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U.S. Department of Housing and Urban Development
Office of Policy Development and Research

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Project-Based Accounting Guidebook

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Project-Based Accounting Guidebook

Prepared for:

U.S. Department of Housing and Urban Development
Office of Policy Development and Research

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Contract HC-5834

October 1990

PREFACE

This Project-Based Accounting Guidebook is the final product of a research effort to develop a standard project-based accounting system for public housing agencies (PHAs). The Guidebook is a document for PHAs to use in converting from a consolidated to a project-based accounting system.

The following is a list of the Guidebook chapters. Each chapter builds on the information provided in the previous chapters, leading PHA staff through a process for designing, selecting and implementing a P-BA system which meets the particular management needs of a PHA.

Chapter One - Introduction to Project-Based Accounting

Chapter Two - Minimum Requirements for a Standard Project-Based Accounting System

Chapter Three - Enhancements to the P-BA System Which Supports Internal Management Needs

Chapter Four - The Process for Designing, Implementing and Maintaining a Project-Based Accounting System

Chapter Five - Determining the Cost to Convert to a P-BA System

Supplementing the information contained in the five chapters are four appendices. Appendix I provides Sample P-BA Report Formats. Appendix II offers a model Project-Based Solicitation Package for a PHA that wishes to obtain technical assistance in the development, installation, and maintenance of a P-BA system; and an RFP for procuring an automated P-BA system. Appendix III includes a Sample Checklist for Steps to Follow In Evaluating P-BA Systems, and Appendix IV provides four PHA Case Studies examining the process the PHA underwent to install P-BA.

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CHAPTER ONE

INTRODUCTION TO PROJECT-BASED ACCOUNTING

INTRODUCTION

Public Housing Agencies (PHAs) have evolved as some of the most complex real estate operations in the country. PHAs operate housing in a highly regulated environment which is constantly changing. Funding programs have become more numerous and complex. Over the past several decades, the housing stock has aged, and houses a more diverse and lower income population than in the past. PHAs are expected to provide both housing and social services to their residents, but limited public funding and high public expectations make it increasingly difficult to allocate limited resources to meet all needs of low-income residents and sustain the operations of PHAs.

In this context, strong and competent management is even more essential than in most private real estate operations. Cost-effective management requires managers to have sufficient information so that appropriate decisions can be made concerning allocation of limited resources. This dictates that efficient financial and management systems be implemented to support the difficult decisions regarding allocation of resources among a PHA's housing developments

Most PHAs maintain a consolidated budgeting and accounting system. The consolidated system, which combines the operating revenues and expenses of the entire public housing portfolio of a PHA, is the budgeting and reporting method which has been required by the U.S. Department of Housing and Urban Development (HUD) for Low Rent Public Housing since the 1950s. From the HUD perspective of managing the program, the consolidated ACC budgeting and reporting system has worked well and has simplified monitoring and reporting requirements. However, from a property management perspective, a consolidated system may not provide all the accounting and budgetary information that is needed for decision-making and accountability for project-level operations. HUD recognizes that the management information needs of PHAs extend beyond the basic reporting requirements, and that significant technological advances in computer technology make it both possible and

cost effective to collect project-level information in support of management. Collecting uniform data at the project level will serve to expand analysis of public housing issues. Information on uniform project level financial data is useful to HUD in its efforts to study and analyze public housing. Accordingly, HUD supports improvements to public housing management through implementation and use of Project-Based Accounting (P-BA) systems.

This guidebook is for PHAs that want to convert from a consolidated to a P-BA system. It addresses the minimum requirements for operating a project-based accounting system, enhancements and modifications which support management at the project level, and mechanisms needed to implement and operate a project-based system. It is not intended to replace or interpret any HUD regulations, handbooks, recordkeeping standards, or reporting requirements. This guidebook has benefited from the experiences of 15 PHAs who participated in the study of P-BA in the winter of 1989-90. It reflects a broad set of P-BA experiences and applications, including several PHAs which have not implemented P-BA.¹

WHAT IS PROJECT-BASED ACCOUNTING?

Project-based accounting is the term used to describe accounting systems which track income and expenses at the project level. A P-BA system permits a PHA to direct-charge items to a project, or to allocate items among projects when direct-charging is not possible or cost effective. By direct-charging and allocating expenses to projects, a PHA can track and report on operations at the project level, and use that information to make managerial decisions. As such, P-BA is more than just a system of accounting, it is also a management system that provides information on the operation of public housing at the project level.

To be considered a functional P-BA system, the system must incorporate at least the following components:

¹The 15 PHAs represented both medium size (500 - 1,250 conventional public housing units) and large size (over 1,250 units). Of the 15 PHAs selected for the study, 9 were P-BA sites. Of the six PHAs categorized as non-P-BA sites, four had the informational systems capacity to implement project-based accounting.

- it must be capable of tracking financial and operational information by project number;
- it must have the capacity to track all relevant income and expense account categories which can be controlled at the project level;
- it must incorporate an acceptable methodology for allocating income and expenses which cannot be direct-charged to the project level, namely those items that are non-project-specific or are related to central office operations; and
- it must report timely, accurate, and useful financial and operational information to management staff to enable them to make decisions about operations at the project level.²

Although the minimum requirements of a P-BA system are defined in Chapter Two, P-BA may take different forms depending on the characteristics and needs of individual PHAs. Factors such as organizational structure, size, housing stock, resident population, management and maintenance delivery systems, and financial condition influence the design of the P-BA system and the information it reports to PHA management. Further, it is possible for the PHA to decide to partially adopt a P-BA system, or to implement components that are useful to the organization and its operations. Such decisions, including the definition of P-BA as it applies to the specific agency, must be made by PHA management.

MANAGEMENT USES OF PROJECT-BASED ACCOUNTING

Project-Based Accounting systems are management systems as well as systems of accounting. The P-BA system functions in conjunction with PHA operations, and must support management decision-making. The existence of project level accounting alone is insufficient to justify P-BA. The P-BA system will fail, or at least

² To minimize confusion and be consistent with HUD terminology the term "development" will be used in this guidebook instead of project, although derivations such as "Project Manager" continue in common usage. Also HUD refers to occupants of public housing as residents rather than tenants, however, the term "tenant" has generally accepted uses in the accounting area, such as Tenant Accounts Receivable.

will be of marginal use, if it is viewed as a static, stand-alone system. The information must also be recognized and used in internal management decision-making.

Following is a depiction of the dynamic elements of a P-BA system: its inputs, outputs and management uses. The management uses are the feedback loop, the dynamic elements of the system whereby P-BA information is used to influence a variety of management systems. (See Exhibit 1-1)

If used to its full capability, P-BA can provide important management information on a variety of topics. These include: financial planning, budgeting, internal audit and control, project-level management decision-making, and performance monitoring.

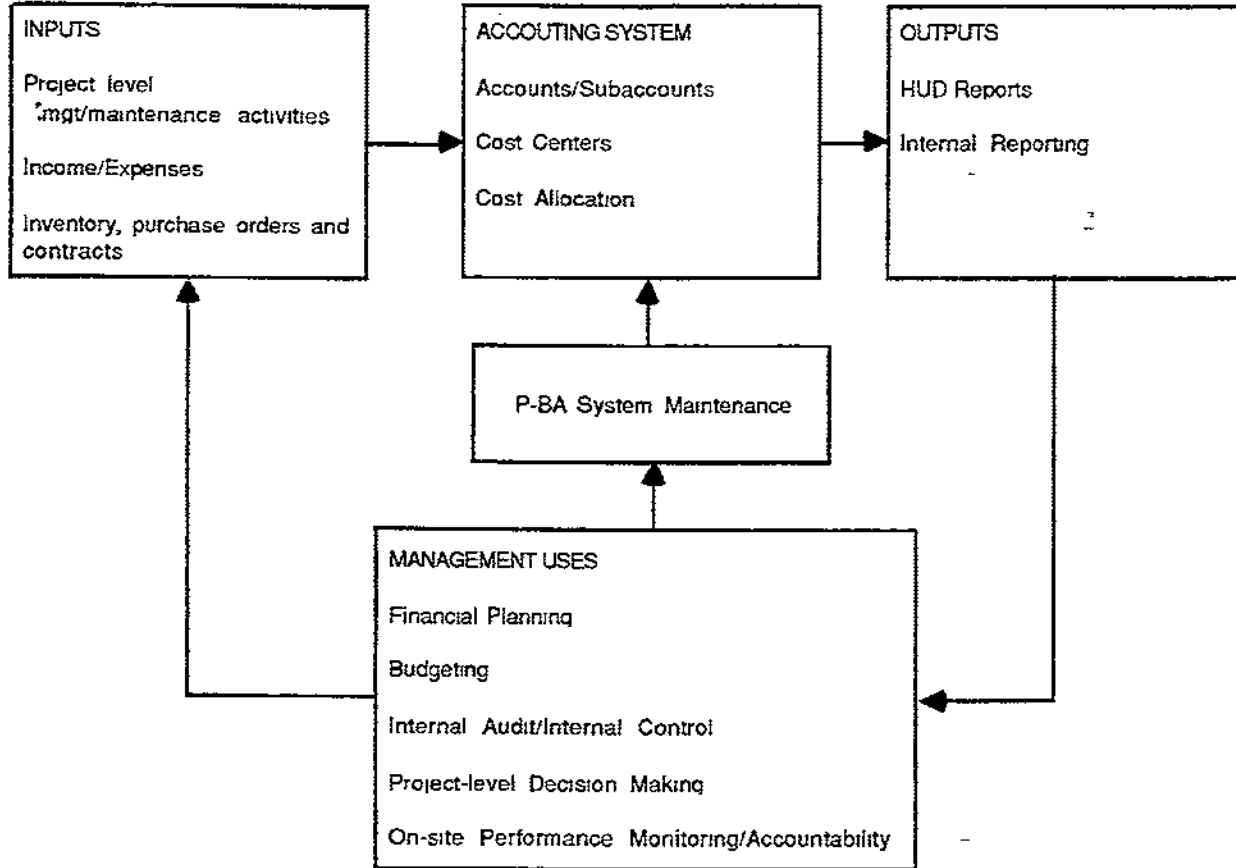
Financial Planning

P-BA information can support financial planning activities with respect to cash management, funding requirements at the project level, materials requirements, and the investment program. It can also link operating statistics of public housing developments with financial data, which supports the management of the Comprehensive Occupancy Plan, Tenant Accounts Receivable, and work orders.

P-BA operating characteristics can provide useful information on the management and maintenance needs of a particular project. P-BA information can be used to assess the financial impacts of operational and capital needs and improvements, which then can be reflected in a PHA's Comprehensive Plan for Modernization (CPM), Comprehensive Occupancy Plan (COP), and other plans which are designed to link capital and operating activities. P-BA systems can provide information needed to monitor the effectiveness of project-based management and capital improvements

EXHIBIT 1-1

PROJECT-BASED ACCOUNTING SYSTEM



Project-Based Budgeting

For many PHAs, project-based budgeting is an important component of project-based accounting.³ Budgeting at the project level helps a PHA to consider the needs of each development as financial resources are allocated. P-BA income and expense information guides PHA staff as they develop a management plan and budget which reflects each development's priorities, goals, and needs.

Project-based budgeting can be used to place financial accountability on field staff. By providing field staff with an approved operating plan and the dollars needed to implement that plan, management is able to compare actual income and expenses to budget, and monitor progress in meeting the development's goals and completing the activities included in the operating plan. By monitoring actual vs. budget for each project level, a PHA can also identify potential over-expenditure locations and pinpoint corrective measures to prevent a budget over-run.

Internal Audit and Internal Control

P-BA is a valuable method of promoting and supporting internal audit and internal control within a PHA's operation.⁴ The basic objectives are to safeguard the PHA's assets, ensure that performance standards are being met, and determine whether the PHA's policies and procedures are operating effectively. These objectives can only be achieved with timely and accurate information.

P-BA can provide much of the information needed for internal audit and control because a majority of the PHA's controllable financial activity is directed toward the operations at the project level. P-BA can provide information on the utilization and costs of personnel, materials, equipment and related items at a particular public housing development. This information can be used to detect abnormally high rates of

³In Project-Based Budgeting/Management and Supporting ADP Systems, HUD defines Project-Based Budgeting as "a method of budget preparation that involves developing a separate budget for each development on an individual basis. It requires identifying the income and expense items for each development in the PHA."

⁴Internal Audit is an independent appraisal function established within the Authority to ensure that the systems and procedures required by the PHA and HUD are functioning effectively. Internal control activities are those which are designed to safeguard and protect the Authority's assets.

expenditures for certain accounts and other financial factors which may be difficult to track without further examination.⁵

Project Level Management Decisions

P-BA information can provide a complete picture of PHA operations and identify areas for improvement at the project level. PHAs usually convert from consolidated accounting to P-BA because they want more detail about income and expenses at the development level, in order to improve operations, and ensure cost-efficiency. For example, in response to rent collection and maintenance delivery problems, a large New England PHA decentralized management and maintenance responsibilities and formulated development-specific income and expense data to support and evaluate the new system.

Many PHAs have found that rent collection percentages vary among developments. This raises the questions: Why do some Housing Managers have more success with collections than others? Do elderly residents have better rent payment than families? Which rent collection procedures work well, and which fail? P-BA can provide information which management can use to answer these questions and develop responses to improve rent collections.

P-BA expense information can be used by management to compare operating costs in similar and diverse types of developments. For example it can answer the following questions: Why do similar developments have different levels of effectiveness? Are row-house developments more or less costly to operate than scattered-site developments? Are maintenance costs higher at developments located in socially-troubled neighborhoods than in stable neighborhoods? P-BA information can be used to analyze the different operating requirements of each type of development, and to customize operating procedures to meet the needs of each development type.

⁵The level of detail and the basis for tracking financial activity will likely affect the usefulness of P-BA information under an internal audit program

On-site Performance Monitoring and Accountability

P-BA financial and operating statistics relate to staff performance at the project level, they can enhance a PHA's ability to hold staff accountable for the use and allocation of resources at the public housing development level. P-BA can also be used to decentralize responsibility for budgeting and expenditures within the organization.

WHAT TYPES OF PHAs WILL BENEFIT MOST FROM P-BA?

