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ZERO-BASE BUDGETING IMPLEMENTATION IN VOLUNTARY HEALTH AND WELFARE ORGANIZATIONS



by Kenneth C. Guyette

An Independent Study

Submitted to the Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the Degree of

Master of Science

in Accounting

Grand Forks, North Dakota

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management problems of the Voluntary, Health, and Welfare Organizations

CHAPTER I

INTRODUCTION

Voluntary, Health, and Welfare Organizations operate in a highly challenging, rapidly changing world. The general public is impatient with the results of programs to help handicaped and disabled persons and to strive to end poverty, deprevation, and other social ills. The technological methods and social procedures for helping needy people has progressed rapidly in recent years. Yet the resource management and fiscal planning procedures have made little progress in the last twenty years. For treatment and service to progress for Voluntary, Health, and Welfare Organizations Budgetary techniques must be improved. Based on the author's association with these organizations, the present budgetary systems used are inconsistent; some having excellent program budgeting systems while others having no recognizable budgetary system at all. For central fund raising agencies, such as the United Way of America, to allocate resources meaningfully and objectively, the Voluntary, Health, and Welfare Organizations must present their budgetary request in a comparable and standardized manner.

This paper will present, as a possible solution to the budgetary management problems of the Voluntary, Health, and Welfare Organizations, the implementation procedures and concepts of Zero-Base Budgeting.

Like previous budget innovations, the underlying aim of Zero-Base Budgeting is to insert rationality into the budget process. This process, which in theory means justifying each program from the bottom up, is currently a popular technique. Not only has the federal government implemented the budgetary technique, but eleven states and over 200 companies are currently using Zero-Base Budgeting. The basic characteristics of the process can best be illustrated by several definitions:

An operating, planning, and budgeting process which requires each program manager to justify his entire budget request in detail from scratch and which shifts the burden of proof to each program manager to justify why he should spend any money at all. This approach requires that all activities be identified as "decision units" and divided into "decision packages" which will be evaluated by systematic analysis and ranked in order of importance. ²

Another of its basic characteristics is illustrated by this definition:

A planning tool that ignores the traditional constraints of organizational structure by focusing on those functions that must be satisfied if the agency is to be successful. All available resources should be utilized in the fulfillment of these functions. In the Zero-Base approach, therefore, "organization" refers to the way in which resources are selected and combined to satisfy an individual function at a specified level of performance. 3

The decision unit is usually an individual program, project, or department with a single objective, and decision packages are possible alternatives and levels of performance within the decision unit.

¹Logan M. Cheek, <u>Zero-Base Budgeting Comes of Age</u> (New York: AMACOM, 1977), p. 12.

²Ibid., p. 13.

³Paul J. Stonich, <u>Zero-Base Planning and Budgeting Improved Cost</u> Control and Resource Allocation (Chicago: Dow Jones-Irwin, 1977), p. 15.

Other terms within the latter definitions of Zero-Base Budgeting that should be defined are budgeting and budgets:

"Budgeting" is the systematic, calculative decision making process through which budgets are created. "Budgets" are prospective statements of the financial position of an independent entity for a specified future period of time based on planned expenditures during that period and proposals for funding them.⁴

This paper will analyze the evolution of the Zero-Base Budgeting technique from a theoretical standpoint, comparing it to the major forms of budgeting concepts of the past. The characteristics of the Voluntary, Health, and Welfare Organizations will be discussed and their budgetary requirements analyzed. Then a detailed presentation of the Zero-Base Budgeting implementation procedures will be described using two Voluntary, Health, and Welfare Organizations as examples. Zero-Base Budgeting's benefits and costs will be discussed along with possible implementation problems. Lastly, the United Way of Grand Forks' budgetary process will be compared with the Zero-Base Budgeting process on a theoretical basis.

⁴United Way of America, <u>Budgeting - A Guide For United Ways</u> and Not-For-Profit Human Service Organizations (Virginia: United Way of America, 1974), p. 25.

CHAPTER II

ZERO-BASE BUDGETING--A THEORETICAL

PERSPECTIVE

Based on the following theoretical analysis it will be shown that the fundamental concepts and ideas that comprise the Zero-Base Budgeting technique are not new, but were formed together as a rational attempt to resolve past budgeting techniques' problems and shortcomings. The best characteristics of many of the past budgetary methods have been combined to form a comprehensive and logical approach to decision making in a budgetary framework.

The main idea of Zero-Base Budgeting can be traced back to 1924 when E. Hilton Young said:

It must be a temptation to one drawing up an estimate to save himself trouble by taking last year's estimate for granted, adding something to any item for which an increased expenditure is foreseen... It is in that way obsolete expenditures are enabled to make their appearance year after year long after reason for their existence has ceased to be. 5

To understand the theoretical evolution of Zero-Base Budgeting, a theoretical review of three of the main approaches to budgeting is in order: procedural and technical, economic analysis, and approaches to decision making theory. All three of these areas evolved simultaneously and led to the formation and refinement of the Zero-Base

⁵Aaron Wildavsky, <u>Budgeting - A Comparative Theory of Budgetary</u>
<u>Processes</u> (Boston: Little, Brown, and Company, 1975), p. 279.

Budgeting method. These main approaches to budgeting have received various levels of emphasis in past budgeting techniques. 6

Procedural and Technical Approaches

In the procedural and technical approach areas, the first major reform that affected budgetary theory was called "performance budgeting". Briefly, a performance budget focuses on the activities that the organization performs; the results in relation to some measure of input. 7 This was in contrast to traditional budgetary theory, also called "line item budgeting", where the main focus is placed on what is used, such as: personal services, supplies, and equipment. Performance budgeting stressed the output and objectives of the unit and compared the program output with performance standards. This method was an advancement from traditional budgeting, but was only useful in areas where measurable workload data could be developed on an ongoing basis. In addition, workload data was used as the major criteria for the success or failure of the programs. performance era ended with the implementation of the Planning-Programming-Budgeting Systems in the early 1960's. The technique attempted to integrate the functions of planning, programming, and budgeting into a comprehensive interrelated system for decision-making and rational resource allocation. This long-range planning tool

⁶Frank D. Draper and Bernard T. Pitsvada, Zero-Base Budgeting for Public Programs (Washington D.C.: University Press of America, 1979), p. 28.

