORTH, INCOME, AND CASH FLOW

FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW

ITEMIZED DEDUCTIONS AND EXEMPTIONS

ITEM

NOTES AND RECEIVABLES

EMPLOYEE BENEFITS BUSINESS OR PROFESSION SALARY

OTHER ASSETS AND RECEIPTS
INVESTMENT OF CASH FLOW
TOTAL ASSETS
LIABILITIES:
MORTAGES ON REAL PROPERTY
OTHER LIABILITIES AND
DISBURSMENTS
TOTAL LIABILITIES

<6,128>

DATE: 04/11/75

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PROJECTED FINANCIAL STATUS--END OF PLANNING HORIZION

DATE: 04/11/75

ASSETS: LIEM CASH	PROJECTED COST	PROJECTED MARKET VALUE 7,663	PROJECTEDINCOME	PROJECTED CASH_ELOW	
CASH NOTES AND RECEIVABLES STOCKS	26,547	22,716	546	546	
BONDS LIFE INSURANCE REAL PROPERTY EMPLOYEE BENEFITS	312 48,600 34,149	312 65,880 55,627	1,155	<17> 3,500 <2,748>	180
BUSINESS OF PROFESSION SALARY OTHER ASSETS AND RECEIPTS INVESTMENT OF CASH FLOW TOTAL ASSETS	10,000 23,150 150,421	10,000 	25,777 1,000 1,852 30,701	27,380 1,000 1,852 31,513	
LIABILITIES: MORTAGES ON REAL PROPERTY OTHER LIABILITIES AND	19,211	19,211	1,093	2,280	
DISBURSMENTS TOTAL LIABILITIES NET WORTH, INCOME, AND CASH FLOW	<u> </u>	719.711> 166,137	29,608	29,233	
ITEMIZED DEDUCTIONS AND EXEMPTIONS TAXABLE INCOME			<u><4.250</u> >	•	
FEDERAL AND STATE INCOME TAXES PERSONAL LIVING EXPENSES AFTER TAX CASH FLOW			~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	<6,885> (14.284> 8,064	

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CLIENT CODE: FDY002

DATE: 04/11/75

REPORT NUMBER 3

COMPARISON OF PROJECTED FINANCIAL STATUS WITH DESIRED FINANCIAL GOALS

ITEM	COST	MARKET VALUE	INCOME_	CASH_FLOW
DESIRED FINANCIAL GOALS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION				
INVESTMENTS	130.000	170.000	32.000	35.000
TOTAL	130.000	170.000	32.000	35.000
PROJECTED FINANCIAL STATUS AT END OF PLANNING HORIZON:				
SOURCE: BUSINESS OR PROFESSION				
INVESTMENTS	131.210	166.137	29.608	29.233
TOTAL	131.210	166.137	29.608	29.233
DIFFERENCE BETWEEN GOALS AND PROJECTED AMOUNTS	1,210	<3,863)	<2,392> *********	<5,76 7 >

Summary

In this chapter, testing procedures applicable to the BUILD program have been set forth. Individuals whose data is used for testing were selected using several criteria. First, a rather wide range of ages was required. The purpose of this requirement was two-fold: (1) to determine if estate owners of different ages had different requirements or circumstances that would make BUILD more or less suitable for their purposes, and (2) to determine the need for or desirability of other programs to produce data for input or to utilize as input data created by this program. It appears that the greatest age-related differences are due to personal requirements that direct the course of future planning. Younger estate owners seem to be interested primarily in simply increasing their estates, and older owners tend to be more concerned with the types of assets owned and their place in the retirement picture or their suitability for certain beneficiaries of their estate.

A second desired characteristic was a wide range of wealth. The purpose of this requirement was to determine if the size of net worth is related to the usefulness of the program and, if so, in what manner. Degree of wealth did appear to influence the structure of the program but mainly through the variety of alternatives open to the owner. In general, the greater his wealth, the greater were the estate owner's opportunities for change. The mere size of the numbers, however, presented no special programming problems.