Public Housing Agencies across the nation are organized differently and face different problems. Some PHAs have highly centralized operations while others are more decentralized and assign both staff and authority to regional and project levels. PHAs range in size from a handful of units to tens of thousands of units. Projects can be structurally diverse, geographically dispersed, of different ages, and in varying physical condition. PHAs can be fiscally sound, or have fiscal problems.

The study which resulted in this guidebook included 9 PHAs with project level accounting systems, ranging in size from fewer than 750 federal public housing units in 10 developments to nearly 40,000 public housing units in approximately 130 developments. The research suggests that P-BA can be readily adapted to most PHAs:

- A PHA's size does not diminish the utility of P-BA. While large PHAs with regional and project management may find P-BA especially useful to their operations, medium PHAs have also applied P-BA with great success.
- A PHA's management operation does not have to be decentralized to make use of P-BA. Fully or partially centralized operations can also benefit from project-level information.
- A PHA does not have to automate its management and accounting information systems to make use of P-BA, although it is recommended.

- A PHA does not have to adopt elaborate and expensive systems that permit tracking of all income and expense information at the project level. It can choose to adopt certain modules or components of P-BA systems which best enhance its management operations, and design methodologies for allocation of items that are too expensive or otherwise unable to be tracked at the project level.
- A PHA does not have to be distressed to benefit from P-BA. While a distressed PHA may be in a position to derive more significant and immediate benefits from the project-level information generated by a P-BA system, even highly successful PHAs may derive operating benefits.
- A PHA does not have to significantly disrupt operations and reassign staff to implement P-BA. With the help of Technical Assistance Providers, vendors, and phased implementation plans, the conversion to P-BA can involve minimal disruptions.

Automation is a major consideration in a PHA's decision to implement a P-BA systems. If a PHA is already automated, it should examine the capacity of its current system to be converted to P-BA. If a PHA is automating its accounting system, it should consider implementing P-BA or at least design the capacity for P-BA into its automated system, so that it has the option of implementing P-BA in the future. Nevertheless, a PHA does not have to be computerized to operate a P-BA system; in fact, two of the PHAs included in the study introduced P-BA as manual systems.⁶ Automation is becoming more common in PHA operations as the technological advances have made it cost effective for most PHAs. Chapters Four and Five will discuss automation and P-BA.

PHAs with a *diverse housing stock* can use P-BA information to compare operating income and expenses among similar and different types of developments. This information can also be used to analyze PHA-wide patterns of rent collection and spending, determine the resource requirements of different development types, and

⁶All of the PHAs with P-BA in the study, as well as all the PHAs without P-BA, have varying degrees of automation. Those PHAs which first introduced manual P-BA systems later chose to automate.

establish cost efficient methods of managing and maintaining each type of development.

The *degree of decentralization* varies widely among PHAs. Any level of decentralization can be enhanced with income and expense information at the project level. However, P-BA can also provide information useful to PHAs with centralized operations. Without on-site staff, it may be more difficult to obtain income and expense information that reflects the day-to-day operations and needs of the individual housing development, but P-BA reporting can provide information to identify development weaknesses and compare needs among developments.

P-BA can be useful to PHAs which experience certain *financial problems*, such as recurring budget over-runs and poor rent collection. Project level income and expense information may help PHA management to identify specific areas of weakness. It can raise important management questions: At which developments is spending too high? At which developments is rent collection too low? While PHAs can detect variance between actual and budget expenditures on a consolidated basis, development-level information enables the Executive Director, the Fiscal Director, and the Directors of Management and Maintenance to identify the precise location(s) of problems

P-BA can also be of significant benefit to PHAs that are maintained in sound financial condition. When budget-to-actual variances occur during the course of the year, the cause of the variance may be identifiable through development-level income and expense information. By looking at the individual development, a PHA can identify those with the best and worst performance. The procedures and management strategies used in the best developments can be adapted by developments that do not perform as well.

Depending on the local conditions and needs, a PHA may develop an application of P-BA that is unique:

A PHA in the Southeast began project-based accounting with its first development and has maintained P-BA while it has grown to 10 developments. The PHA has a blend of centralized and decentralized operations, with Project Managers assigned to each development.

According to the Executive Director, "P-BA makes it easy to monitor expenses" compared to consolidated accounting.

A PHA with 2,500 units in 23 developments is organized into six geographic regions for delivering services to individual development sites. The Executive Director believes that income and expense information at the regional level, rather than at the development level, is appropriate to the PHA's operating needs.

A large New England PHA with a mixture of federal and state public housing developments, decided that its size and condition warranted conversion to decentralized management and analysis of development-level data. According to the PHA, it appears that decentralization, and project-based accounting and budgeting at the cost center level have contributed significantly to improvements in maintenance and rent collection.

CONTENTS OF THIS GUIDEBOOK

The remainder of this guidebook consists of four chapters. Each chapter builds on the information provided in previous chapters, leading PHA staff through a process for designing, selecting and implementing a P-BA system which meets the particular management needs of a PHA.

- Chapter Two contains a discussion of the *Minimum Requirements for a Standard Project-Based Accounting System*. These requirements include the accounts, cost allocation method, and reporting capabilities which are minimally needed for a Project-Based Accounting system.
- Chapter Three considers *Enhancements to a P-BA System Which Supports Internal Management Needs*. The chapter examines expanded use of cost centers, accounts and subaccounts, alternative allocation methods, and internal reporting. It also discusses project-based budgeting.

- Chapter Four offers advice regarding *The Process of Designing, Implementing and Maintaining a Project-Based Accounting System*. It provides a step-by-step approach to evaluating automated P-BA systems and determining the right system and capabilities for individual PHAs. Information on evaluating proposals, conducting negotiations, and monitoring installation is presented. The chapter also addresses ongoing system maintenance, training, organizational items, enhancements, and evaluations.
- Chapter Five offers a methodology for *Determining the Cost of Converting to a P-BA System*. Primary categories of costs are delineated, including hardware and software, consultants, training, maintenance costs and opportunity costs. The methodology for arriving at the costs is described.

Supplementing the information contained in these five chapters are four appendices. Appendix I provides *Sample P-BA Report Formats*. Appendix II offers a model *Project-Based Solicitation Package* for a PHA that wishes to obtain technical assistance in the development, installation, and maintenance of a P-BA system and assistance in automation services. Appendix III includes a *Sample Checklist for Steps to Follow In Evaluating P-BA Systems*, and Appendix IV provides four *PHA Case Studies* examining the processes the PHA underwent to install a P-BA system.

SUMMARY

Project-Based Accounting is the term used to define an accounting system which is capable of tracking income and expenses at the project level. P-BA is a source of important financial and operational information that can be used by management to help improve management and planning in PHAs with a wide variety of characteristics. Key management uses include financial planning, budgeting, internal audit and control, project level management, and performance monitoring and accountability.

The remaining chapters of this Guidebook will further define the requirements of P-BA, describe its benefits and uses in greater detail, and assist PHAs in selecting,

implementing, and maximizing the effects of P-BA systems. Chapter Two will begin by providing an overview of the minimum components of a P-BA system.

CHAPTER TWO

MINIMUM REQUIREMENTS FOR A STANDARD PROJECT-BASED ACCOUNTING SYSTEM

INTRODUCTION

The design of a P-BA system for a PHA should reflect the PHA's specific organizational structure, management culture, staff capacity, and organizational objectives. Consequently, each PHA's P-BA system may have unique features or capabilities. However, while each P-BA application may be customized, a functional P-BA system must meet certain minimum or threshold requirements. The purpose of these minimum requirements is to ensure that the system is capable of generating sufficient information at the project level both to make the system useful to the PHA and to meet HUD reporting requirements.

This chapter examines the minimum requirements for P-BA. Minimum requirements are those accounts, allocation methodologies, and reporting capabilities which are needed to report on the operation of any and all types of public housing. They are defined in part by HUD reporting requirements and the Chart of Accounts for income and expense items. They must relate to individual public housing development project numbers.

The minimum requirements discussed in this chapter *are not* intended to limit the possibilities of a P-BA system. It is important that the system be designed to accommodate all current needs and future growth of a PHA, its housing portfolio, and its management systems. Over a period of time, the system may demand a greater capacity to accommodate new subaccounts, cost centers, reporting formats, and other changes in the types and levels of information needed to support PHA operations. The next chapter contains a discussion of enhancements to P-BA systems which PHAs can consider to maximize the benefits they can derive through the implementation of P-BA systems.

The use of automated management information systems along with P-BA is desirable, but not mandatory. If a PHA cannot report on financial activity in a timely

and accurate manner, the development and installation of a P-BA system will be of limited value. Automated systems can improve the timeliness of reporting.

This chapter begins with a discussion of minimum reporting requirements, detailing consolidated reports that the P-BA system should be able to provide. This is followed by a definition of the minimum or threshold accounts for P-BA and the minimum accounting capabilities of a P-BA system. Finally, this chapter explores the methodology of allocating costs which cannot be reasonably assigned directly by the PHA.

MINIMUM REPORTING REQUIREMENTS

The fundamental characteristic of a P-BA system is the capacity to track expenses and income at the project level. The basic minimum requirement for a P-BA system is that it have the capability of reporting on income and expenses by public housing development *project number*.

In order for a P-BA system to be considered fully operational and effective, it must have the ability to report specified income and expense items to PHA staff who can use the P-BA information. A discussion of the minimum external reporting capabilities of P-BA systems is included here. Internal reporting and management uses of P-BA information are covered in greater detail in the next chapter.

A P-BA system should have the capacity to report on income and expenses as frequently as the needs of management dictate. A minimum P-BA system must be capable of providing reports on income and expenditures on a HUD Form 52599 (through Line 620) or facsimile at the end of the first six months of the fiscal year and again at the end of the fiscal year. More frequent reporting -- such as quarterly or monthly reporting -- is preferred by most PHAs.

In regard to P-BA accounting and reporting capacity there are four consolidated reports required by HUD which must be generated by a PHA accounting system.

- **HUD-52295 Report On Tenant Accounts Receivable** -- PHAs usually account for Tenant Accounts Receivable by development because they

are required to submit a HUD-52295 for each development or for each cluster of units combined for rent collection purposes. Typically, the rent roll is maintained by development because each unit included in the rent roll has a discrete address. As a result of these record-keeping practices, all PHA accounting systems (with or without P-BA) are capable of producing the data needed for the HUD-52295 submission.

Although consolidated figures can obscure the performance of individual developments, development-level information on dwelling rentals enables both a PHA and HUD to identify problems. For example, a PHA may have achieved an overall rent collection rate of 90 percent, but the overall rate is lowered by one development with a collection rate of only 75 percent. Consolidated reporting obscures the problem of lower rent collection at one development understating the adequate performance of other developments.

- **HUD-52598 Analysis of Nonroutine Expenditures** -- Since non-routine expenditures are typically development-specific (except when equipment is purchased for use PHA-wide), PHAs tend to maintain development-specific information on non-routine expenditures, even if they do not have P-BA. Development-level information should be consolidated for submission on the HUD-52598. Project level expenditure information helps both HUD and the PHA to identify the types and location of work being completed with operating funds.
- **HUD-52599 Statement of Operating Receipts and Expenditures** -- As noted previously, this HUD form serves as a model of budgeted vs. actual expenditure analysis. For internal PHA purposes, this can be replicated for each development. While PHAs may want more information, including greater detail and subaccount data, the HUD-52599 provides a useful format for comparing actual to budgeted expenditures. Information at the project level serves as easily accessible back-up to amounts included in the HUD consolidated reports. When HUD raises questions regarding information included in the HUD reports, the PHA can easily locate and analyze data if it is available at the project level. PHAs must therefore include, for all projects, a report in the modified HUD 52599 format (see Exhibit 2.1) through Line 620.

- **HUD-52722B Adjustment For Utility Consumption and Rates** -- PHAs can track actual utility consumption at the meter (or tank) level and on a development, site, building, or unit basis by analyzing utility invoices. Where invoices are for specific meters (or tanks), development-level utility cost and consumption data already exists.

Automated PHA accounting systems with P-BA capabilities can generate consolidated HUD reports automatically. In a PHA with a manual accounting system, the procedures for preparing HUD reports should already be in place.

MINIMUM REQUIREMENTS FOR ACCOUNTS TO BE INCLUDED IN A P-BA SYSTEM

The minimum set of accounts for a P-BA system is defined as the HUD Chart of Accounts included on the HUD Form 52599 Statement of Operating Receipts and Expenditures, covering all income and expense line numbers from line 060 through line 620 (see Exhibit 2.1 Modified Form 52599 - Minimum Accounts For a P-BA System). These accounts must be applied to each public housing development number.

In addition to deciding upon the frequency of reports, a PHA must consider how it can provide project managers the information they need to get a clear picture of expenses incurred. If the reports reflect only expense data on a cash basis, the information provided is considered to be incomplete and will not be viewed as useful by the staff. PHAs can experience difficulty with P-BA systems if the system produces reports which, for example, include expense data from prior periods or which do not include all expenses incurred. Accordingly, the system must be designed to ensure that reporting is timely, accurate and complete.

Automation can enhance the ability of a PHA to deliver timely reports. PHAs need not automate to use P-BA, but a PHA that intends to convert from a manual to an automated system should consider developing and implementing a P-BA system. Shifting to automated data processing for finance and accounting activities creates a significant advantage in adopting P-BA systems. There are numerous computer software and hardware providers who offer automated accounting systems which can accommodate chart of accounts numbering structures and are capable of supporting

very large and sophisticated P-BA systems. This will be explained further in Chapter Four.

An effective P-BA system is contingent upon the ability to track expenses at the public housing development level. Many PHAs without a P-BA system already account for some income and expenses at the public housing development level. A PHA should take steps to track items that can and should be direct charged. For those it cannot direct charge, the PHA should follow the allocation process for distributing central office and non-project specific expenses.