⁷Ibid., p. 31.

aimed at macro-ecomomic analysis of broad policy decisions and desired output rather then detailed implementation and operation. Lower levels of management had little opportunity for input into the system and also were not provided with sufficient guidance for transforming goals and objectives into a workable budget. Methods for evaluating program efficiency and effectiveness were not provided at lower levels of management, and most emphasis was placed on examination and justification of new programs without examining the old programs. Like its predecessor, Performance Budgeting, Planning-Programming-Budgeting Systems was not a drastic reform nor did it provide the mechanism to answer all major budgeting questions that exist and remain unsolved.8

Economic Analysis

Economic Analysis became part of the budgetary process with the introduction of marginal utility (value of a program determined by the the value of the last increment added to the existing level of funding). Because of the lack of market place feedback to determine the value of the marginal unit, cost/benefit analysis resulted. This technique attempted to make systematic and rational calculations of the cost of a non-profit organization program in relation to its benefits. Cost/benefit analysis in non-profit organizations poses very special problems. The most serious of which is the ability to

⁸Ibid., p. 32.

measure the costs of a program or the benefits produced. For example: "What is the cost of a life or the benefit to society for having a youth program in the local YMCA?" Cost/benefit analysis is useful in determining which of several ways would be the most efficient in achieving an objective, but this is true only if proper assumptions are made to reflect the cost/benefit analysis's realistic value to the decision making process.

One technique that incorporates marginal utility, cost/benefit analysis, and welfare economics is Maximum Social Gain. This method maintains that resources for social programs should be allocated in each area and in the aggregate until the marginal social value of the next dollar spent equals the marginal social costs. If there is a choice among alternatives, the alternative which gives society the largest benefit in relation to the total cost should be selected. This concept combines efficiency measurement and equity or ethical judgement. This method could be very useful for Voluntary, Health, and Welfare Organizations to determine the value of programs in relation to the local community as a whole. The time and expertise required could result in the cost of accumulating the information for analysis outweighing the benefits.

⁹Ibid., p 53.

Decision Making

Decision making models have affected budgetary techniques in basically two forms: that of an incremental model and that of a rational comprehensive model. The comprehensive model uses the scientific method of problem solving. The Planning-Programming-Budgeting System was the closest attempt to build a decision-making structure based on a rational comprehensive model. The incremental model increases old programs automatically and only analyzed proposed new programs. The main problem with the latter method is that old programs may become obsolete and require analysis. 10

The comprehensive budgeting method was first attempted in the Department of Agriculture in 1964. This budgetary system was not the present Zero-Base Budgeting technique, for it had no detailed implementation procedures or operational guidelines. The organizational units were told only to evaluate all of the programs from the ground up, but not how to accomplish this demanding budgetary feat. The managers were able to learn a great deal about their respective organizations, but they had no way to formulate what they had learned. 11

¹⁰Ibid., p. 58.

^{11&}lt;sub>Aaron</sub> Wildavsky, "Comprehensive Versus Incremental Budgeting in the Department of Agriculture," <u>Administrative Science Quarterly</u> 10 (December 1965):330.

It was into this historical and theoretical perspective that
Zero-Base Budgeting began its increased emphasis and implementation.
The concept is built to a great extent on what has evolved before it.
The rational comprehensive decision making model, the program design and evaluation of outputs from the Planning-Programming-Budgeting
System, and the marginal utility of increments and cost/benefit analysis techniques, all are part of the Zero-Base Budgeting concept.

As a theoretical summary and comparison between the traditional budgeting methodology and Zero-Base Budgeting characteristics, exhibit l compares the two concepts. This exhibit is self-explanatory. In exhibit 2 the traditional versus the Zero-Base Budgeting flow of events is presented. The first stage is the same for both Zero-Base Budgeting and traditional budgeting, that of setting objectives and goals. After this initial step the concepts are not the same. the traditional method each program manager's next step is to estimate the cost of continuing activities. The cost of continuing activities is not challenged and these costs are considered as a fixed base for the following year's operating plan. Managers then focus their time on developing costs for new activities proposed for the upcoming year. This puts upper level managers in an uncomfortable position of having to adjust the traditional budget as estimated funded levels vary. They must now either fund entire new programs, delete entire old programs, or make arbitrary percentage cuts or additions across the board. This is the most critical problem of traditional budgeting;

management cannot be sure that it has focused on the key areas or problems facing the organization. The majority of the programs are not reviewed, since the emphasis is on the increases from the previous year's programs. In Zero-Base Budgeting in step two of exhibit 2, the budgeting process is integrated into the decision-making process and the trade-offs are identified and tested against the budgeting plan in step three. Zero-Base Budgeting takes the approach that every dollar is equal, both dollars for ongoing programs as well as new programs, thus program managers are not given the continuation of their programs for free.

Peter A. Pyhrr developed the comprehensive budgeting concept into a formalized, systematic budget process. The heart of the system is the program manager in the organization. Each program manager prepares decision packages for each decision unit under the program manager's responsibilities. Each decision package sets forth: the objectives of the activity, alternatives examined, impact of not performing the activity, indicators of performance, and analysis of costs and benefits of the activity. Alternatives consist of different ways of performing each activity and different levels of effort for performing the recommended way, including levels: lower than, the same as, or higher than the current level of funding. 12

¹²Peter A. Phyrr, Zero-Base Budgeting - A Practical Management Tool For Evaluating Expenses (New York: John Wiley and Sons, 1973), p. 19.

Then the decision packages are ranked in decending order of importance. Each program manager ranks the decision packages according to his priorities. The decision packages are then merged with other decision packages prepared by other program managers within other organizational units and a ranking then is made of the aggregate. Such mergings proceed up the organizational chain so that eventually top management can assess the relative needs and priorities of the different organizations.