Thirdly, a variety of investment and business interests was considered to be a desirable attribute in order that flexibility and

utility of the program under diverse conditions might be ascertained. Accordingly, participants were chosen who possessed financial interests in a substantial array of activities and a broad assortment of businesses or professions. As a result of this testing, it was found that BUILD is sufficiently flexible to accomodate a variety of investment preferences. One significant limitation that should be noted is that the program is not suitable for an individual with an unstable investment pattern, i.e., one that frequently changes specific investments or their amounts. For such a person, projections would tend to be tenuous at best.

Lastly, participants were chosen who had differing personal circumstances and requirements. One is married with young children, another is married with nearly grown children, one is divorced and has no one financially dependent upon him, the fourth is married with adult children but with responsibility for an elderly relative. Some persons preferred one type of investment while others chose or needed another. Diverse personal situations did not appear to affect the mechanical requirements of the quantitative portion of the program, but did affect the direction of financial planning and tended to limit the alternatives that would otherwise be available to the estate owner.

Input data and reports relating to present financial status, projected status if current policies are maintained, and a comparison of projected status with the owner's financial goals were presented for the four selected participants. When significant divergences appear between projected data and predetermined goals, some type of

corrective action is presumed. The specific option selected will depend upon the financial and personal needs of the owner and his dependents.

Two of the participants, HAN 001 and FDY 001, were used to illustrate the use of BUILD in testing various types of corrective actions. HAN 001 is considering investing in a business in which he has long been interested. He wishes to determine the probable impact of such a venture on his longer range financial situation. His wife plans to begin hiring employees eligible for the Work Incentive Program and thus claim a tax credit for a portion of their wages. FDY 001 wishes to test the financial consequences of converting certain present assets into rental property. The BUILD program can be used to quickly calculate the effects over the planning horizon of both HAN 002 and FDY 002's proposed actions. BUILD can provide some insight into the probable consequences, but it cannot prescribe remedial courses of action.

CHAPTER V

SUMMARY AND CONCLUSION

The purpose of this study has been to develop a computer model that will simulate the operation of financial activities of individuals. The model was then used as an aid in developing the lifetime wealth, comfort, and security of the test participants. By incorporating in the model factors relating to the quantitative aspects of the estate, projections have been made of the expected future status of each test participant in terms of investment cost, estimated market value, income, and cash flow produced by each investment or business component. For decision-making purposes, evaluation of reports has been made with regard to the estate owner's total environment, including personal preferences and needs.

Accumulation of Information

During the course of this study, it was necessary to select from among the many possible variables only those most closely associated with the welfare of individual estate owners. Once the variables were selected, a means of organizing the information to be used by the computer program was devised.

Selection of Variables

The variables chosen for use in the BUILD program are of two types: quantitative and qualitative. The qualitative variables were not explicitly incorporated into the program, but were considered in evaluating program reports. Selected quantitative information was incorporated into the model and functionally related to other data to simulate operation of the owner's estate.

Personal Requirements. By their nature, the personal needs and preferences of test participants did not lend themselves to quantification. They did, however, guide the direction of future plans and limit an otherwise larger range of options. During this study, variables of this kind were frequently found to be closely associated with family obligations or individual preferences, but they may arise from business considerations or the requirements of business associates. Whatever their source, due consideration was given to these factors in evaluating available options and interpreting present circumstances.

Business and Investment Data. The quantitative variables selected related primarily to business interests and investments. Data was gathered for cost and estimated fair market value of each undertaking and the annual income and cash generated by each. When this information had been gathered, the owner and planner determined the current use of resources, and formed a foundation from which alternatives were explored and projections made of estimated status at a given future time. The specific categories of assets and liabilities provided for were: cash, notes and receivables, shares

of stock, bonds, life insurance, real estate, employee benefits, salary, other assets and receipts, mortgages on realty, and other liabilities and disbursements.

In order to make the necessary projections, data and programmed instructions were required that would enable the program to make such calculations. Accordingly, data was gathered for: interest rates on assets and liabilities, annual payments received or paid on notes or obligations, annual income from certain investments and their estimated rates of change in value, and the annual cash generated or required by assets and liabilities. In addition, information was gathered with regard to tax credits arising from businesses or investments, estimated state income tax as a percentage of the federal tax, and the estate owner's assumed rate of return on investments of excess cash.