EXHIBIT 2-1

**MODIFIED HUD FORM 52599 -
MINIMUM ACCOUNTS FOR A P-BA SYSTEM**

STATEMENT OF OPERATING RECEIPTS AND EXPENDITURES

Name of Authority

Development
Number

Report Period

Dwelling
Units

Line #	Account #	Account Title	Budget		Actual	
			Pun	Amount	Pun	Amount
		Operating Receipts				
060	3110	Dwelling Rental				
070	3120	Excess Utilities				
080	3190	Non-dwelling Rental				
090		Total Rental Income (Lines 060-080)				
100	3610	Interest on General Fund Investments				

EXHIBIT 2-1 Continued

130	3690	Other income				
140		Total Operating Income (Lines 090-130)				
150	7110	Receipts from off-site utilities				
160	7530	Receipts from non-expendable equip.				
170		Total Operating Receipts Exclusive of HUD				
		Operating Expense/Administration				
180	4110	Administrative Salaries				
190	4130	Legal Expense				
200	4140	Staff Training				
210	4150	Travel				
220	4170	Accounting and auditing fees				
230	4190	Sundry				
240		Total Administration Expense (Lines 180-230)				
		Tenant Services				
250	4210	Salaries				
260	4220	Recreation, publications, and other services				
270	4230	Contract costs, training and other				
280		Total Tenant Services Expense (Lines 250-270)				
		Utilities				
290	4310	Water				
300	4320	Electricity				
310	4330	Gas				
320	4340	Fuel				
330	4350	Labor				
340	4390	Other Utilities Expense				
350		Total Utilities Expense (Lines 290-340)				
		Ordinary Maintenance and Operation				
360	4410	Labor				
370	4420	Materials				
380	4430	Contract Costs				

EXHIBIT 2-1 Continued

390		Total Ordinary Maintenance & Operation				
		(Lines 360-380)				
		Protective Service				
400	4460	Labor				
410	4470	Materials				
420	4480	Contract Costs				
430		Total Protective Services (Lines 400-420)				
		General Expense				
440	4510	Insurance				
450	4520	Payments in lieu of taxes				
460	4530	Terminal leave payments				
470	4540	Employee benefit contributions				
480	4570	Collection losses				
490	4580	Interest on administrative and sundry items				
500	4590	Other general expenses				
510		Total General Expense (440 - 500)				
520		Total Routine Expense (240,280,350,390,430,510)				
		Non-Routine Maintenance				
530	4610	Extraordinary Maintenance				
540	4620	Casualty Losses - noncapitalized net				
550		Total nonroutine maintenance (Lines 530-540)				
		Rent for Leased Dwellings				
570		TOTAL OPERATING EXPENSE (Lines 520 & 550)				
		Capital Expenditures				
580	7520	Replacement of non-expendable equipment				
590	7540	Property betterments and additions				
600	7560	Casualty Losses - net capitalized				
610		Total Capital Expenditures (Lines 580-600)				
620		Total Operating Expenditures (Lines 570 & 610)				

Treatment of Income and Expenses Under P-BA

A "primary objective" of any P-BA system is ***to track as many transactions as possible in such a manner that they can be direct charged or allocated to a public housing development.*** For purposes of determining which income or expenses should be direct charged or allocated to a project, a PHA may have to group transactions into three categories.

- 1. Direct project level income and expenses** -- These are income and expenses which can reasonably be directly assigned to a project. Examples of direct expenses are wage and salary costs of staff assigned to a specific project, office supplies, maintenance expenses, protective services, and other expenses which relate to specific projects. Examples of direct project level income include dwelling rental income, non-dwelling rental income, and excess utility charges. As a general rule, if the income or expenditure is directly attributable to the operation of a public housing development and can be tracked to the relevant project, then it should be charged as a direct project level income or expense.
- 2. Non-project-specific income and expenses** -- These items pertain to a wide variety of activities and operating services provided to *more than one public housing development*. PHAs may have staff organized for clusters of housing developments or certain central divisions within the organization which are organized to provide services on-site to all public housing developments. Examples include regional management offices, central maintenance departments, resident services divisions, and agency-wide security forces. Depending upon the capability of the PHA's accounting system and the nature of the services which generate the transactions, these costs may need to be distributed using a "pro-rata" allocation methodology. Income which is based or grouped in a centralized or clustered manner for record-keeping purposes will similarly need to be distributed to projects.
- 3. Central office income and expenses** -- These income and expense items relate to the general overhead of the organization, including the costs of services pertaining to accounting, tenant selection, the Executive Director, and other centralized administrative and supervisory personnel. Non-

personnel expenses include the costs of insurance, office supplies, central office rent, and non-housing development legal costs. Central office income can include non-dwelling office rent for space in a PHA owned central office space, investment income on PHA General Fund balances, and other non-project based income from vending or other operations or activities.

For purposes of allocating income and expenses, a PHA should allocate both non-project and central office items in the same manner using an identical proration methodology. The required allocation method is discussed later in this chapter.

In order to derive the most useful and accurate information from a P-BA system, a PHA should strive to maximize direct charged items and minimize those items which must be allocated. This can be done by improving procedures used to track these transactions at the project level. For example, a PHA may develop the ability to track disbursements of materials and supplies at the point of issuance to a public housing development, which will enable it to direct charge materials and supplies to a project. Another example is a work order system which tracks all maintenance labor hours by public housing development. Often, automating systems or implementing improved automated systems can give PHAs the capability to limit the amount of transactions (both income and expenses) assigned to the non-project specific category.

Tracking Operating Income

Most PHA income is generated at the project level and therefore must be tracked at the project level. However, for items such as investment income, it may not be practical or cost-effective to maintain a system which can directly allocate investment earnings, attributable to a specific public housing development, to the project level. A discussion of the preferred methodology for each of the major income accounts is presented below.

- **Dwelling Rental** (account 3110) -- This account consists of rental charges to residents. The rent roll for a public housing development should relate to actual addresses, and therefore this category of income should be credited directly to the project level.

- **Excess Utilities (account 3120)** -- This account covers charges to households for excess utilities consumption. Since income should be household-based, it should be directly credited to the project level.
- **Nondwelling Rental (account 3190)** -- This account covers charges for space that is not used for habitation by residents, such as social service space and community room rental charges. If this space is located in a public housing development, it can be tracked directly at the project level.
- **Interest on General Fund Investments (account 3610)** -- This account covers interest earnings on PHA funds in the General Fund Account. Therefore, it is more practical for this category of income to be distributed or prorated to projects.
- **Other Income (account 3690)** -- This account covers all income not properly included under the above accounts. The types of income included under this account can vary, but items typically included are vending machine earnings and income from the operation of laundry machines. Where such income is generated at specific public housing developments, it is possible to track and directly credit it to the project level. Other types of income may have to be allocated across projects.
- **Receipts from off-site utilities (account 7110)** -- This account covers any collections made by a PHA for the provision of off-site utilities. If this type of income account applies to a PHA, it is probably not directly related to a specific public housing development.
- **Receipts from nonexpendable equipment not replaced (account 7530)** -- This account covers collection of any funds paid to a PHA for nonexpendable equipment which is not replaced by the PHA. Where nonexpendable equipment items are directly attributable to a public housing development, they should be directly charged to the project level.

Treatment of Operating Expenses

A PHA must include all operating expense items covered by the HUD Chart of Accounts in its P-BA system. The minimum accounts a PHA must include under its

project-based accounting system are those covered from Line 180 through Line 620 listed on the HUD Form 52599.

- **Administrative Salaries** (account 4110) -- This account covers the administrative salaries of PHA personnel. The PHA should give special attention to direct charging the administrative salaries of personnel responsible for activities and assigned at the project level.
- **Administrative Expenses Other Than Salaries** (accounts 4130, 4140, 4150, 4170, and 4190) -- These accounts cover legal expenses, staff training, travel, accounting fees, auditing fees, and sundry. To the extent that any of these items are controllable and provide useful information at the project level, the PHA should consider taking steps to direct charge the items.
- **Tenant Services** (accounts 4210, 4220 and 4230) -- These accounts cover the salaries of tenant services personnel for recreation, publications, and other services, in addition to contract costs, training, and other related expenses. There is considerable variation among PHAs in tenant services delivered. To the extent that tenant services are provided and are offered or managed at the project level, the PHA should consider a process for direct charging the expenses to the project level.
- **Ordinary Maintenance and Operation** (accounts 4410, 4420 and 4430) -- These accounts cover labor costs of maintenance personnel, maintenance materials and supply expenses, and the contract costs associated with maintenance services provided by other organizations under contract with the PHA. Many PHAs have the ability to direct charge most components of these expenses to the project level. Many PHAs develop subaccounts in order to track these expenses in greater detail.
- **Protective Services** (accounts 4460, 4470 and 4480) -- These accounts cover labor, materials, and contract costs associated with providing security-related services. If the services are funded through the federal conventional operating program, the PHA must account for the expenses of its protective services program either by direct charge or allocation, depending on the services provided and how staff are assigned.

- **General Expenses** (accounts 4510, 4520, 4530, 4540, 4570, 4580, and 4590) -- These accounts cover insurance, payments in lieu of taxes (PILOT), terminal leave payments, employee benefit contributions, collection losses, interest on administrative and sundry notes, and other general expenses. Many of these expenses must be distributed or prorated to the project level. But not all of these costs have to be distributed. With proper planning, such costs can be direct-charged to the project level. For example, collection losses are an important measure of project level management performance and should be tracked at the project level.
- **Non-Routine Maintenance** (accounts 4610 and 4620) -- These accounts cover extraordinary maintenance and noncapitalized net casualty losses. Many PHAs assign responsibility for managing and controlling activities under these accounts to the project level. PHAs who do not assign specific responsibility for these accounts to the project level often discover they must track these accounts and monitor financial activity at this level. The PHA should therefore, take steps to direct charge these expenditures to the project level.
- **Capital Expenditures** (accounts 7520, 7540 and 7560) -- These accounts cover replacement of non-expendable equipment, property betterments and additions, and capitalized net casualty losses. These accounts are similar to non-routine maintenance listed above, and PHAs should take steps to have these expenditures charged directly to the project level.
- **Utilities** (accounts, 4310, 4320, 4330, 4340, 4350 and 4390) -- These accounts cover water, electricity, gas, fuel, labor, and other utility expenses such as sewer charges. PHAs differ in how they manage and report utility consumption and expenses as well as in the level and types of utilities provided. For the purpose of budgeting and tracking expenses, there is a degree of standardization required to produce the HUD Forms 52722-A and 52722-B. Generally, utility consumption and expenses are available at the project level, except in cases where projects share heating plants, for example. Therefore, PHAs should include a process for direct charging utility expenses to the project level.

One of the greatest challenges in developing a P-BA system is to identify the best method for tracking expenses and determining how to represent that data in a manner which gives senior PHA management the information it needs to evaluate programs and activities at the public housing development level. Each account should be reviewed and evaluated to determine how expenses can be reasonably charged in a direct manner to an account. In cases where it is deemed too costly or difficult to directly assign or charge expenses to a project level, the PHA should classify and distribute the expenses according to the methods discussed in the following section.

The use of the accounts described above and listed on HUD Form 52599 enables a PHA to give a detailed profile of both income and expenses at the project level. However, this list of accounts should not discourage a PHA from including other accounts or developing subaccounts. P-BA is a system designed to assist those responsible for supervising and monitoring public housing operations, and therefore it should include features which give PHA management the information needed to effectively deliver services to its residents.

COST ALLOCATION AND DISTRIBUTION OF INCOME AND EXPENSES

In designing a P-BA system, a PHA should take steps to direct charge as many income and expense items to the project level as are reasonable and justifiable, or to adapt its P-BA system to permit direct charging of items in the future as its capabilities and needs evolve. However, not all PHA public housing program costs can be direct charged to a project level. There are central office and non-project-specific income and expenses which often cannot be direct charged, including:

- operating costs of the central office;
- costs incurred that benefit more than one funding source;
- costs incurred that benefit more than one program; and
- costs for which the benefits of tracking to specific programs, funding sources, or housing developments are less than the effort required to track such costs sufficient to resolve or direct charge the income or expense item.

For the most part, costs that fall into the first three categories are easy to identify. However, those costs which fall into the fourth category can only be determined based upon a careful analysis of a PHA's accounting capabilities.

To satisfy the requirements for allocating non-project specific income and expenses in a minimum P-BA system, PHAs must use a single proration methodology based on the distribution of bedrooms within each project. Proration by bedroom count is a method which allocates costs based upon the ratio of the number of bedrooms per project to the total number of bedrooms for all projects of the PHA. When utilizing this method of proration, a PHA should multiply the unit months available for each public housing development by the total number of bedrooms in a public housing development. The distribution of non-project specific and central office income and expenses to each project should be allocated based upon the total for each project divided by the total for the PHA.

In comparison to proration by unit count, this method allocates a higher portion of costs to projects which consist of housing developments comprised of larger bedroom units, typically occupied by large families. Scattered site units also tend to have a large number of bedrooms per unit. Since operating costs are higher on a per unit basis for larger size family units, the distribution provided by the bedroom allocation method better reflects the relatively higher costs associated with the delivery of on-site operating services at public housing developments comprised of large families and scattered sites.

This minimum allocation method does not apply to cost centers a PHA may have established which are unrelated to public housing developments. As the next chapter explains, a PHA may pursue additional allocation methodologies which would benefit other internal review and reporting needs. Also, for internal management purposes, a PHA may want to develop cost allocation schemes which provide different methods of distribution for different types of central office and non-project-specific costs to projects. Yet, it is important that a PHA be consistent in the basis and method of allocation or proration.

SUMMARY

This chapter has examined the minimum requirements for a P-BA system, including the designation of project level, accounts, and reporting and accounting

capabilities of the system. For the minimal P-BA system to function properly, it must be structured to relate the information generated to the management and delivery of essential operating services at the public housing development.

Project-based accounting systems appear to be used most often by PHAs who have some form of decentralized management structure. However, implementation of decentralized management for public housing is not necessary in order to effectively utilize the minimum features of a P-BA system.

A PHA should maximize the income and expense items which it can direct charge to the project level. Those items which fall into the categories of non-project specific or central office must be distributed or prorated by bedroom count as described in this chapter.

While P-BA reporting for internal management can be quite broad, the minimum requirement for a system is that it must be capable of generating the consolidated reports required by HUD, as well as a modified Statement of Operating Receipts and Expenditures as defined in this chapter.

P-BA systems can greatly expand the capabilities of a PHA to collect and report information on performance at the public housing development level. Yet, there are direct and indirect costs associated with collecting and reporting more financial information than is reasonably required. If the P-BA data is not relevant to users with responsibilities at the project level, it will be difficult for the PHA to ensure that the features of the system are utilized effectively.