Thus, as the decision packages are merged along the chain and as their numbers increase, so do the costs of approving each additional decision package. In theory top management is able to determine where in the list of packages the marginal costs begin to outstrip marginal benefits.

The first implementation of the current Zero-Base Budgeting technique occured in the late 1960s in the company of Texas Instruments Inc. This implementation was relatively successful because of the detailed implementation procedures and flexibility in adapting to the needs of the particular organization. 13

The first time the method was used in a non-profit, governmental organization was in the state of Georgia in 1970. The results of the implementation of Zero-Base Budgeting were mixed for the first two years of operation under the budetary technique. After many adjustments

¹³Ibid., p. 29.

the process was successful with the state using the process for the past nine years. 14 The advantages and disadvantages of the implementation process in Georgia can be summarized as follows:

Advantages:

- 1. The establishment of a financial planning phase prior to budget preparation.
- Improvement in the quality of management information.
- An increase in the budget involvement of personnel at the activity level.

Disadvantages:

- 1. An increase in time and effort required for budget preparation.
- 2. A contention that the new system had not significantly affected the allocation of funds.
- 3. An ineffectiveness of the decision package ranking approach to meet changes in the level of funding (Instead of adjusting programs according to the initial decision package ranking, new decision packages were required when the level of funding increased or decreased. 15

Thus, the way the implementation was planned and executed determined how successful and effective the budgetary process was in the initial two year period of operation in the state. The detail implementation of Zero-Base Budgeting will be covered in chapter four.

¹⁴ Ibid., p. 8.

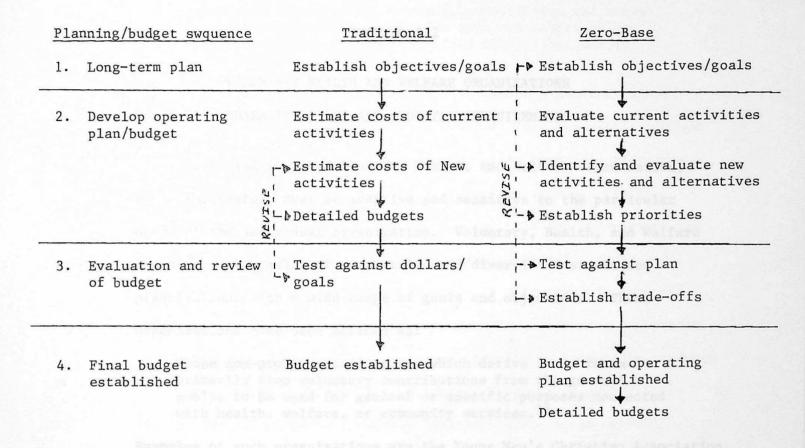
¹⁵ James D. Suver, "Where Does Zero-Base Budgeting Work," Harvard Business Review 55 (November-December 1977):7.

EXHIBIT 1

ASPECT OF THE BUDGETING	TRADITIONAL	ZERO-BASE
APPROACH		
Philosophy	Functionally oriented Accounting oriented Justify only new pro- grams	Program oriented Decision-oriented All programs compete for scarce resources
Technique	Extrapolate past spending	Break up budget into understandable decision packages.
End Product	An aggregated set of numbers, understood by few.	A set of ranked priorities that can be rationally in- creased, changed, or trimmed as circumstances warrant.
Organizational	Encourages "gamesman-ship": -Those who substan-tially inflate requests	Facilitates rational analysis and decision making:
	knowing they will be cut, are implicitly rewarded, for they wind up with what they wanted any-way	-Those who do inflate their packages are more likely to be caught. -Carefully devised results-oriented packages make credible managers of their sponsors.
Perer A. Physr, "ZBB", Acre	-At the same time those making responsible submissions are penalized with the inevitable cut. Few make the same mistake twice.	their sponsors.
	-Thus, dishonesty is encouraged.	

SOURCE: Logan M. Cheek, Zero-Base Budgeting Comes of Age, (New York: AMACOM, 1977), p.16

EXHIBIT 2
TRADITIONAL VERSUS ZERO-BASE BUDGETING



SOURCE: Peter A. Phyrr, "ZBB", Across the Board, 14 (November, 1977): 37.

CHAPTER III

VOLUNTARY HEALTH AND WELFARE ORGANIZATIONS CHARACTERISTICS AND BUDGETARY REQUIREMENTS

Budgeting in any Voluntary, Health, and Welfare Organization, to be successful, must be adaptive and sensitive to the particular needs of the individual organization. Voluntary, Health, and Welfare Organizations consist of many varied and diversified structured organizations with a wide range of goals and objectives. These organizations have been defined as:

Those non-profit organizations which derive their revenue primarily from voluntary contributions from the general public to be used for general or specific purposes connected with health, welfare, or community services. 16

Examples of such organizations are the Young Men's Christian Association, Red Cross, Salvation Army, and the United Way of America.

The budgeting process is more important in a non-profit organization versus a profit oriented organization for several reasons:

¹⁶Malvin J. Gross, <u>Financial and Accounting Guide For Non-Profit Organizations</u> (New York: John Wiley and Sons, 1974), p. 178.

- 1. Few costs in a profit oriented company are discretionary in nature, compared to a non-profit organization where the majority of the costs are discretionary.
- 2. Budgets in profit oriented companies are tentative and usually are adjusted for economic, competitive, and sales level variables; while non-profit type organizations are usually subject to inflexible, fixed allocations for the entire year. 17

A non-profit organization exists to render a service rather than to earn a profit. "Service" is a vague, less measurable concept than "profit". 18 Thus, it is more difficult to measure performance and to make rational choices among alternatives in a non-profit organization. This results in no single criteria for measurement and no positive way of determining the relation of specific costs and related benefits. Comparison among units is only possible when the units are similar in function and output. The output of a non-profit organization, which is service oriented, results in intangible products which are even more difficult to measure. There is no market force to give the organization immediate feedback on how it is performing. This is further complicated by the line of responsibility. In a profit orientated company ownership lines of responsibility runs from the shareholders to the board of directors to the president; while a non-profit organization's lines of responsibility runs from three directions, each having equal effect: from the contributors, from the board of directors, and from the chief executive.