Personal Financial Data. Although the majority of the quantitative information required related to business interests and investments, some personal data was necessary for the program. To calculate federal and state taxes each year, the estate owner's itemized deductions and exemptions and the rate of estimated change in this amount was acquired from each participant. In addition, information was gathered on each participant's personal living expenses and the estimated rate at which these would change over time. This information was used to calculate the annual after tax cash flow. The time horizon used by the program was also indicated by each participant. This controlled the number of years for which the program would project and calculate information.

Financial Goals. A final type of quantitative data was required with regard to business and investment financial goals the estate owner wished to attain by the close of the planning period. The goals were stated in terms of desired cost, market value, income, and cash flow arising from each category.

Input Form

Following the selection of factors to be included, it was necessary to devise an appropriate means by which they could be accumulated and organized. A form was developed which allowed the estate owner and the planner to set forth the types of data required and to make comments about any personal matter that might be of consequence in interpreting the program output or directing the future course of investment planning.

Nonquantitative Information. The first two pages of the input form were designed to accumulate general information of a nonquantitative nature. It contained comments and facts pertaining to dependents, their ages and special requirements, background information on the owner's business and business associates to the extent such information was appropriate, and the owner's attitude toward changes in these activities. It was noted which forms and documents had been acquired and which were still needed. None of the information contained in the first section of the input form was utilized in the mechanical operation of the program. It was an essential part of the overall program since the type of data contained there was occasionally controlling when decisions were made regarding future actions.

Financial Data. The second section of the input form contained quantitative financial data that became a functional part of the BUILD program. Business and investment data relating to cost, estimated fair market value, income, and cash flow were gathered for each participant during the testing and development procedures. In addition to providing for information relating to present financial interests, the form allowed for information necessary for the projection of future values, outstanding balances, taxable income, and cash sources available for future investments.

The third section of the form contained the financial goals of the estate owners. This information was used by the program in producing comparisons of projected financial data with the goals set by each owner. Significant variances gave indications of the attainability of the predetermined goals. Corrective action was indicated in several instances.

Preparation of Reports

Program instructions directed the preparation of three types of computer-generated reports. Report Number 1 presented the estate owner's current financial position. Report Number 2 contained a series of pro forms reports prepared for each year in the planning period. The final report compared projected data at the end of the planning period with the owner's predetermined goals as stated in the input form.

Report Number 1

In the first report, assets were listed by group totals and

summed, and liabilities were also listed and summed. The difference between total assets and total liabilities was reported as owner net worth in columns one and two. Column one contained net worth in terms of historical costs, while column two presented estimated fair market values. The income and sources of cash derived from these groups was listed in columns three and four, respectively.

Report Number 2

BUILD instructions directed the preparation of a pro forma report for each year of the planning span based on data contained in the input form and computer-generated information. Assets were reported at their historical costs or computed carrying values, new balances for liabilities were computed each year in accordance with the information gathered for each obligation, and taxable income and cash flow were calculated. Each year, the amount available for investment at the required rate of return was determined by subtacting federal and state income taxes from the cash produced by investments.

Report Number 3

The final report compared the pro forma data reported in the final year of the Report Number 2 series with the goals set by the estate owner. Unfavorable variances from the goals indicated that corrective action was necessary if the owner expected to realize his ambitions at the end of the planning period. Divergences did not indicate specific courses of action which would improve the expected problem, but they did aid the planner in discerning potentially troublesome developments. BUILD also provided a tool whereby the

intuition and judgment of the estate owner and planner was sharpened and alternatives were tested.

Testing Procedures

Testing procedures applied to the BUILD program were designed to insure mechanical accuracy of the computer-generated figures and the overall utility of the program. Mechanical precision was carefully verified throughout the development of the program by manual calculation of data and comparison with computer-generated data. The serviceableness and flexibility of the program was designed and tested through the careful selection of participants whose data reflected certain desired characteristics.

Selection of Participants

During the testing of the model, four individuals were chosen who exhibited considerable diversity in both personal characteristics and financial activities. Ages ranged from 37 to 65, net worths varied from \$90,000 to \$2,100,000, diverse business and professional interests were represented, and a variety of investments were encountered. Personal conditions and circumstances exhibited a degree of variety at least equal to that found in the quantitative characteristics. One participant was single, the others were married, and all differed considerably in their financial responsibilities to dependents or others.