Chapter Three examines the capacity of a P-BA system to be expanded and enhanced beyond the minimum requirements and to meet the specific internal management needs of the PHA.

CHAPTER THREE

ENHANCEMENTS TO A P-BA SYSTEM WHICH SUPPORTS INTERNAL MANAGEMENT NEEDS

INTRODUCTION

Chapter Two presented the set of minimum requirements that a PHA must include in the development of a project-based accounting system. This chapter suggests a range of enhancements that can be added to a P-BA system which go beyond those contained in the minimum requirements.

To some extent, each PHA has unique operating requirements and objectives which will influence the design of its P-BA system. Minimum requirements comprise the basic threshold standard, but a PHA should strongly consider how the system can be designed to meet specific requirements.

In considering the development of a P-BA system it is important to note that cost centers are the units or levels at which information is reported. Cost centers can be project numbers, housing developments, or parts of housing developments, or some other combination of units that relates to how a PHA manages its operations. As a minimum requirement, the PHA must develop cost centers which enable it to report on income and expenses at the public housing project number level. Other methods of creating cost centers to enhance a P-BA system are discussed in this chapter.

This chapter is organized along the same four major P-BA system components as used in Chapter Two, but explores alternatives and expanded applications of these components to an enhanced P-BA system:

- **Cost centers** -- Beyond the cost centers established by public housing project number, there are hierarchical cost centers and cost centers relating to agency departments, programs, and functions that can enhance the ability of the PHA to monitor all aspects of its operations.

- **Accounts** -- Many PHAs choose to use expanded accounts and subaccounts to improve the information available from a P-BA system.
- **Cost allocation** -- In addition to cost allocation by number of bedrooms per project cost center, there are other allocation methods which may be considered.
- **Reporting** -- There are many potential uses of P-BA data within the PHA which extend beyond the basic HUD reporting requirements. Data can be used to improve monitoring of management performance and changes in the operating condition of public housing developments.

The desirability of including the enhancements discussed in this chapter relates to the type of housing managed, the organizational structure of the agency, the size and complexity of the programs administered, and the capabilities of the agency. If the PHA is implementing a new or updated automated data processing system along with P-BA, many of these enhancements can be incorporated (or designed for future implementation) without significant additional cost of design or cost of implementation.

It is imperative that the benefits of improved management and operation drive the design and development of a P-BA system at each PHA. Minimum threshold requirements should be the basic framework for a system but should not exclude those elements of any management system which are of value to the organization. The design of a P-BA system must reflect management's needs and be built upon the requirements of the PHA. Some of the enhancements discussed below may not be beneficial to all PHAs, but it is recommended that every PHA review each of the enhancements addressed in this chapter before deciding which enhancements will benefit its public housing operation.

DESIGN AND DEVELOPMENT OF COST CENTERS

What is a Cost Center? A cost center is a cluster of units, activities, staff, or programs which are grouped for purposes of financial monitoring and analysis. Cost centers can be delineated by administrative departments, divisions within an agency, office locations, individual public housing

developments, regions or clusters of public housing developments, or related organizational components or programs at the PHA.

Cost centers are a critical element of any P-BA system since they provide a basis for tracking data pertaining to income and expenses. The design of cost centers must clearly reflect the operation of a PHA. For the purpose of P-BA, the minimum set of cost centers must support the tracking of income and expenses at the public housing development level by project number. However, tracking costs solely at the public housing project number may not always relate to how a PHA manages its housing stock. Therefore, the PHA should consider grouping and supplementing the project cost centers based on the perspective of ensuring that P-BA is a useful and significant management system which assists the agency in operating its public housing.

A number of factors may influence the selection of cost centers:

- **Type of housing stock** -- a PHA may cluster units and buildings of similar type, such as low-rise, mid-rise, highrise, and scattered site;
- **Geographic area served** -- depending upon the size of the geographic area served, a PHA may cluster certain contiguous units which fall under different project numbers, or separate scattered units under the same project numbers into different cost centers;
- **Size of the PHA** -- it may not be feasible for large PHAs to have separate cost centers for each development; and
- **Management structure of the PHA** -- where decentralized site operations exist for both management and maintenance, the organizational structure may lend itself more easily to development-level cost centers. But cost centers can also be useful where centralized operations exist.

Cost centers can be used to track financial activity by a cluster of public housing developments, by department or administrative division, for the central office as a whole, or for any other program or category of financial activity. What follows is a discussion on the types and organization of cost centers which can be considered in order to enhance a P-BA system.

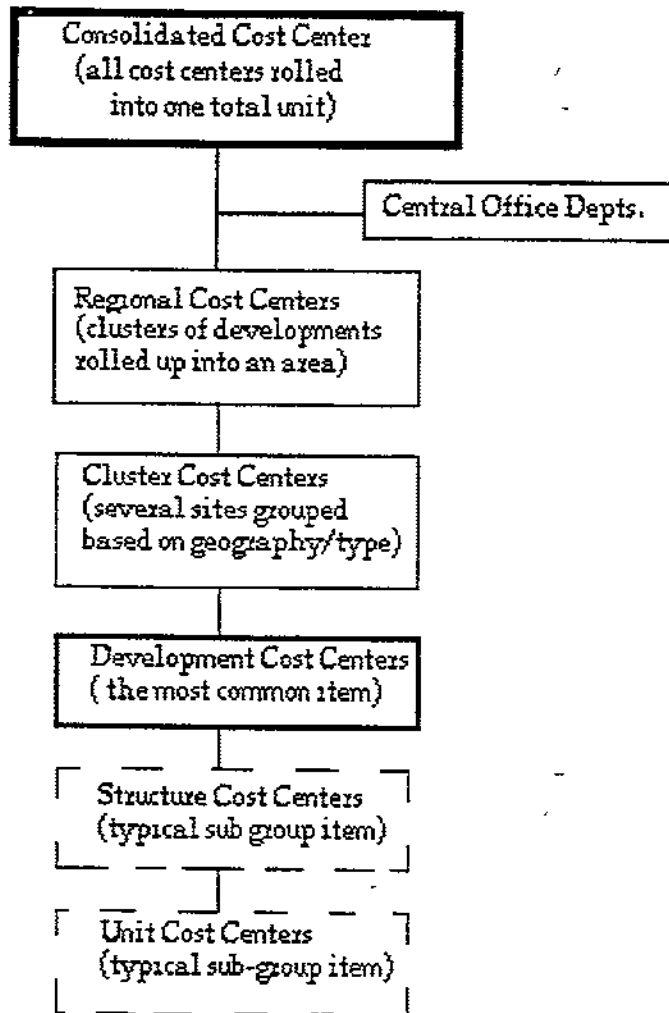
In cases where more than one housing development exists on the same site or is clustered in the same geographic area, the PHA may find it useful to establish cost centers combining units in more than one project or development, or to assign portions of one project or development to more than one cost center. Situations where a PHA might delineate cost centers that do not follow project numbers include the following:

- scattered site housing has been developed throughout the PHA service area under one project number next to larger, more conventional housing developed under another project number(s);
- one conventional (non-scattered site) project has been developed next to another conventional project(s);
- housing developments or even buildings provide housing of one specific occupancy type (i.e. disabled or elderly) and the PHA desires to group these types of units into separate cost centers; or
- the entire public housing portfolio can be divided into overall geographic areas or regions throughout the PHA's service area and the housing stock is grouped without regard to project numbers (or perhaps even occupancy type) into cost centers by area or region.

Some PHAs have found it useful to establish a *hierarchical structure* to cost centers. A PHA might choose to have cost centers comprised of two or more smaller cost centers for purposes of tracking certain types of expenses. For example, dwelling income and maintenance labor expenses may be tracked for a specific portion of a development (e.g., highrise buildings), but administrative, materials, equipment and other expenses may be tracked at a project cost center level that combines two or more smaller cost centers. Or, a PHA may group two or more project level cost centers into a cluster or regional cost center for purposes of reviewing performance at the regional office level. See the attached example of a Hierarchical Cost Center structure in Exhibit 3-1.

EXHIBIT 3-1

HIERARCHICAL COST CENTER STRUCTURE



Most PHAs will not have cost centers below the development level. Clusters and Regions may be common for some medium and large PHAs

Cost centers might also be designated for items or activities which are not project-specific. For example, a PHA may create cost centers for departments or similar organizational divisions within the agency, its Central Office, or certain program activities. This can help identify and isolate income and costs related to specific functions or administrative areas of the agency.

While a greater number of cost centers potentially provides a greater amount of management information, there are direct and indirect costs associated with creating and sustaining a P-BA system and these costs increase with the level of detail. Some PHAs have found that their P-BA systems provide information to a level of detail greater than what they need for management purposes; some have even terminated use of their P-BA system. The type of cost centers used can also impact a PHA's ability to undertake various methods of cost allocation. Therefore, it is critical that the design and scale of the P-BA system be proportionate to the information needs of the agency and its management personnel.

ENHANCEMENTS TO ACCOUNTS WHICH CAN BE CONTROLLED AT THE PROJECT-LEVEL

Chapter Two established a minimum level of line items and accounts for a functional P-BA system to include those accounts listed on the HUD Form 52599 through line number 620. PHAs will be able to meet minimum requirements if they are able to generate income and expense information regarding these accounts at the project cost center level through direct charges and allocations using the minimum bedroom method. However, management uses of project-level information can be greatly enhanced if the PHA considers extensive and careful use of these accounts. This section consists of a more careful examination of the major account categories and the benefits of enhancing the information through direct-charging (rather than allocation) and the use of subaccounts.

Most accounts which are used in a P-BA system will relate to controllable on-site financial activity. *A controllable account is one for which management level personnel responsible for the operation of public housing developments can have a meaningful effect on the income produced or the expenses incurred.* It is not necessary for all HUD line items or accounts to be incorporated or "direct-charged" in a P-BA system. Rather, it is important that the PHA select the accounts and subaccounts

which are necessary to relate project-level activity to the PHA's operating budget and the income and expense reports.

It should be noted that while quite useful for internal management purposes, subaccounts are not considered part of the minimum requirements of a P-BA system. As long as the subaccounts support, but do not replace or alter, the major accounts defined as part of the minimum P-BA requirements, a PHA can and should consider them as part of the development of its system.

PHAs with P-BA systems generally follow the HUD Chart of Accounts and report using the numbering system specified by HUD. However, the PHA may elect to create subaccounts which enable the agency to account for expenses (or income) to a higher degree of detail than permitted by the basic HUD Chart of Accounts structure. The HUD Chart of Accounts may be expanded either through the use of new line items or subaccounts. This enables an agency to isolate certain types of income and expenses in order to monitor and control them. In particular, subaccounts are considered most useful under P-BA when used to provide greater detail for administrative expenses other than salaries, maintenance materials and supplies, maintenance contract costs, and extraordinary maintenance. Subaccounts can help PHAs to isolate certain types of income or expenses in order to monitor and control them. For example, a breakout from the maintenance labor line item for labor related exclusively to vacancy turn-over may be of value to certain PHAs.

A P-BA system should include income as well as expenses, since many forms of operating receipts are generated at the project level (e.g. dwelling rental income). Non-dwelling rentals and other income (e.g., for laundry machines, vending machines, etc.) which are controllable and significant should also be included as direct income under a P-BA system.

Effective control over operating expenses is a major responsibility of a PHA and an important objective of P-BA. The majority of conventional public housing expenses relate to the direct operation of public housing developments. The assignment of responsibility and the degree of control exercised over various expenses can directly impact the structure and effectiveness of a P-BA system.

The accounts discussed below are defined in Chapter Two of the HUD Financial Management Handbook (7475.1 REV). The descriptions included herein

are not intended to be definitive, but rather to illustrate the income and cost components that can be directly charged to the project cost center.

Also, included here are some report formats a PHA can consider for its P-BA system. Appendix I contains sample report formats and illustrations of report formats currently in use by agencies that can be considered. Later in this chapter, more extensive use of P-BA information for internal reporting is discussed.

Operating Receipts

Income accounts which can be reported at the project cost center level are:

- Dwelling Rental (Account 3110) - In order to maximize rent collections, PHAs should review tenant accounts receivable on at least a monthly basis. Reports which indicate amount of rent roll actually collected are essential in determining where rent collection problems exist, and which staff and procedures are most effective in collecting rent.

A useful report on dwelling rental income collected would include:

- total rent roll for the month
 - amount of rent roll collected for the month
 - percent of rent roll collected for the month
 - percent of rent collected this month last year
 - amount of receivables collected
 - percent of receivables collected
-
- Non-dwelling Rentals (account 3190) - Since PHAs must include some types of non-dwelling rentals in their PFS calculation, the inclusion of the actual collection of non-dwelling rents is important. A useful report on non-dwelling rentals would consist of a spread sheet with the following three column headings:
 - Agency Name
 - Rental Under Contract
 - Rental Paid

Operating Expenditures

The expense accounts included in a PHA's P-BA reports may vary according to: (1) the ability to control line items at the development or project cost center level; and (2) the degree of decentralization in the PHA. The more expense account detail included in the P-BA report, the more complete will be the picture of development operations.

Preferably the format for P-BA expense reports should indicate the *Month* for which information is being reported and the *Percent Of The Fiscal Year That Has Passed* as of the end of the month. Exhibit 3-2 below is a sample P-BA report following this format.

EXHIBIT 3-2

**ANYTOWN PHA PROJECT-BASED ACCOUNTING SYSTEM
MONTHLY REPORT ON PROJECT EXPENSES:
PERCENT OF FISCAL YEAR ELAPSED: 17%
Project: Cedar Hills 003**

Account	Expended this month	Expended Y-T-D	Percent of budget expended Y-T-D	Total Budget	Balance of budget remaining Y-T-D
Administration	\$1,596	\$3,196	17%	\$19,176	\$15,980
Tenant Services	\$21	\$75	13%	\$600	\$525
Utilities	\$8,997	\$18,219	38%	\$48,350	\$30,131
Ordinary Maintenance	\$2,654	\$4,992	17%	\$30,000	\$25,008
Protective Services	\$332	\$476	13%	\$3,565	\$3,089
General Expenses	\$145	\$266	15%	\$1,810	\$1,544
Non Routine	\$250	\$250	11%	\$2,300	\$2,050
Total	\$13,895	\$27,474	26%	\$105,801	\$78,327

This format can be used for each of the individual expense accounts discussed below.