¹⁷Robert N. Anthony and Regina Herzlinger, Management Control in Non-Profit Organizations (Chicago: Richard D. Irwin, Inc., 1975), p. 229.

^{18&}lt;sub>Ibid.</sub>, p. 14.

The cost/benefit analysis problem is a basic problem of the non-profit organization, but it is especially a problem for the service oriented, human welfare programs. To determine a program's effect on the individual person; the economy, society, different organizational sponsorships, inefficient administration, wide range of interests, and needs of various groups served to which programs must be responsive; must be taken in consideration.²⁰

Because these organizations rely heavily on support from central funding organizations such as the United Way of America, the need for well defined objectives and goals as they relate to the organization's program is paramount.

Social and rehabilitation agencies especially need a comprehensive budgeting system, for the administration of public programs in these fields is complex and the allocation of resources to them does not provide equally for all. State and local agencies operate many diverse programs and offer a variety of services in many fields. Their operations are governed by numerous plans, laws, regulations, guidelines, manuals, and directives. The personnel employed differ widely in background and in the kinds of services they are capable of giving. And the public, spurred by community consciousness is pressing social agencies to fulfill physical and social needs. 21

Thus, the need for formal budgeting techniques that are integrated into the planning and programming process, the objectives and goals, and the incompassing programs of the Voluntary, Health, and Welfare Organizations is extremely important for their continued growth and their ability to continue to serve their local community effectively.

²⁰ Arthur Spinder, "PPBS and Social and Rehabilitation Services," Welfare in Review 48 (May and April 1969):22.

²¹Ibid., p. 25.

CHAPTER IV

ZERO-BASE BUDGETING IMPLEMENTATION PROCEDURES

Voluntary, Health, and Welfare Organization's primary budgetary requirements are addressed to some extent by the concepts of program budgeting, yet the organizations that use this budgetary method are few in number and those that do use it have highly varied quality programs. Thus, Zero-Base Budgeting would not only enhance any program budgeting method in use, but would enhance all other budgeting methods and at the same time allow comparison and standardization of budgetary outputs. The latter statement is based on the author's experiences in implementing Zero-Base Budgeting in the Department of Defense, which is program oriented.

The way in which Zero-Base Budgeting is implemented determines how successful the method will be during future fiscal periods.

Past implementation mistakes in the Department of Agriculture and the state of Georgia attest to this negative effect on future operations.

This chapter will cover the recommended implementation procedures in detail, for Voluntary, Health, and Welfare Organizations, using as examples the Salvation Army and Young Men's Christian Association where deemed appropriate.

The basic framework of an implementation plan should consist of two general steps:

- 1. Define the objectives of the implementation procedures.
 - 2. Structure the implementation strategy. 22

The objectives desired from the implementation of Zero-Base
Budgeting are commonly the estimated benefits, such as better communication between all levels of management, better defined objectives
and coordination of these objectives with the overall organization
goals, establishing new goals, or reallocating existing resources.

After the objectives have been established the implementation strategy and procedures must be formulated. A team task force, consultant, or trained internal management should accomplish the following:

- 1. Design the process to fit the specfic needs and accounting control ability of the organization.
- 2. Prepare simple, straight forward budget manuals, illustrating the type of Zero-Base Budgeting analysis required and explaining decision package and ranking concepts.
- 3. Train program managers.
- 4. Work with the program managers to expedite the process.
- 5. Train the committee or higher management to rank the decision packages and compare similar functions across organizational lines.
- 6. Evaluate process progress and revise as needed. 23

²²Peter A. Pyhrr, "Zero-Base Budgeting: Where to Use it and How to Begin," S.A.M. Advanced Management Journal 41 (Summer 1976):3.

²³Ibid., p. 5.

All the latter implementation steps are self explanatory except for step one, designing the process to fit the specific requirements of the organization. This step is critical to the success of the implementation program and consist basically of seven separate designing steps:

- 1. Determining the scope of the implementation
- 2. Defining all the goals and objectives of the organization.
- Establishing all planning assumptions.
- 4. Developing a time table for implementation.
- 5. Determining decision unit location and responsibility.
- 6. Developing decision packages.
- 7. Ranking procedure design. 24

The scope of Zero-Base Budgeting implementation will depend on the support of higher management and the structure of the organization. If total commitment is not available at first, a possible trial implementation of one or two programs might be attempted. If this is not suitable, a test period may be designated to determine the success of the method for the entire organization. Generally, unlike a commercial enterprise, the Voluntary, Health, and Welfare Organization can utilize the process throughout the entire organization.

²⁴Kevin W. Tourangeau, "Operating a Zero-Base Budgeting Program," Cost and Management 52 (January-February 1978):13.

The next step is to formulate all the goals and objectives of the organization. Before implementation plans can be formulated the intended end product must be known. The objectives should pertain to the specific budget year under scrutiny and be in-line with the long-range planning goals. Zero-Base Budgeting builds a bridge between the coming years budget and the corresponding year of the long-range plan by incorporating the documentation of the objectives of the organization into the budget cycle.

Planning assumptions, as in all budgetary processes must be established for accurate quantification of expenditures and estimation of revenues. Examples of these assumptions are estimation of revenue levels, salary level increases, or inflation estimates. Usually the inflation percentages are not calculated at program level, but are incorporated into the budget submissions at the top management or top organization ranking level.

To complete the preliminary design steps, a time table for implementation accomplishments should be designed. A possible time schedule is suggested by the Georgia time table:

WEEKS											ACCOMPLISHMENTS
1 week	٠	•		•	٠		•	•	•	1.	Designate decision units
3-6		•	•		•		iad •			2.	Develop decision packages
4-6 8-13 Tot						•	٠	•	•	3.	Review and rank decision packages ²⁵

²⁵Phyrr, Zero-Base Budgeting: A Practical Management Tool For Evaluating Expenses, p. 121.