Age differences were found to have no effect on the usefulness of the program to various estate owners. However, this factor did affect the use made of the program output. Older estate owners

tended to be more concerned with the projected values of certain assets and their impact on estate and gift taxes and the equalization of values among estate beneficiaries. Younger estate owners were interested in testing the effects of investment options and obtaining the best use of their resources. Their emphasis was directed toward building a larger estate rather than methods of dispostion.

Size of the owner's net worth presented no particular difficulties with regard to the design of the program. This factor did
influence the variety of alternatives available to the owner, and
thus the program's ability to manage diverse situations. The size of
the numbers alone, however, were not of significance in program usefulness or flexibility.

Of greater importance in designing and testing the model, was the diversity of professional, business, and investment undertakings. Asset and liability categories were provided on the input form and instructions designed to accommodate a wide variety of circumstances. Flexibility was obtained to a rather large degree, but limitations must nevertheless be recognized. The most severe limitation is that BUILD cannot realistically accommodate the activities of an investor who buys and sells frequently, or radically changes his investment pattern. Projections based on rapidly fluctuating information would tend to lack reliability and are unsuitable for this study.

The variety of personal requirements, desires, and circumstances did not affect the operation of the program since it dealt only with quantitative data. Nevertheless, these factors did have

considerable influence on the direction of future planning and tended to limit the options available to estate owners.

Modifications of Financial Arrangements

In order to test and demonstrate the model's use as a means of exploring various investment options, the input data for two participants was modified. Both HAN 001 and FDY 001 wished to consider changes in their financial arrangements, and the program was used for this purpose. Only that data that would change as a result of financial rearrangements was modified. The effects of these changes over the planning period were observed by comparing the expected values at the end of the planning period with the goals originally determined by the estate owner. Variances between expected values and goals determined with the original input and those resulting from the revised data revealed the change expected as a result of the revised data. Although an estate owner might decide against adoption of the plan under consideration, as a minimum he would have financial knowledge upon which to base his decisions. The rapidity with which alternatives can be explored made it possible to obtain timely information to add insight to the planning process.

Conclusion

During this study, several facts were observed. First, computer-assisted tax and financial planning is not only feasible, but also necessary if projections of future costs, values, incomes, and cash flows are to be made. Manual calculations are often prohibitively time-consuming, particularly if several options are being

considered.

Secondly, there is a need for additional computer-assisted planning models. This study typifies the modular approach to such programs in contrast to the conventional unitary design which can only be used alone rather than in conjunction with supplementary programs. However, there is a need for sub-programs which will provide input for specific business and investment problems or which will utilize the output produced by BUILD in the solution of other problems.

A few programs exist which, if modified to some extent, would fill the requirements for a modular approach. One such program aids doctors in determining whether to lease or buy certain equipment used in their practices. Information developed by this program could become input data to BUILD, and the impact of leasing or buying could be explored within the framework of the individual's overall financial activites. Another program exists by which the optimum depreciation method can be computer-selected for certain business assets. Subprograms such as these and others yet to be developed can relieve the planner of the tedious manual calculations that have often rendered financial planning for individuals impractical.

Additional programs are needed to utilize the information provided by this simulation model in solving other problems. For example, programs which are designed to explore gift and estate tax alternatives could use the information resulting from the BUILD calculations to determine the most satisfactory methods of transmitting the estate to designated beneficiaries. Also, given a projected future size and composition of an estate, programs could be developed

to aid the executor in selecting satisfactory valuations and making the many elections available to and required of an estate administrator.

A final conclusion resulting from this study is that in tax and financial planning for individuals, a team approach may occasionally be desirable. Expertise may be needed with regard to appraisal values, the development of investment alternatives, or the drafting of legal documents. That the accountant should assume a dominant role in initiating and continuing estate planning activities appears to be both appropriate and practical. The accountant meets with the estate owner on a recurring basis. As a minimum, they will meet annually for the preparation of the yearly tax report and perhaps more frequently in dealing with day-to-day business problems. As a result of his continuing contact with the client, the accountant will probably already have much of the information necessary for the analysis of the estate and the development of appropriate alternatives. He may have also acquired an understanding of the owner's responsibilities and desires and sharpened his insight into the client's economic activities and opportunities as well.

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