- **Administration Salaries & Other Expenses** (accounts 4110 - 4190) -- The administrative costs of an individual development include: on-site administrative staff; a share of area or regional staff, central office staff, or other centralized staff; on-site administrative expenses other than salaries; and a share of non-salary administrative expenses of regional and centralized staff, including legal expenses, staff training, travel, accounting fees, auditing fees and sundry items. PHAs may designate other subaccounts to provide more detail of expense items within expense categories.

Salaries of staff associated with the operation of public housing developments are an important and often controllable expense. The salaries of management personnel, clerical staff and other personnel either located on-site or who work directly on a housing development (but are not located at the development) are considered critical for direct-charge in a P-BA system. PHAs can also include allocations of indirect expenses or supervisory personnel who oversee those involved in the operation of a public housing development, but is not necessary for management purposes.

In order to have a complete picture of a development's administrative costs, a report with the following information would be useful for the Executive Director, the Fiscal Director, and other appropriate senior staff:

Administrative Salaries:

- Administrative Salaries
- Share of Area Administrative Salaries
- Share of Central Office Administrative Salaries

Other Administrative Expenses:

- Development-specific Non-salary Administrative Expenses
- Share of Area Non-Salary Administrative Expenses
- Share of Central Office Non-Salary Administrative Expenses

A report which shows only development-specific information may be more useful for the Housing Manager, who typically has no control over the Shares of Area and Central Office costs.

A consolidated line item for administrative expenses other than salaries might be sufficient for a Housing Manager. However, in an effort to control specific administrative costs, the Director of Finance might want more detailed cost information, broken down into the individual HUD accounts contained in the HUD Form 52599:

- 4130 Legal Expense
- 4140 Staff Training
- 4150 Travel
- 4170 Accounting and Auditing Fees
- 4190 Sundry

The Director of Finance might also want a more detailed accounting of the 4190 accounts, including the following sample of 4190 subaccounts:

- 4190000 Sundry Miscellaneous
- 4190010 Sundry Publications
- 4190020 Membership Dues and Fees
- 4190030 Sundry Telephone and Telegraph
- 4190040 Forms, Office Supplies
- 4190050 Postage

- **Tenant Services** (accounts 4210 - 4230) -- The Tenant Services costs of an individual development are comprised of Tenant Services costs specific to the development and a share of tenant services costs that are not specific to any development.

Tenant services expenses usually do not comprise a significant portion of the total operating budget or expenses of a PHA, but often they are controllable at the development level. A PHA can consider tracking accounts for Salaries, Recreation, Publication and other Services, Contract Costs, Training and Other Costs at the development level. How to include these expenses (through either direct charge or allocation) in a P-BA system depends upon the degree to which

the PHA feels it should monitor and control these expenses at the project cost center level.

A report with the following information would be useful to central office staff:

Tenant Services Salaries:

- Development-specific Tenant Services Salaries
- Share of Central Office Tenant Services Salaries

Recreation, Publications, and Other Services

- Development-Specific Expenses
- Share of Central Office Expenses

Contract Costs:

- Development-Specific Expenses
- Share of Central Office Expenses

A report which shows only development-specific costs may be more useful for the Housing Manager since he/she ordinarily cannot control central office costs.

- **Utilities** (accounts 4310 - 4390) -- Expenses for utilities can be tracked by development or project, sometimes even by building or unit if needed. Accounts for these expenses include Water, Electricity, Gas, Fuel, Labor and Other Utility expenses. Under the Performance Funding System, HUD provides funds to PHAs for some or all cost increases attributable to changes in utility prices, and shares savings resulting from a reduction in energy consumption from the base consumption level with the PHA.

Labor (account 4350) - Utilities Labor charged to a development reflects the wage cost of workers who spend time working on utilities at the development. Two subaccounts of Utilities Labor, Regular Labor and Overtime Labor, would facilitate evaluation of routine vs. emergency utilities work by identifying which utilities systems have problems and are in need of CIAP work.

Utilities (accounts 4310 - 4340) - This account is comprised of Water (account 4310), Electricity (account 4320), Gas (account 4330), and

Heating Fuel (account 4340). Frequent (i.e. monthly) expenditure information on each of the four utilities accounts would be useful in monitoring energy consumption to improve utilities management, catch problems such as leaks, and evaluate the results of energy-related capital improvements.

- **Ordinary Maintenance and Operations** (accounts 4410 - 4430) -- Accounts for ordinary maintenance and operation tend to be the accounts with the greatest impact on the operation of public housing developments. These accounts include *Labor, Materials, and Contract Costs*. Labor expenses associated with the delivery of maintenance services can be tracked by whatever method maintenance personnel are assigned -- by housing development, by geographic area, centrally, or by program. Materials and supplies expenses can also be incurred or tracked by the same manner as is labor described above.

Maintenance contract cost expenses cover costs of outside firms providing maintenance services. They can often be tracked by purchase order or by contract since they tend to provide information about where the services are being provided. Many PHAs without P-BA systems already have procedures in place to track some or all maintenance expenses at the project level. They may also have designated other subaccounts to cover a wider range of expense items than provided by this category under the HUD Chart of Accounts.

Maintenance Labor - Maintenance Labor charged to a development represents the wage cost of maintenance staff who spend time working at the development. In some PHAs, a subaccount breakdown by category of maintenance labor, such as Painters, Glaziers, Maintenance Mechanics, Plasterers, Laborers, etc. would be very useful. A separate breakdown of these categories for overtime would also help Maintenance and Area/Regional Directors, and Housing Managers and Maintenance Supervisors, to analyze specific development maintenance needs by providing information for future operations, CIAP, and vacant unit reduction planning.

Maintenance Materials and Supplies - Materials and supplies charged to a development represent the cost of items obtained through stock requisitions, or purchase requisitions for the specific development. A breakdown of

costs by category, such as Electrical, Plumbing, Plastering, etc. would be useful.

Contract Costs - Contract costs charged to a development represent the cost of contracted services provided specifically for the individual development. A breakdown by category, such as Electrical, Plumbing, etc. would help the Housing Manager and/or Maintenance Supervisor plan for the rest of the fiscal year and for the next fiscal year.

- **Protective Services** (accounts 4460 - 4480) -- Protective services accounts cover Labor, Materials, and Contract Costs expenses. The costs incurred by PHAs for protective services can vary. When such costs are incurred the PHA should track or allocate them at the project level. The PHA should give careful thought to which subaccounts (if any) would enhance these accounts in a P-BA system.

Protective Services Labor - Labor charged to a development represents the wage cost of employees who provide direct services to the development, as well as a share of central office Protective Services staff salaries. A report with the following information would be useful to central office staff, especially the Executive Director and the Director of Protective Services in evaluating the public safety needs of each development:

- Development-specific Protective Services Labor
- Share of Central Office Protective Services Labor

A report with information on development-specific labor may be more useful for the Housing Manager since he/she is typically knowledgeable about, and responsible for, services actually provided on-site.

Protective Services Materials and Contracts - Materials and Contracts charged to the development represent the cost of actual materials used or services delivered to the specific development.

- **General Expenses** (accounts 4510 - 4590) -- The general expense categories include the cost of insurance and of employee benefits, which are directly related to the amount of Administrative Salaries, Utilities Labor, Maintenance

Labor, and Protective Services Labor charged to the development. It is useful for central office staff to review development-level expenditures on these line items in order to get a complete picture of development operating costs. Information on these general expenses may not be useful to the Housing Manager, who cannot control insurance and employee benefit rates. However, the general expense accounts also include Collection Losses. These are related to rent collection and therefore may be controlled by the Housing Manager or other staff responsible for public housing development-based operations.

- **Non-Routine Expenditures** (accounts 4610, 7520, and 7540) -- Non-routine expenditures charged to a development include Extraordinary Maintenance, Replacement of Equipment, and Betterments and Additions. Extraordinary maintenance can often be done under contract with an outside vendor rather than with PHA staff. An attachment which lists expenditures by vendor would assist Housing Managers and other staff in keeping track of the following: non-routine items which have been completed, the actual cost of an individual item, what unfinished items remain, and what budget balances remain from completed items. This type of detailed analysis by specific work item is needed for the HUD-52598 Analysis of Non-routine Expenditures submitted to HUD at the close of the fiscal year.

COST ALLOCATION DECISIONS UNDER PROJECT-BASED ACCOUNTING

The goal of P-BA is to direct charge those income and expense accounts which relate most directly to the effective delivery of essential on-site operating services at the public housing development level. Not all PHA public housing program costs can be "direct charged" to a project cost center and therefore may have to be allocated using some form of a pro-rata methodology. Allocation methods are useful in cases where systems (i.e. data processing) or other resource limitations make a detailed direct-charge process less practical.

Project-based accounting cost allocation refers to the methods used to assign costs to specific project-level cost centers. Costs which are usually allocated can be put into the following four categories:

- costs pertaining to more than one program or funding source;
- central office costs;
- costs that are not project-specific; and
- whereby tracking costs exceed the benefit of direct charging.

For example, central office costs can be related to the operation of a central office facility or administrative departments which are not based on-site or do not deliver services to one site. Even if it is possible to assign certain cost information to a project level cost center, it may not be necessary or the systems required may cost more than the benefit of the assignment. This section covers issues and procedures that a PHA can consider in determining methods of allocating costs and, in some cases, income under a project-based accounting system. It covers allocation methods and activities a PHA can undertake in addition to, but not in place of, the minimum or threshold allocation requirements in Chapter Two. The purpose of this discussion of the allocation of costs is not to cover the compliance aspects of accounting, but rather to examine how a PHA can allocate income and expenses to maximize the usefulness of the financial information.⁷ P-BA systems are designed to help managers plan, control, and evaluate operations and to allocate or re-allocate resources among management units or cost centers. The allocation system, and the resulting reports, must provide the information managers need to make these decisions.

This discussion is limited to costs and methods that pertain exclusively to the financial activity which occurs within the federally-assisted Low Rent Public Housing Program. It does not examine issues of allocation between programs, such as the allocation of central office costs between Section 8 and Public Housing. HUD and others who regulate PHA activities must ensure that PHAs distribute income and expenses among funding sources and programs in a way that is consistent with specific program requirements and standard practices. However, allocations within a program, such as Public Housing, for purposes which are essentially internal to the agency are not necessarily regulated or supervised by HUD.

⁷ The discussion of allocation methods is based on the assumption that the reader has a working knowledge of HUD policies and procedures pertaining to the operation of the Low Rent Public Housing Program. I particular assumes that the reader is familiar with Handbook 7475.1 REV, The Financial Management Handbook and HUD 7510.1 REV-1, The Public and Indian Housing Accounting Handbook

Certain PHAs may find it useful for purposes of tracking financial activity related to specific program initiatives to use different (and other widely accepted) methods of allocating costs. For example, for modernization type work many PHAs do, and are recommended to use an allocation method based on full-time equivalent (FTE) employees, if the work is funded under the Comprehensive Improvement Assistance Program (CIAP). If the PHA is tracking non-routine expenses for internal purposes it may wish to use FTE allocation. Likewise, for purposes of conducting an internal examination of non-project specific expenses, a PHA may find it more useful not to distinguish between developments in any way and use an allocation method based on unit months available. At times, a PHA may find it useful or even a requirement of another organization which is providing grants or other forms of support for public housing to represent project-based expenses using a method other than that defined as a part of the minimum required for a P-BA system.

A PHA may conclude that it is not necessary to allocate all costs, other than those pertaining to the HUD Low Rent Public Housing Program, to the project cost center level. PHAs which establish a P-BA system exclusively for the operation of housing under the Federal Low Rent Public Housing Program have a high degree of flexibility in distributing expenses at the project cost center level.

A PHA should begin development of a cost allocation methodology by determining: (1) which accounts are controllable; and (2) what information on the direct expenses of a project level cost center are important to the agency's operations. A controllable income or expense account is one which project level management personnel can control or upon which they can have an effect. Most accounts used in a P-BA system will relate to controllable on-site financial activity.

A PHA should, to the greatest extent possible, try to develop and install a P-BA system which can track directly those costs and income which relate to activities which occur at the project cost center level. The fewer the categories and types of expenses which are not project-specific, the better the PHA's P-BA system will perform by providing information on management performance at public housing developments. Any methodology for allocating income and expenses should be based on the elements which comprise the project level cost center.

Alternative Methods of Cost Allocation

The threshold or minimum P-BA cost allocation method is the allocation by bedroom size. PHAs using Project-Based Accounting may elect to use more than one method or approach to allocate expenses internally, if the additional methods are *rational, justifiable, and supportable*. The PHA may determine that a truer indication of their allocated income and expenses is captured in an alternative cost allocation. However, allocation by bedroom size must always be calculated so all PHA's have a consistent measure of across the board allocations for comparison purposes. The basis for the allocation must be consistent with the need for distributing cost elements which are not or cannot be assigned directly under the P-BA system. In addition, the distribution of costs must be relevant to the cost center to which the expenses are being assigned. This is especially true for internal reporting and tracking of costs which are considered extraneous to an operation and need not be directly assigned or charged by a PHA to a housing development.

Several basic methods for allocating costs are described below. The list is not comprehensive but represents a range of allocation schemes in use by many PHAs.

1. **Unit Proration by Bedroom Count** - This method of proration is based upon the ratio of the number of bedrooms per project level cost center compared to the total number of bedrooms for all project level cost centers of the PHA. The purpose of this method of allocation is defined in the previous chapter, and it is considered the minimum requirement for cost allocation under P-BA.
2. **Unit Proration** - This method of allocating expenses relies upon the distribution of units within the public housing program. The most common method is the use of the *Unit Months Availability (UMA)* within each project level cost center. Each project is allocated a pro-rata share of income or expenses based upon the ratio of UMAs for that cost center to the total number of UMAs for the PHA. This is probably the most common type of cost allocation method used by PHAs.
3. **Proration based on Full Time Equivalent (FTEs) Employees** - This method of allocation is based upon the ratio of FTEs per project level cost center to the total FTEs for all project level cost centers. Many costs are

driven by personnel costs and activities. Thus, the use of FTEs as the basis for allocation is considered to be an effective method for some PHAs. Such is the case for expenses which appear to have a strong relationship to employee expenses such as employee benefit costs.