The next three steps are the basic implementation procedures for Zero-Base Budgeting. Yet these steps are identical with all budgeting implementation procedures except for the Zero-Base review of programs. The steps can be compared to other budgetary implementation steps as follows:

- 1. Determining programs/functions/activities for which significant budgetary decisions are made. (In Zero-Base Budgeting this step is identifying decision units).
- 2. Preparing justification statements that include information necessary for managers to make judgements on these programs. (In Zero-Base Budgeting this step is preparing decision packages around each decision unit).
- 3. Identifying the relative priority of programs. (In Zero-Base Budgeting this is ranking the decision packages). 26

These three steps will be described in detail and will be illustrated by theoretically implementing Zero-Base Budgeting in the Voluntary, Health, and Welfare Organizations of the Young Men's Christian Association and the Salvation Army of Grand Forks, North Dakota.

Identification of Decision Units

Decision units are programs or organizational entities for which budgets are prepared, for which a manager makes significant decisions on the amount of spending and makes decisions on the scope or quality of work performed. Selecting the decision unit maybe the most important step in Zero-Base Budgeting, for all the rest of the process relies on this step. The selection determines the "fit" between

²⁶Draper and Pitsvada, Zero-Base Budgeting For Public Programs, p. 59.

Zero-Base Budgeting and other organizational systems as well as the task to be confronted during system introduction. The basic question to be asked when looking for appropriate decision units could be, "What decision units provide an appropriate balance between external submission requirements and internal needs within particular organizational units?"27

For illustration purposes decision units for the Young Men's Christian Association and Salvation Army will be selected. In the Young Men's Christian Association the organizational structure and budgetary system resemble that of program budgeting. The organization is divided into four main programs: Youth, Physical Fitness, Aquatic, and Special programs. Each of these programs has a program manager that submits a budget request to the executive officer, who in turn analyzes the budgets for accuracy and content. The four main programs are composed of many specialized programs, such as the Day Camp within the Youth Program. Although it is desirable to have the decision units at the lowest level possible, this organization should have the decision units at level "B" because at this organizational level there are program managers with significant authority and knowledge for decision making (reference exhibit 3).

²⁷Tourangeau, "Operating a Zero-Base Budgeting Program," p. 14.

Like the Young Men's Christian Association, the Salvation

Army lacks a sufficient number of program managers to allow lower programs to be considered as decision units. Thus, the appropriate decision units should be the Day Care Center, the Thrift Shop, and the Corps Community group of programs. This decision unit selection is illustrated in the second part of exhibit 3.

The decision unit is summarized on a two page decision overview form, which is illustrated in exhibit 4 for both the Young Men's Christian Association and the Salvation Army. Here the decision unit is identified, the long range goals (general statements of desired outcome, usually timeless and non-measurable) are described, major objectives (specific statements of desired outcome, measurable and controlable by the program manager) are defined, alternatives are suggested and anayzed, the best method is recommended, and the accomplishments of the program, up to the present, are measured against the stated objectives.

Decision Package Formulation

After the decision units have been identified and the program managers have developed the decision unit overviews, then the next step is the preparation of a set of decision packages. The decision package which identifies each decision unit in such a manner that management can evaluate it, rank it against other decision packages competing for funds, and identify any duplication of services.

As the decision overview identifies different ways of performing the program, the decision packages identify different levels of effort for performing the program. These levels can be from three to four in number and are described as follows:

- 1. Minimum Level. This is the level of effort below which it is not realistic or feasible to operate the program at all.
- 2. <u>Current Level</u>. This level represents a continuance of the program at last year's funding level. This may or may not be adjusted for inflation depending on where this variable is considered (program or top management level).
- 3. <u>Intermediate Level</u>. The increment between minimum and current levels.
- 4. Improvement Level. This is the level which is higher then current level and which represents an augmented level of funding. 28

With the exception of the minimum level decision packages, each decision package addresses only the increment from the previous package. It is this minimum level package where the results of Zero-Base funding for the program are set forth. In other words, if the minimum level of the decision package was not funded, then the program would cease to exist. Considerations that may guide a program manager in determining the minimum level are as follows:

- 1. The minimum level may not achieve the total objective of the program.
- 2. The minimum level addresses itself to the most critically needed services or attaches to the most serious problems.

 $^{^{28}\}mbox{Pyhrr},$ "Zero-Base Budgeting: Where to Use It and How to Begin," p. 7.

- 3. The level may merely reduce the amount of service or the number of services provided by the program.
- 4. The minimum may reflect cost saving procedures.
- 5. The level may reflect any combination of the above. 29

The Day Care Center of the Salvation Army and the Youth Program of the Young Men's Christian Association represent decision units of each of the respective organizations and are broken into two decision packages (minimum and current) in exhibit 5 and 6. The decision package formats should include:

- 1. Identification narrative.
- 2. Activity description the work to be performed at this level of funding.
- 3. Resource requirements.
- 4. Short term objectives how much of the stated objective of the decision unit will be reached.
- 5. Impact on the major objective of the organization.
- 6. Other consequences of not being funded and cost/benefit analysis, if available. 30

²⁹Draper and Pitsvada, <u>Zero-Base Budgeting For Public Programs</u>, p. 65. ³⁰Ibid., p. 67.

Ranking Decision Packages

The third and final basic implementation step of Zero-Base
Budgeting is determining the relative priorities among all the decision packages. The degree of importance associated with each
dicision package is determined by the pre-established goals of the
organization. Personal preferences of the program manager are subsidiary. At the program level decision packages, representing the
minimum level of effort, should receive the highest ranking and
decision packages representing incremental levels of effort should
receive a progressively lower ranking. 31 It is possible for a
current package of one program to be ranked ahead of another program's
minimum package if the current package is more important to the organization then the minimum package.

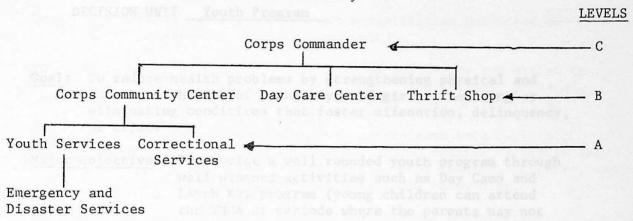
In the continuing illustration, the Youth Program decision packages in exhibit 7 will have to compete for funding at the consolidated ranking level with the packages of the Physical Fitness, Aquatic, and Special program decision packages. In the Salvation Army, the Day Care Center decision packages will compete for funding at the consolidation ranking level with the Thrift Shop and the Corps Community programs. Thus, all programs are competing against each other for the total amount of the funds that will become available, and not just a share of the additional funds for all programs—this is the heart of Zero—Base Budgeting!

³¹ Tourangeau, "Operating a Zero-Base Budgeting Program," p. 15.

EXHIBIT 3

DECISION UNIT LEVELS

Salvation Army



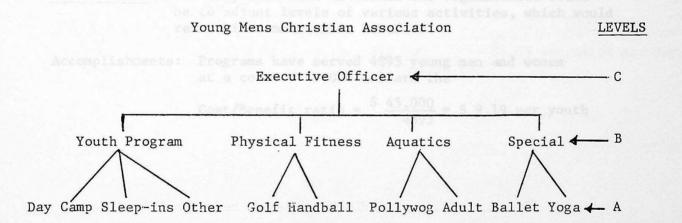


EXHIBIT 4 cont.

DECISION UNIT OVERVIEW

DECISION UNIT Day Care Center

- Goal: To increase the educational and socialization potential of young children in the local community.
- Major Objective: To provide a well rounded child-care and strive to meet the social emotional, intellectual, physical, and spiritual developmental needs of the child.
- Current Method: Child is encouraged to participate in a variety of learning centers grouped around related materials and types of activities such as book reading, puppetry, music and rhythm, painting, clay, and water play.
- Alternatives: No alternative available within the organization.
- Accomplishments: Total number of days of prechild care given 7915
 Total number of meals served 4494
 Snacks served 7534

Cost/Benefit ratio = $\frac{$40,000}{7915 \text{ days/care}}$ = \$5.05 per child per day

EXHIBIT 5

DECISION PACKAGE

Package 1 of 3 (Minimum Level) Program Day Care Center

ACTIVITY DESCRIPTION

Only minimum amount of creative activities could be accomplished. Child would receive a higher percentage of baby sitting supervision because of the lack of qualified instructors. Only 75% of the current service level could be maintained.

RESOURCE REQUIREMENTS:	PAST YEAR	YEAR CURRENT YEAR		BUDGET YEAR			
Park to Park to the State of th			This Pack	Cum Total			
RESOURCES: Donations	\$ 1000.00	\$ 1000.00	\$ 1000	\$ 1000			
Public Funds	16000.00	12000.00	11600	11600			
Program Fees	21000.00	27000.00	15000	15000			
OUTLAYS: Supplies	3200.00	3000.00	2400	2400			
Overhead	3000.00	3500.00	3800	3800			
Equipment	1500.00	1700.00	1000	1000			
Field Service	2500.00	3000.00	2000	2000			
Wages	25000.00	27000.00	18000	18000			
Position of people	330 4 .00	4	3	3			
Total Resources	38000.00	40000.00	27600	27600			
Total Expenditures	35000.00	38200.00	27200	27200			

SHORT-TERM OBJECTIVE:

To provide as many children as possible with a quality pre-school education.

OTHER INFORMATION:

Failure to approve the above package would eliminate a high quality low costing educational programs for pre-school children in the community.

EXHIBIT 5 Cont.

DECISION PACKAGE

Package 2 of 3 (Current Level) **

Program Day Care Center

ACTIVITY DESCRIPTION

All current programs would be maintain and the high quality creative activities would fill the majority of the child's time at the school.

RESOURCE REQUIREMENTS:	PAST YEAR	CURRENT YEAR	BUDGET This year	
RESOURCES:				
Donations	\$ 1000.00	\$ 1000.00	\$ 0	\$ 1000
Public Funds	16000.00	12000.00	1000	12600
Program Fees	21000.00	27000.00	10000	25000
OUTLAYS:				
Supplies	3200.00	3000.00	700	3100
Overhead	3000.00	3500.00	0	3800
Equipment	1500.00	1700.00	800	1800
Field Service	2500.00	3000.00	1000	3000
Wages	25000.00	27000.00	9000	27000
Position of People	4	4	1	4
Total Resources	38000.00	40000.00	11000	38600
Total Expenditures	35000.00	38200.00	11500	38700

SHORT-TERM OBJECTIVE:

To provide as many children as possible with a quality pre-school program.

OTHER INFORMATION:

Failure to approve the above package would eliminate many educational programs and 25% of the day care center capacity to serve the community.

^{**} The improvement level decision package would be in the same format with an increase in possible teacher position, enrollment, program fees, equipment, and supplies.

EXHIBIT 6

DECISION PACKAGE

Package 1 of 3 (Minimum level)

Program Youth

ACTIVITY DESCRIPTION

Youth activities comprise of a number of varied activities such as day camp, sleep-ins, kinderkamp, and many smaller specialized programs. Many of the specialized programs would no longer be offered at this level, the day camp would have to be cut from seven days to five, and kinderkamp would be decreased by 25%.

RESOURCE REQUIREMENTS:	PAST YEAR	PAST YEAR CURRENT YEAR BUDGE This Pack			
RESOURCES: United Way donation	\$ 28000.00	\$ 30000.00	\$ 20000	\$ 20000	
Program Fees	15000.00	15000.00	12000	12000	
OUTLAYS: Supplies	5500.00	5700.00	3800	3800	
Equipment	400.00	400.00	250	250	
Wages	35000.00	38000.00	28000	28000	
Position of People	4	4	3	3	
Total Resources	43000.00	45000.00	32000	32000	
Total Expanditures	40900.00	44100.00	32050	32050	

SHORT-TERM OBJECTIVE:

To provide diversified youth program for all age groups at a minimum fee. To help less fortunate youth with scholarship memberships.

OTHER INFORMATION:

Failure to fund this program at this level would eliminate over on third of the specialized programs, and in addition the program fees would have to increase by 30%.

EXHIBIT 6 Cont.