4. **Allocation Based on Time Spent** - This method allocates costs among cost centers based upon time spent by staff on each cost center. Some programs and activities seem to lend themselves more to this method, such as modernization programs. The HUD Office of Inspector General has cited this as one basis which could be better utilized by PHAs for allocating charges to the CIAP program. This method of allocation can be useful when a PHA has department or division-based cost centers. Non-project level cost center charges are more reasonably distributed based on the projection of time spent per program and by type of service (such as accounting, legal, and other centrally or regionally based functions).
5. **Allocation Based on Job or Activity** - This method of allocation is based upon the activities or actual distribution of work undertaken at the project cost center level. For example, PHAs can allocate inventory charges based on the work orders completed by maintenance personnel or distribute certain types of general expenses using this method. As PHAs have become more sophisticated in the ways they track time and activities at the project cost center level, their capacity to allocate based on actual activities and events has expanded.
6. **Allocation Based on the Distribution of Direct Project Level Expenses** - This method provides for allocation of costs among project cost centers. Allocation is based on the overall distribution of costs which are considered to be direct and controllable at the project cost center level. In P-BA these costs should be budgeted prior to the start of the fiscal year and tracked throughout the fiscal year. Then the distribution of these expenses can be used to create a pro-rata methodology or allocation for project level non-controllable or indirect expenses.

Each of these allocation methods gives the PHA an opportunity to accurately reflect activities at the cost center level. This can be done without the capacity to direct charge each and every item.

A PHA may consider using more than one allocation scheme. For example, the allocation of costs for a centralized maintenance administrative department to project level cost centers could be based on Full Time Equivalent (FTE) assignments for maintenance personnel per cost center. Per unit proration could be used for non-project-specific insurance expenses. Per bedroom proration could be substantiated for allocation of administrative staff supporting on-site housing management. For internal review purposes, PHA's could also choose not to allocate certain non-project-specific expenses and income (if such allocations will not enhance management's understanding and control of project level operations).

Allocation Procedures

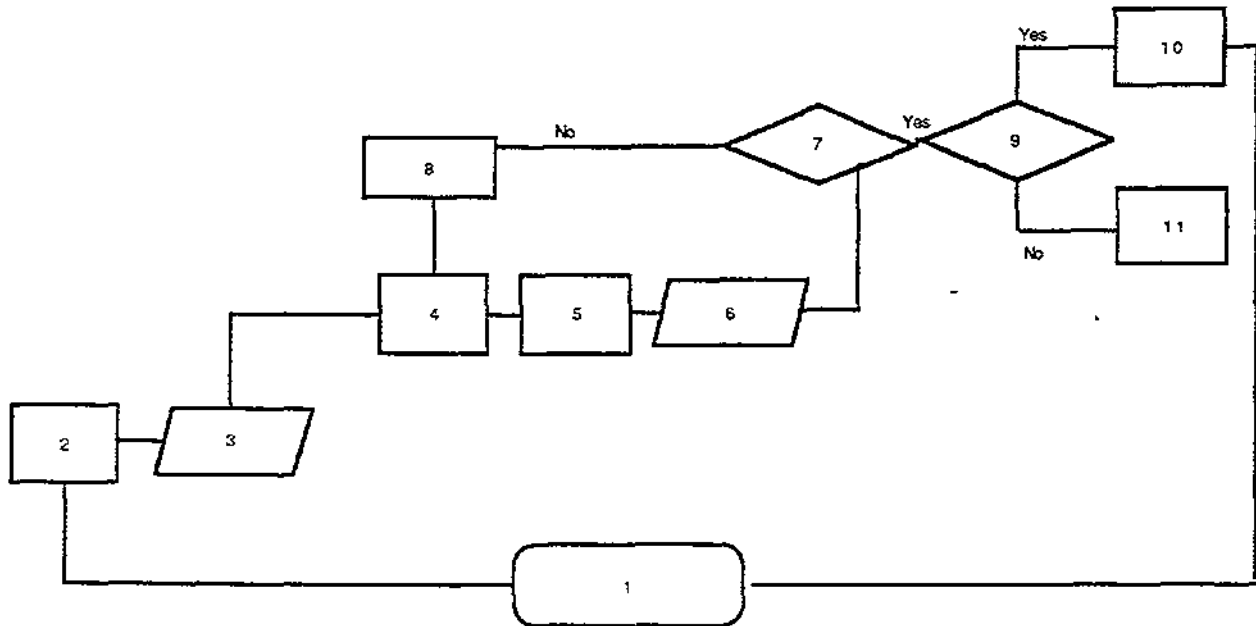
After a PHA has specified the line items which are to be allocated to each project, it must develop a coding system which passes the same test as a consolidated system. Costs recorded as project level charges must also be reconciled to the General Ledger. Audit trails must be followed to ensure that all costs incurred are allocated to project level cost centers or to the administrative cost centers. The system should not duplicate charges to more than one project cost center or administrative cost center. Below is a discussion of how source information can be used.

Estimates may be used to allocate cost. For example, when certain supplies are used on more than one project, estimates may be used to allocate these costs through an Inventory Account. Differences resulting from inventory adjustments should not be significant and can be allocated as a proration charge, or left as an administrative cost center.

Generally, allocation is easier if costs are generated through the invoice recording (voucher/accounts payable) system. The purchase requisition is often the basis of the allocation decision when the invoice is received. Recognition of the cost at time of invoice, through use of purchase requisitions, is especially important if requisitions are combined to take advantage of volume discounts. If the cost is identified in the accounting system when the liability is recorded, the allocation of the cost elements to the project level cost center can be done when the party requesting the services or supplies still recalls the requisition or use. If the cost is identified at a later time, recollection of the requisition or use may not be clear and the allocation decision is considerably more difficult.

EXHIBIT 3-3

FLOW CHART OF TYPICAL ALLOCATION PROCESS



1. YTD budget status report prepared by accounting each month which includes charges based on P.O.

2. Each month Project level and Central Office Cost Centers review YTD expenditures against planned expenditures to determine funds available for requisitions of needed materials or services

3. Project level and Central Office Cost Centers prepare and send requisitions to purchasing.

4. Purchasing receives and consolidates requisitions into purchase orders.

5. Review and approval by Director of Finance

6. Copy to Accounting (Accounts Payable)

7. Can accounting make allocations based on P O information (Y or N)?

8. (If N), Accounting contacts procurement for breakdown of requisitions.

9. (If Y), Can item be directly allocated to a cost center (Y or N).

10. (If Y), Accounts Payable allocates against the requisitioners budget at the time the invoice is received.

11. (If N), Accounts Payable allocates either across the central departments or across a development (using an allocation method like unit proration).

Payroll distribution systems via time sheets or other methods of generating the hours for payroll payment provide a place to ensure proper allocation of this cost. Maintenance staff can be pooled and allocated via the work order system. Differences in the pool are treated the same as adjustments to the inventory.

When adjustments need to be made in allocation decisions, general Journal entries should be used to make the correction entries. Standard Journal entries should be used to recognize cost through the allocation or distribution system. In all cases, it is important that the appropriate systems and procedures are in place before undertaking the allocation of income and expenses.

ENHANCED REPORTING CAPABILITIES OF A P-BA SYSTEM

A P-BA system can generate reports that meet HUD reporting requirements, and can also generate internal reports designed to meet the specific internal management needs of the PHA. ***P-BA reports turn accounting information into management tools.*** Reports provide income and expense data that can be used to:

- identify expenditure or rent collection problems at specific developments;
- evaluate staff performance by enabling development-by-development comparisons;
- analyze the budgetary impacts of capital improvements;
- determine the special operating needs of individual developments or specific types or clusters of developments; and
- analyze pilot programs or corrective measures, by comparing the results at "test site" developments with results at developments where the programs are not taking place.

The appropriate level of detail and the inclusion or exclusion of particular income and expense accounts in P-BA reports will depend on the size, organization, and operating capabilities of the individual PHA.

In small and medium-size PHAs, where the Executive Director and other Senior staff are familiar with the administrative details and regulatory requirements as well as the day-to-day operations of each development, less detailed project cost center level information is required. A large PHA, whose central staff has less direct knowledge of all levels of activity, may require more information.

The organizational structure of a PHA, such as centralized vs. decentralized management and maintenance, will affect the content and format of P-BA reports. In PHAs with centralized management, greater detail in P-BA reporting may be needed to provide a clear operating picture of each development or project cost center. In decentralized PHAs, the on-site staff, who are intimately acquainted with day-to-day operations, may require less detail. The level chosen by the PHA for management and maintenance responsibilities will greatly impact the content of useful P-BA reports.

The methods of storing, sorting, summarizing, and reporting the data under P-BA are as critical as the decisions regarding accounts, cost centers, and reporting levels. ***Automation greatly increases the capability of the PHA to track information and to allocate costs.*** PHAs with automated database systems may have the capacity to store and report information in several ways. Automation adds a third dimension to storage and reporting. When the system can store and access individual transactions as well as compiled account information, it is possible to recompile the data in formats that are limited only by the extension of the chart of account structure and the modifications (if any) made by the PHA. Other fields in the transaction recording can also be accessed. Examples of fields are: date; unit requesting within the reporting unit; worker performing or approving the transaction, and so on.

A fully functional P-BA system has the capacity to generate reports tailored to the specific interests and needs of different users within a PHA:

- The Executive Director is interested in, and responsible for, each development and for overall PHA operations. A report covering the total cost of operating a PHA would include on-site as well as central and area costs attributable to the individual development. For instance, the P-BA report would include total Administrative Salaries (account 4110); on-site as well as central office and area or regional administrative staff.

- The Housing Manager may require only development-specific information. On-site staff do not require a report as inclusive as that of the Executive Director and other senior executives. Instead, they need to see income and expenses for which they are responsible, such as costs of staff who actually work on-site or are under the Housing Manager's supervision.
- The Director of Management or Area/Regional supervisors may need reports containing information on the cost of staff time spent on each development. This helps them to analyze which developments require special attention and to plan operations for the current fiscal year.
- The Director of Maintenance or a Maintenance Supervisor may want reports which only include information related to Maintenance Labor (account 4410), Maintenance Materials and Supplies (account 4420) and Maintenance Contracts (account 4430). If each of these accounts is broken into subaccounts, the P-BA report can provide useful detail on costs in categories, such as masonry or pest control.

Reports which include information on more than one development can help Senior Staff to identify problem areas among similar and different types of developments. They can also provide information for evaluating staff and program performance. Figure 3-4 is a sample format of expenses for a project cost center consisting of all elderly developments in the PHA. Such a report would enable the Executive Director to analyze differences among elderly developments, to compare staff performance at each development, and to evaluate the effects of management or capital improvements made at elderly developments.

EXHIBIT 3-4

**ANYTOWN PHA PROJECT-BASED ACCOUNTING SYSTEM
MONTHLY REPORT ON PROJECT EXPENSES
PROJECT: ELDERLY - PER UNIT EXPENSE**

Account	Baywood 007	Burns 011	Fuller 012	Average per Unit
Administration	\$6.21	\$7.35	\$6.84	\$6.80
Tenant Services	\$0.20	\$0.00	\$0.19	\$0.13
Utilities	\$8.45	\$6.99	\$7.38	\$7.61
Ordinary Maintenance	\$3.36	\$3.78	\$2.96	\$3.37
Protective Services	\$1.12	\$0.00	\$0.45	\$0.52
General Expenses	\$4.68	\$4.97	\$4.12	\$4.59
Non-Routine	\$0.00	\$1.30	\$0.75	\$0.68
Total	\$24.02	\$24.39	\$22.69	\$23.70

Figure 3-5 is a sample format showing average per unit costs at different types of family developments, such as hi-rises, townhouses, etc. This report would enable the Executive Director to identify which types of developments require the greatest non-utilities and utilities resources, and facilitate the development of specific operating programs to meet the needs of different types of developments.

EXHIBIT 3-5

**ANYTOWN PHA PROJECT-BASED ACCOUNTING SYSTEM
MONTHLY REPORT ON PROJECT EXPENSES
PROJECT: FAMILY - PER UNIT EXPENSE**

Account	Family Hi-Rise Average	Family Mid-Rise Average	Family Townhouse Average	Family Average
Administration	\$8.42	\$7.98	\$6.65	\$7.68
Tenant Services	\$0.67	\$1.13	\$0.12	\$0.64
Utilities	\$7.31	\$8.56	\$9.13	\$8.33
Ordinary Maintenance	\$5.64	\$4.89	\$4.21	\$4.91
Protective Services	\$1.03	\$2.21	\$0.00	\$10.80
General Expenses	\$5.12	\$4.79	\$4.99	\$4.97
Non-Routine	\$0.37	\$0.87	\$0.73	\$0.66
Total	\$28.56	\$30.43	\$25.83	\$28.27

PHAs may want to consider establishing an on-going internal process through which staff can request P-BA reports. These reports would help staff members to do their jobs better. Such a process would maximize the effectiveness of P-BA information, and enable P-BA reporting to evolve to meet the changing needs in the PHA.

In PHAs without such a procedure, development management staff may not know how to request or suggest changes in report format, content, or detail. For example, an Area Director in a large PHA often moves maintenance workers around within his Area in order to meet changing needs. To help the Area Director keep track of where staff are deployed, a monthly report would be useful. Such a report would include: maintenance labor charged to each development, broken down by labor

category (painter, carpenter, maintenance mechanic, etc.), a column for total dollars of regular time charged, and a column reporting "full-time-equivalent" (FTE) - to show the number of each type of maintenance worker charged to each development. A procedure is needed by which the Area Director can request this type of report. The sample report format in Figure 3-6 includes FTE maintenance labor information.

EXHIBIT 3-6

**ANYTOWN PHA PROJECT-BASED ACCOUNTING SYSTEM
MONTHLY REPORT ON MAINTENANCE LABOR COSTS**

Account	Expended this month	Hours worked this month	Full-Time equivalent
Regular Time			
Painter	\$144	12	0.07
Plumber	\$378	27	0.16
Laborer	\$444	74	0.43
Maintenance Mechanic	\$369	204	1.18
Electrician	\$84	6	0.03
Groundskeeper	\$405	81	0.47
Total	\$1,824	241	1.39
Overtime			
Painter	\$0	0	0.00
Plumber	\$196	14	0.08
Laborer	\$0	0	0.00
Maintenance Mechanic	\$0	0	0.00
Electrician	\$238	17	0.10
Groundskeeper	\$0	0	0.00
Total	\$434	31	0.18

Use of P-BA Reports as Management Tools

Effective use of P-BA reports depends on accurate information and staff who are trained to use that information. The system must have the capability of responding to changing needs and requests for additional or modified information.