DECISION PACKAGE

Package 2 of 3 (Current Level)

Program Youth

ACTIVITY DESCRIPTION

Youth activities comprise of a number of varied activities such as the day camp, sleep-ins, kinderkamp, and many smaller specialized programs. At this level of funding all these quality program would remain at the current service level.

RESOURCE REQUIREMENTS:	PAST YEAR	CURRENT YEAR	BUDGET This Pack	YEAR Cum Total
RESOURCES:		10000	2 100	
United Way Donations	\$ 28000.00	\$ 30000.00	\$ 10000	\$ 30000
Program Fees	15000.00	15000.00	4000	16000
OUTLAYS:				
Supplies	5500.00	5700.00	2000	5800
Equipment	400.00	400.00	250	500
Wages	35000.00	38000.00	11500	39500
Position of People	4	4	1	4
Total Resources	43000.00	45000.00	14000	46000
Total Expenditures	40900.00	44100.00	13750	45800

SHORT-TERM OBJECTIVE:

To provide a diversified youth program for all age groups at a minimum fee. To help less fortunate youth with special scholarship memberships.

OTHER INFORMATION

Failure to fund this program at this level would eliminate over one quarter of the specialized programs, and in addition the program fees would have to be increased by 20%.

EXHIBIT 7

						RA	NKING SI	HEET	Identification <u>YMCA</u> Review Level <u>Executive Officer</u>				
RANK	DECISIC	N	PAC	CKAC	ΞE		FY 78	Resources # People	79 Budg \$	et Request # People		ative %	
	1938011										2222	16	
1	Youth	1	1	of	3		45000	4	32000	3	32000	16	
2	Phys	1	1	of	3		40000	entar5 on or	26000	se 80.3 et	58000	29	
3	Aquat	1	1	of	3		55000	6	40000	4	98000	49	
4	Spec	1	1	of	3		30000	areas3 the	26000	3	124000	60	
5	Youth	2	2	of	3				14000	1	138000	69	
6	Aquat		2	of	3				10000	2	148000	74	
7	Phys	2	2						15000	2	163000	82	
8	Spec	2	0.000	of					8000	0	171000	86	
9	Youth			of					6000	0	177000	89	
10	Aquat			of					2000	0	179000	90	
11	Phys	3	720	of					9000	1	188000	94	
12	Spec	3		of					12000	$\bar{1}$	200000	100	
letrod	nced into	,	171	org		zaci	on Th	ese problem	ss. such	as anxiet	and		

TOTALS 170000 18

						ification <u>Sa</u> w Level <u>Corp</u>		
RANK	DECISION	PACKAGE	FY 78	Resources	79 Bud	get Request	Cumu	lative
			\$	# People	\$	# People	\$	%
1000	Day C.1	1 of 3	38000	4	27600	3	27600	14
2	Corp 1	1 of 3	100000	7	78000	5 1	05600	53
3	Thrif 1	1 of 3	40000	way 30 do	37000	3 1	42600	71
4	Corp 2	2 of 3			10000	2 1	52600	76
5	Day C.2	2 of 3			11000	he navile in 1	63600	82
6	Thrif 2	2 of 3			5000	0 1	68600	84
7	Corp 3	3 of 3			18000	2 1	86000	93
8	Day C 3	3 of 3			8000	1 1	94000	97
9	Thrif 3	3 of 3			6000	0 2	00000	100

TOTALS 178000 14

CHAPTER V

ANALYSIS OF PROBLEMS, BENEFITS, AND COSTS OF ZERO-BASE BUDGETING IMPLEMENTATION

Basic problems of the implementation of Zero-Base Budgeting can be categorized into four main areas: that of human behavior problems, work load data problems, problems of inadequate information, and problems that require special flexibility from the budgetary process.

The human behavior problem occurs anytime a new system is introduced into an organization. These problems, such as anxiety and gamesmanship, will occur expecially when the process forces decision making and requires detailed scrutiny of management's functions for all to see. Proper orientation to the procedures and expected benefits of the budgeting procedure would help to ease these problems to some extent. Zero-Base Budgeting will function in a meaningful sense only if it becomes a routine way to do things, it has support of all levels of the organization, and it benefits the participants. 32

The workload problem usually results because of one of two reasons. First, the problem results when the organization is very

³²Phyrr, Zero-Base Budgeting - A Practical Management Tool For Evaluation Expenses, p. 27.

large and second when the decision packages have been established very low in the organizational structure. All the decision packages should be analyzed by every consolidation ranking level, but the decision packages near the estimated funding level should be given more emphasis and examination. If a high priority package has intentially been placed low in the ranking in hopes that lower priority items would be funded, then the credibility of the program manager must be questioned.³³

Inadequate information has already been addressed as one of the main problems of non-profit organization in formulating meaningful cost/benefit data. However, if it is possible to obtain the data. then the benefits, costs, impacts, and recommendations for program changes must be based on actual data and not on merely hazy judgements if they are to result in improved program analysis. Hard objective data which can be quantified provides a better basis for judgement than does nebulous narrative explanation. The basic reason for not being able to obtain sufficient data should be accepted only when it it can be clearly proven that the program manager knows his program objectives and knows what he is seeking to accomplish. 34 Though

³³Suver, "Where does Zero-Base Budgeting Work?," p. 81.

³⁴Draper and Pitsvada, Zero-Base Budgeting For Public Programs, p. 127.

cost/benefit information should be used only as one of many tools in determining alternatives and ranking of similar programs; without this objective information Zero-Base Budgeting loses much of its desirable effect.

Zero-Base Budgeting's major contribution to the non-profit organization's budget process is the displaying for the decision makers the tradeoffs among existing programs. The services that are duplicated within the organization are also disclosed and can be evaluated and analyzed for contribution to the goals of the organization.

Zero-Base Budgeting results in increased organizational effectiveness by developing meaningful individual and organizational goals,
clarifying responsibilities, improving supervisor-subordinate collaboration, and improving the administrative feedback process.

Motivation is enhanced when subordinates as well as management
participate in setting objectives.35

Costs of implementing Zero-Base Budgeting are substantial.

The direct costs of implementation, man hours in formulating decision packages, and ranking these packages will take a great deal of time from the normal work load, especially the first year. So, the question must be asked, how much is good budgeting worth? Actual cost data to answer this question is not available at this time, but the realization that the cost will be substantial most be weighed against the estimated benefits.

³⁵ Phyrr, Zero-Base Budgeting: A Practical Management Tool For Evaluating Expenses, p. 180.

CHAPTER VI

COMPARISON OF ZERO-BASE BUDGETING PROCEDURES WITH THAT OF UNITED WAY OF GRAND FORKS' PRESENT BUDGETARY PROCEDURES

To compare the United Way of Grand Forks' budgetary procedures with that of Zero-Base Budgeting procedures, a detailed description and analysis of United Way's present budgetary procedures is required. All the information that is used in the comparison was obtained from actual participation on the United Way budget committee.

United Way of Grand Forks' budget system can best be described as traditional and incremental. The main objective of the United Way budget committee is to determine what amount of funding will be allocated to each Voluntary, Health, and Welfare Organization, that is requesting funds. To accomplish this objective the budget committee must examine each written Voluntary, Health, and Welfare Organization's budget submission and interview a representative from each organization.

The Voluntary, Health, and Welfare Organization's budget submissions are also traditional and incremental, including data from their entire organization. Very little reference is made to programs or their relation to their costs and benefits. Justification is required only for increments of the input/expenditure figures and

the outputs are not associated with program costs, thus making cost/benefit analysis nearly impossible. The only way that cost and benefits can be associated with a particular program is to query the representative from the particular organization.

After all budget submissions are examined and the representatives from the various organizations are interviewed, the budget committee allocates the estimated contribution revenues to the requesting organizations. The allocation procedure is generally based on the level that the agency was funded at the previous year. The individual rational for allocation amounts ranged from excellent cost/benefit analysis (using data from the personal interviews), to pure prejudicial opinion. For example, one member did not want any money to be allocated to any day care center because the member's child was unable to receive free day care service. In summary, with few exceptions, the allocation of United Way's expected contribution revenues is based, in the authors opinion, on an arbitrary, incremental, and irrational system. This is no fault of the budget committee, the chairman, or the United Way representative, but all members were handicapped by the lack of relevant program data presented by the Voluntary, Health, and Welfare Organizations. The most appropriate and relevant form for the budget submissions of the Voluntary, Health, and Welfare Organizations would be in program form (objectives, quantified accomplishments, and associated costs) and containing only costs that would be considered for funding by the United Way.

Zero-Base Budgeting could help the United Way's budgetary problems in many ways, but only if the Voluntary, Health, and Welfare Organization would submit their budget request in Zero-Base Budgeting format. Assuming that the Voluntary, Health, and Welfare Organization's budget submissions are in Zero-Base Budgeting format, here is a list of estimated benefits from incorporating the Zero-Base Budgeting procedure into United Way's present allocation procedures:

- 1. Increase relevant budgetary data (program output associated with input costs).
- 2. Increase flexibility in allocating different contribution revenue levels.
- 3. Increase objectivity in decision making (with more objective data in decision package format less allocation decisions would have to be made arbitrarily).
- 4. Increase ability to allocate funds in line with local community objectives. (Decision packages would be ranked in accordance with organization's objectives and in turn ranked in accordance with the United Way's objectives).
- 5. Ready made contingency plan for different funding levels. (After prioritization of decision packages, the stage is set to either fund more or less decision packages by their relative importance.
- 6. Allow the committee to examine only the programs that are being considered for funding.

The costs and disadvantages that could result would be similar to what has already been discussed. The most serious of which would be the increase amount of time required for training of all program managers of the Voluntary, Health, and Welfare Organizations and United Way Budget Committee members.

CHAPTER VII

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Zero-Base Budgeting is the budgeting product of the current time period, like other budgetary reforms have been a product of their time period:

As in the 1920's the cry "return to normalcy" - demanded the Budget Accounting Act of 1921, as the 1930's the descent of efficiency experts demanded performance budgeting, as Programming-Planning-Budgeting was tried for hopes and programs of the Great Society - so perhaps "accountability", "responsiveness" in government and "openness" in decision making demands ZBB.36

It has been shown that Zero-Base Budgeting has adopted specific aspects of many of the prior budgetary methods including economic's marginal analysis and management's management by objectives.

Voluntary, Health, and Welfare Organizations are well suited for Zero-Base Budgeting implementation. Generally, these organizations consist of discretionary costs, highly motivated personnel, and a small number of programs for decision units. The current budgetary methods used by these organizations are generally outdated and do not allow optimum resource allocation (statement based on the author's experiences on the United Way budget committee). The implementation of Zero-Base

³⁶Draper and Pitsvada, Zero-Base Budgeting For Public Programs, p. 159.

Budgeting would create benefits such as: discovery of duplication of services, motivation of program managers, and better communication throughout the organization.

Zero-Base Budgeting must be implemented properly or it will not be effective. The implementation process should include: flexibility in its application, thorough training of all program managers, a realistic time table for implementation of milestones, a feedback system from the bottom up, support from high ranking officials, and continuous guidance during the actual formulation of the decision packages.

The United Way allocation process could be improved in many ways by the use of Zero-Base Budgeting procedures. The most beneficial of which would be: a ready made contingency plan for different levels of contribution funding, funding would not be allocated arbitrarily but according to established objectives and goals, the funds requested by the agencies would be in the form of program costs and benefits, and lastly the total budget process would be based on the needs of the organizations and the funds allocated by United Way would be in accordance with the needs of the local community.

Whether the anticipated benefits outweigh the costs and disadvantages of implementing Zero-Base Budgeting cannot be determined until the organization uses the budgetary method through several budget cycles. Yet with the general public becoming more demanding on how their contributions are being utilized, the open information and rational

characteristic of

1 0 0

characteristics of Zero-Base Budgeting may be just what the Voluntary, Health, and Welfare Organizations and United Way of America need in the way of fiscal management.

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