The first use of P-BA generated information is *verification and reconciliation*. This should be done by someone who can reasonably ascertain that information is inaccurate or incomplete. Senior staff in larger PHAs may have to rely on subordinate personnel with first hand knowledge of the P-BA data to review the information for accuracy. In smaller PHAs, this function is usually performed by senior staff.

To ensure the integrity of this review and use function, there should be a program for training staff who use the reports. They should fully understand how to examine and determine the significance of the data presented. Staff should also be trained and capable of understanding the criteria for determining whether the additional supplementary information or changes in the existing reporting formats are needed to better utilize the information.

A PHA should have the capacity to fully update and modify reports to meet changes in its management information needs. Staff must be given the opportunity to request changes in reports and supporting information to evaluate data presented in standardized reports.

P-BA reports and data can be used in evaluating the causes and effects of certain changes in the operation of public housing at the project cost center level. P-BA systems can generate information on project vacancy rates, housing unit inspections and conditions, work order performance, and other non-financial operating statistics as well as financial information. The combined use of financial data and operating statistics can assist the PHA in detecting problems in public housing development-based operations and in strengthening its processes for ensuring accountability for key aspects of its management at the project cost center level.

By providing a complete picture of financial and operating status at the project cost center or development level, P-BA reports become important management tools.

They facilitate informed decision-making and planning at all levels of PHA operations. Following is a discussion of how P-BA reports serve as management tools.

- **P-BA rent collection reports** - project cost center information on rent collections can be used to:

Identify developments with poor rent collection, so that collection efforts can focus on developments with problems.

Identify developments with good rent collection so that procedures used at these developments can be replicated at developments that have rent collection problems.

Analyze the effectiveness of current rent collection priorities. For example, One Northeastern PHA reported that it had been focusing most of its attention on rent collection problems at family developments, but a P-BA analysis of rent collections by development showed that collections at elderly developments were more significant.

Compare rent collection at Development A during the current fiscal year with rent collection at Development A in previous years, to identify improvements or increased problems.

Measure the effectiveness of new rent collection procedures being tested at Development B, but not at Development C.

- **P-BA expense reports** - Expense information on a project cost center level can be used to:

Compare maintenance costs for all PHA developments in order to identify which types of developments have high or low operating costs. Do family developments have higher operating costs than elderly developments? Do hi-rise developments have higher operating costs than row-house developments? How do the operating costs of scattered-site developments compare with developments that are not scattered-site? Does the PHA need to develop different maintenance delivery systems to meet the needs of different types of developments?

Compare maintenance costs for similar type developments. For example, compare costs in all mid-rise family developments in order to analyze why their operating costs vary. Are operating costs higher in a mid-rise with economically and socially troubled families, and if so, why? Are operating costs higher in blighted neighborhoods, and if so, why? Does the PHA need to develop programs (such as vandalism protection or resident education) to address problems that contribute to high maintenance costs?

Compare maintenance costs in Development A during the current fiscal year vs. costs in previous years to determine if changes in management staff or maintenance delivery procedures are cost-effective.

Analyze maintenance costs in each individual development to identify capital improvement needs. For example, why are heating costs in Development A so much higher than in Development B? Does Development A need heating system repairs? Such information is useful in planning for extraordinary maintenance in the upcoming operating budget and for CIAP planning.

Educate residents and staff about the budgetary effects of vandalism, littering, wasting water, leaving doors and windows open in winter months, etc.

These examples suggest how reporting can be used to benefit the operation of public housing. The effective use of P-BA greatly depends on the quality and "usability" of P-BA reports. Reporting is the method by which financial data can be linked with operating statistics to provide for improved decision-making and planning at the development and region, and PHA-wide. P-BA reports that are clear, concise, and easy to read, and that provide information that is specifically useful to the person receiving the report, will maximize the benefits of P-BA.

PROJECT-BASED BUDGETING

Project level cost center budgeting is a component of project-based accounting, and serves as an additional management tool. Not all PHAs which

operate project-based accounting systems have project level cost center budgeting. However, those PHAs which do create budgets at the project cost center level can enhance the effectiveness of financial information at that level.

The budgeting process is a planning process. A PHA must develop an operating plan for each development for the coming fiscal year. The plan reflects the priorities and operating goals for the specific development for rent collection, tenant services, utilities, maintenance, security, etc. Project-based budgeting requires the PHA to anticipate and plan for operating needs for the upcoming fiscal year. The development budget translates the operating plan into dollars.

Throughout the country, PHAs differ in the level of involvement of development staff in the preparation of development-level budgets. In some PHAs, cost center budgets are prepared by the Budget or Finance Director, with little input from development staff. In others, the Housing Manager is given primary responsibility for preparing the public housing development budget, (seeking input from development administrative and maintenance staff) with review and approval by supervisory staff. Preparation of the public housing development budget in some PHAs includes both central office and development staff participation.

Some PHAs believe that the most effective development budgets are those prepared by housing development staff. On-site staff are most familiar with the development. They know the residents and their rent payment patterns, as well as the condition of each building, and each unit. They are familiar with the particulars of systems and structures throughout the development. Working on site daily, they know what the development needs.

PHAs which have project cost center budgeting can maximize the use of P-BA. By comparing actual to budgeted income and expenses at the housing development level, PHA management and development staff can determine if the development operating plan and budget goals are being met. If half of the fiscal year has elapsed but only 25 percent of the maintenance materials and supplies budget has been spent, this may indicate that maintenance work is not proceeding as planned in the budget. However, if 75 percent of the materials and supplies budget has been spent when only half the fiscal year has passed, the development may be headed for a budget over-run and activity levels need to be adjusted.

When a Housing Manager has a specific budget with which to operate, the Manager can be held responsible and accountable for managing the resources of the development. Accountability is most effective when the budget is prepared by the Housing Manager or similar individual responsible for on-site operations. Housing Managers who are responsible for preparing development budgets and are accountable for managing those budgets, believe that they have a great deal of control and autonomy. When their budget is approved for the fiscal year, they can undertake all of the work included in the operating plan represented by the project cost center budget.

SUMMARY

P-BA is a management tool which should be used to provide improved information on financial activity affecting the operation of the public housing program. The system should be designed in a way that assists the PHA in its efforts to improve the delivery of on-site operating services to public housing. Any enhancements made to a P-BA system must reflect the specific operating requirements of the housing agency.

In considering the enhancements to be made to P-BA, the agency should consider how the enhancements will compliment existing systems and procedures for meeting the agency's key organizational objectives. P-BA can assist a PHA in improving performance monitoring, assessing the financial and operating condition of public housing developments, increasing planning capacity through the use of improved information and in budgeting. Other objectives can also be met with the help of a fully functioning P-BA system. Therefore, it is the objectives and needs of the organization which should be the basis for the design of an enhanced P-BA system.

An important consideration for implementing or enhancing P-BA is automated data processing. Certain systems now available to PHAs provide the capability of developing enhanced P-BA systems. These systems can offer a variety of internal reports, allow for the creation of many types of cost centers, and provide options for using different methods of cost allocation among housing developments. The use of automated data processing systems is not a prerequisite for implementing P-BA. But often it provides a PHA with many options for designing a P-BA system. This can be

accomplished without incurring substantial data processing costs over and above those already to be incurred in implementing the data processing system which has been selected or purchased by the PHA. Data processing is intended to increase the capacity of the organization. P-BA, in addition to automation, may provide a PHA with an opportunity to take greater advantage of the increased capacity. This aspect of P-BA is explored even further in the following chapters.

Careful attention to the management information needs of the various users of P-BA information and the actual presentation of the information can result in a more effective system. In Appendix I examples of customized reports produced by other PHAs through P-BA are presented for purposes of illustration. Automation offers important opportunities for PHAs in creating and producing reports which provide detailed information on public housing development operations. The information requirements of management must be a major consideration in the development of a P-BA system.

It is important that a PHA consider its P-BA system as a **dynamic** and not a **static** system. The PHA should take steps to ensure that its P-BA system can keep pace with the changes at the PHA and that it is constantly relevant to the information needs of PHA management.

CHAPTER FOUR

THE PROCESS FOR DESIGNING, IMPLEMENTING AND MAINTAINING A PROJECT-BASED ACCOUNTING SYSTEM

INTRODUCTION

This chapter provides an overview of the process a PHA might follow in designing and implementing a project-based accounting system.

This discussion assumes that the PHA is adopting an automated system, or is adapting its current automated system to project-based accounting. A PHA can implement a P-BA system manually, or use personal computer (PC) systems for various accounting and information components. The size of the agency is an important factor in determining if the PHA can handle P-BA manually. The larger the PHA, the better it is served by an automated system. Nonetheless, the issues and steps discussed herein, with the exception of selection of an automation vendor, also apply to a PHA which chooses to adopt a P-BA system without automating. For those PHAs with manual systems, the user group planning process is even more critical because of the time involved in compiling and recompiling manual reports.

Not every PHA will have to undertake full redesign and development of its accounting system. A PHA may determine by doing a needs assessment that adapting its current system or adding a few accounting components to it will create a functional P-BA system that meets its needs. Not all of the steps described in this chapter and the following chapter will be necessary for all PHAs. But it is still recommended that user group(s) conduct a full review of the adequacy of its current system's reporting capabilities and the use of its information.

Throughout the planning and implementation process, the essential message to the PHA is the importance of involving users in designing the P-BA system. P-BA is intended to provide information which can be used by management to make decisions and monitor performance at the project cost center level. It is essential that the staff who are to use the report have input into its creation. They must also be able to

request additional or slightly different information. Failure to involve the users will decrease their commitment to, and use of the system. It will also diminish the potential value of P-BA to the agency.

SETTING GOALS

Before proceeding with design of a P-BA system, the agency should determine its objectives for the system. These objectives should relate to the managerial or operational objectives of the agency. They should be completed before any of the system components are designed. These goals should be the basis for evaluating the design of the system.

While the goals and objectives of each PHA will be unique, the general goals of converting to a project-based accounting system are:

- *To provide detailed financial information regarding the financial activity that can be controlled on site, such as administrative and maintenance expenses;*
- *To provide information on program and financial activities that, while not controlled at the site, may have an impact on controllable costs, including such non-site expenditures as district maintenance, authority-wide security, and in-house legal costs for evictions;*
- *To provide information on financial activities that may be used to affect operations. For example, tracking vacancy reduction costs and maintenance staff costs to determine how changes in the resources allocated to these items might impact operating results;*
- *To provide information which links operating costs to the costs of capital improvements. For example, identifying non-routine maintenance or improvements that will correct project conditions that distort the level trend of maintenance.*

In essence, P-BA provides information that can be used to quantify agency goals. It relates budget, financial performance, and operating statistics in a manner

which enables the PHA to evaluate its performance against agency goals. Further, it enables this performance evaluation to be conducted at the cost center level.

While the objectives will probably vary from agency to agency, any P-BA system should be designed to include the capacity to track and report on the following:

- Progress towards goals
- Actual Expenses and Obligations compared to projected or budgeted
- Fund reporting requirements, such as may be delineated by the funding agencies.

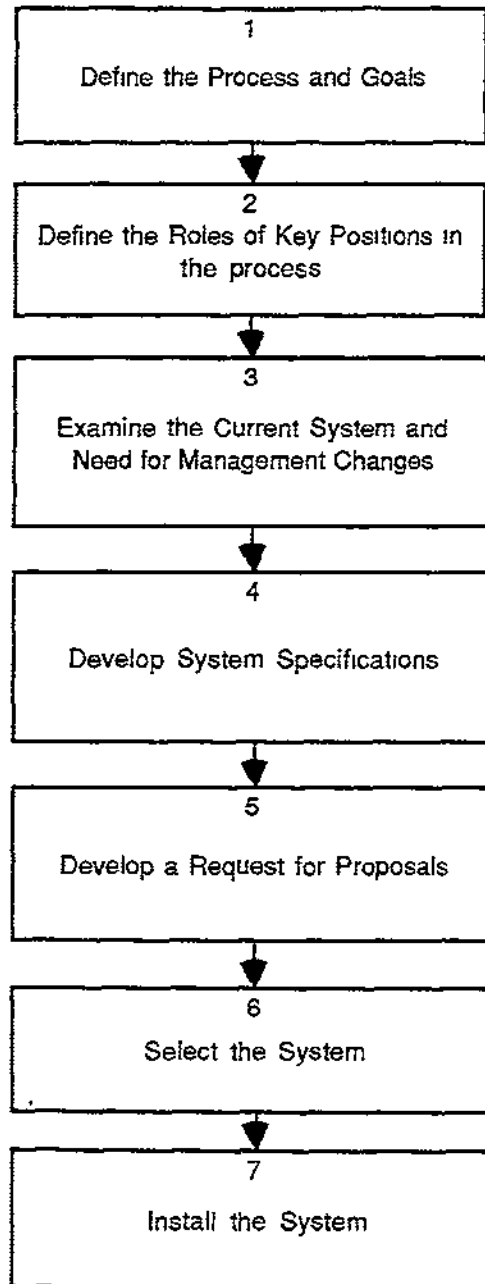
In addition to meeting the above goals, automated systems should be able to compile information for various analytical purposes such as:

- Comparison of costs by various demographic and physical characteristics, such as type of building, category of occupancy, geographical location, density etc.
- Performance trends of key elements of buildings down to the most elementary level
- Comparative costs (historical and by staff/contractors) for work items
- Productivity characteristics by staff, units etc.

Following is a flowchart (Exhibit 4-1) of the key general activities which occur in the design and implementation of a P-BA system.

EXHIBIT 4-1

**CRITICAL PATH FOR DESIGNING AND
IMPLEMENTING A P-BA SYSTEM**



Step 1: Define the Process and Goals

Once a PHA has determined that it wants to establish a project-based accounting system, it should establish the process to be used in specifying the system. This first step consists of determining *who will be involved* and *what steps will be taken*. These decisions will be made by the senior executives of the PHA.

Designing The Process

The process of designing and installing a P-BA system is potentially complicated and lengthy. To manage the process requires an understanding of all the activities and actors and their interrelationships. Laying out the full process helps to identify the critical path of activities and provides management with a tool for monitoring the process.

This chapter divides these many activities into four key phases:

- *Set up the Process* -- This phase includes the tasks of:
 - defining the scope;
 - time frame and;
 - actors.

The time required to complete this phase should be minimal: no more than a couple of months to make decisions on goals and participants.

- *Assessment and Specifications* -- This phase involves:
 - the assessment of agency needs; and
 - the determination of specifications for the new or modified P-BA system.

If a consultant is selected to assist the agency, allow approximately two to three months for the needs assessment and draft specifications, two months for internal review, and two months for HUD review and approval of the specifications (if funds are being used that require HUD approval).

- *Procurement* -- This phase entails:
 - advertising the Request For Proposals;
 - selecting the successful offerer; and
 - negotiating a contract.

Assume a period of six to eight months to complete this phase -- two months allotted to advertising and response; one to two months for review of proposals and visiting installation sites; two months for HUD review and approval; and up to two months for negotiation of the contract.

- *Installation* -- Installation encompasses:
 - the delivery and testing of the hardware and software;
 - conversion of any manual or old system data;
 - training; and
 - parallel processing.

Delivery of hardware may take three months; installation and testing can take from several months up to two years depending upon the phasing of installation to minimize disruption of operations; and parallel processing can usually be concluded within six months.

The time frames described for these phases assume a full-scope conversion and automation of accounting systems. Where the PHA is already automated, and wishes only to adapt certain components for P-BA, the time frames are substantially reduced. In addition to the scope of the conversion and size of the PHA, the most significant variables which impact time are:

- *Phasing of installation, testing and training* -- Where a full-scale conversion is occurring and the PHA wants to minimize disruption to ongoing operations, the modules may be installed in phases over as much as two years;
- *In-house or consultant system design* -- The assessment and design may be accomplished more quickly with a consultant, who can conduct the assessment and design specifications without diverting PHA staff or disrupting PHA operations;

- *In-house or vendor data conversion* -- The system vendor can assign staff to conversion of current data, and may be able to accomplish conversion more quickly than PHA staff who have other administrative responsibilities - (particularly if the vendor payment schedule is tied to completion of the conversion); and
- *HUD approval* -- HUD approval of the specifications and contractor selection is required where CIAP or other HUD-regulated funds are utilized.

The process adopted by a particular PHA may vary depending upon the actors involved, the capabilities of the organization, the type of system selected, and the method of implementation. However, the process should generally reflect these phases and activities.

Step 2: Define the Roles of Key Parties in the Process

The executive staff of the PHA makes the decision to initiate the planning and implementation of a P-BA system and designates the staff who will be involved in the process. In addition, the executive staff is involved in setting the goals for the process. While executive staff generally does not assume a day-to-day involvement in the design of the system, it makes major decisions. These decisions are based upon the findings and recommendations of the user group, information systems staff, and technical assistance providers.

User Groups. P-BA systems are established to link financial and operating statistics. This is done in a way which allows staff, at the project cost center level, to monitor operating performance and control costs. The system requires involvement of staff who operate at the cost center level and are in a position to control costs and evaluate performance.

The success of the system relies heavily upon the enthusiasm for, and commitment to, its procedures and use. Success depends upon entering accurate data into the system, timely and accurate processing of the data, and usable reporting. It will also depend on staff training and the degree to which people perceive the system as directly benefiting them in the performance of their job.

An effective method for planning the design and implementation of a P-BA system is the method or technique of **user groups**. This approach is frequently used in automating or re-designing management information systems. Its purpose is to make certain that all specifications for the system are detailed and reporting requirements meet the needs of the users in the agency. Project-based accounting as a system which supports the management of the agency, can be designed to mirror the operational information needs of the agency.

User groups are important forums for defining what information should be provided by the P-BA system. The user group can assemble information on how things actually work or why they don't currently, such as why work orders are not completed fully and accurately. It can provide a means for people to give input on which reports or parts of reports are useful. It can help to formulate reports which improve productivity. And, it can monitor system implementation to ensure that goals are being met and that the system is, in fact, helping people to do their jobs.

User groups usually include the end-users or managers of the information collected and reported through P-BA. Depending on the size of the agency, the groups can vary in size. They range from just a few individuals in one group, to a set of working groups for each function of the agency, coordinated by a core group. While each PHA varies in its organizational structure and staffing patterns, the user group should probably include key personnel representing the following positions:

- information systems management and computers (MIS)
- director of accounting (or representative)
- director of property management (or representative)
- representative of regional level management staff (if applicable)
- representative(s) of property level management staff
- director of maintenance (or representative)
- director of contracts and/or procurement (or representative)
- director or internal audit and control (or representative, if applicable)

The groups can be directed through the coordinated efforts of the managers of the Accounting and MIS areas. These two functional areas bear the largest burden in organizing and presenting the reporting information. If multiple groups are convened, accounting and MIS staff should be part of each group.

The key functions of the user group are to:

- Conduct a review of existing accounting and information systems reporting from the perspective of the users;
- Provide user review of system specifications as they are developed by the accounting/MIS staff and/or Technical Assistance Provider;
- Design and oversee training programs for staff who will provide information into the system and use the information generated by the system;
- Participate in appropriate testing of any new system components;
- Review all system documentation to determine whether it is of sufficient detail and clarity to be used by staff; and
- Provide a forum for PHA staff to have input into the process at any stage.

Staff assigned to the user group(s) should have their current job responsibilities examined, and in some cases shifted, to ensure that they will have time to fully participate. The user group(s) can be expected to meet at least monthly during the planning stages, and at some points every other week. Allow one-half day for each meeting to permit time for preparation and review of information in advance of the meetings.

Technical Assistance Providers. A PHA should assess the capabilities of its staff to determine whether it can design the specifications for the system in-house or whether to involve a Technical Assistance Provider. As noted above, it is logical for staff associated with the information systems and accounting units to participate in the user groups. Depending upon the capacities of these staff, the work may be conducted by the current staff or by newly hired staff added to design and oversee implementation.

While many PHAs can conduct their own needs assessments and specify system objectives using PHA staff, there is a creative value in having a Technical Assistance Provider be part of the process:

- The Technical Assistance Provider can provide expertise and technical information regarding P-BA and automation that current PHA staff may not possess.
- The Technical Assistance Provider provides a perspective that is external to the agency. He/she raises options and suggests improvements which agency staff may not recognize on their own. The Technical Assistance Provider may have experience with other PHAs and how they implement P-BA. He/she may also have knowledge about the strengths and weaknesses of automation vendors and financial programs.
- The Technical Assistance Provider can take on certain time-intensive tasks to minimize disruptions of the ongoing operations of the PHA. If PHA staff were to undertake such tasks, normal operations of the PHA might be interrupted.
- The Technical Assistance Provider can be an objective listener during user group discussions and the concerns underlying staff involvement and responses during the process.

If a Technical Assistance Provider will be involved in the process, the PHA should develop and issue a Request For Proposal (RFP) defining the process, the scope of services, the reporting relationships, and other contractual requirements. For guidance in developing the RFP, Appendix II contains a sample scope of services. The PHA should review this comprehensive scope, reducing or amending the scope to reflect the specific needs of the agency.

The PHA may also choose to define a role for the Certified Public Accountant firm which provides accounting and audit services to the agency. Above all, a P-BA system must be auditable and comply with the requirements of the Single Audit Act and HUD regulations. The agency's CPA can review the planned system to determine whether or not it complies.

In cases where the PHA plans to maintain a manual P-BA system or will not adopt a new computer system, an automation contractor probably will not become involved. Thus, the scope of the accounting changes may be handled by the PHA, in consultation with its CPA firm.

Step 3: Examine the Current System and Needs for Management Changes

The next step is to determine the scope of changes that the PHA must make to adopt a P-BA system. The scope of the changes is determined by the adequacy and adaptability of current accounting and management information systems, and the needs of management level staff for additional or more useful information.

Accordingly, a needs assessment should be conducted, the scope of which should include:

- interviews with management level staff at central, district/regional, and project levels to determine their *needs for information* and the adequacy of the current systems in providing the information;
- assessment of the PHA's *current accounting capabilities* to determine what information can and cannot be reported at the project cost center level;
- analysis of the PHA's *reporting capabilities and management systems* to determine the levels at which P-BA information should be reported to be useful for operations; and
- evaluation of the *capabilities of the PHA to implement a P-BA system*, including what external staff and financial resources, if any will be needed to design and implement the system.

Project-based accounting activities can be implemented in part or in whole without implementing project-based maintenance or management. There are many agencies who have central and regional organizational structures for the delivery of services and still use project-based budgeting and accounting as a tool for improving agency performance.

A PHA may want to incorporate some of the features of a P-BA system without abandoning its consolidated accounting system. Its investment in, and comfort with, the current financial accounting system may be too great to abandon it. The agency may prefer to experiment with pieces of a P-BA system which are most immediately useful to operations; or it may believe that partial implementation of project-based accounting features is compatible with its current accounting system and may be cost effective. Partial implementation entails different levels of activity depending on the

PHA. The use of the reporting system and budgeting at the cost center level is not as involved as with a fully implemented P-BA system. The PHA selects particular items that are important to its operations. However, in order to be considered a fully operational P-BA system, it must incorporate the minimum requirements as delineated in Chapter Two. Consequently, an agency may want to compare the cost of partial implementation with full implementation of P-BA, or adopt a gradual changeover to P-BA.

If a PHA determines that it is preferable to enhance the current system to perform some functions of P-BA, it must analyze the elements of P-BA which are most useful to the agency. For example, an agency might consider it useful to prepare maintenance labor budgets by project and compare actual maintenance labor costs. Tracking maintenance labor costs could be done through payroll or work orders in a consolidated system, particularly in an automated system with a job costing module. It may require that staff time records be changed and that someone be assigned the data entry job responsibility. But the actual costs of implementing this change would be quite low.

A PHA may find it useful and appropriate to make organizational changes along with changes in its financial management and information systems. Changes in organization may facilitate P-BA changes, but P-BA should not be undertaken as a tool for organizational change. It is a management tool designed to improve the operations of the organization. It can complement, but is not a substitute for, organizational change. Therefore, organizational changes that are to be enhanced by P-BA should be undertaken separately from the design and installation of a P-BA system.

A PHA may determine that it needs to improve its management information systems (MIS), or to implement automated data processing systems. The desire to improve management capacity and to track key activities at the public housing development level should be compatible with the goals of P-BA.

The ability to budget and report financial and operating information at the project level increases the opportunities for Property Management to control activities and to hold personnel accountable. For example, site managers can become more involved in supervision of maintenance activities on site, but only if they acquire some basic knowledge of accounts and accounting practices, administrative and

personnel management skills, and identification of maintenance and capital improvement needs. Site staff may also become involved in project-based budgeting, provided staff receive the appropriate guidance and supervision. This may require: development of a budget procedures manual on how to prepare budgets; a review process for proposed budgets to determine priorities; and training to line staff on the funding and funding sources so that a context for budget limitations can be understood.

P-BA can provide financial and operating information the agency can use to identify organizational performance that strays from commonly defined standards. Regular P-BA reporting can be used for purposes of internal control to monitor performance. Where performance negatively impacts a development corrective actions can be planned and implemented before developments become distressed. In the case of PHAs with distressed properties, a P-BA system can provide information for assessing the impact of new operational systems such as a vacancy reduction program or rent collection program.

Because P-BA provides financial and operating information for review by managers and other staff, improper allocation or distribution of charges to a cost center can be rapidly identified by cost center managers. This quality control is possible only if the managers and other users know how to review the information and actually use it.

PHAs can also use P-BA to support an internal audit function which can be an individual or group whose organizational responsibilities are to review agency operations in light of the internal control and quality control features discussed above. In essence, this function reviews and tests the organization against its own performance criteria (which consists of policies, procedures and objectives).

Step 4. Develop System Specifications

The responsibility for Developing the specifications for the system is assigned to the user group(s) and the system staff or Technical Assistance Provider as appropriate. Using the goals and needs assessment results, system specifications can be developed, including definition of:

- cost centers
- accounts to be reported at the cost center level
- allocation methodologies
- outputs (reports) required
- inputs (data) needed
- processing (production) necessary
- equipment needed (workstations, printers, remote site workstations and printers)
- internal controls needed
- testing specifications
- training, documentation required

Following is a discussion of some of these key components.

Reports

Reports are the outputs of P-BA systems. They are also the starting point for designing a P-BA system. Specifying what the system needs to produce will help to specify what inputs and processes are needed to yield the required output.

Chapter Two identified external reports required by HUD and other regulatory agencies. These reports are required of all PHAs, whether or not an agency has P-BA, and do not necessarily relate to a PHA's internal operations or management structure. Chapter Three explored the internal reports that are designed specifically to meet the management needs of the agency. They can be categorized as follows:

- *Routine Management Reports* - These are the regular reports to senior level management. They summarize cost center and agency overall operating and financial statistics. These statistics are used for financial planning, budgeting, performance monitoring, and other management purposes.
- *Routine Project Cost Center Reports* - These reports are distributed on a regular basis (either monthly or quarterly) to staff at the project cost center level. They provide operating and financial information generally confined to those accounts and line items which are considered controllable by staff

at the cost center level. They are used by supervisors at the cost center level to monitor performance and control costs.

- *Internal Audit and Internal Control Reports* - These occasional reports are requested for purposes of conducting internal audit or internal control reviews of specific areas of PHA operations. These are designed to provide summary statistics, as well as random verification of individual transactions recorded in the system.
- *Ad Hoc or Special Purpose Reports* - These occasional reports are specified by senior staff to address short-term needs or projects, and to examine particular areas of management concern.

Development of reporting formats and specifications is usually done through a user group or a similar process which allows for user inputs. As needs change or reporting problems are identified, the user group develops new reporting formats and specifications to respond to these needs. This ability to expand, contract, or otherwise change reporting is a critical feature of the P-BA system. The design should incorporate specifications that permit reporting flexibility and adaptability. The most flexible system is represented by automated software programs which incorporate a report writing feature. This allows people to design their own reports without the help of a programmer. Flexible data storage systems, such as automated database management programs, also increase the options available in combining, analyzing, and restructuring data for analysis. When a database is combined with report writer capability, the PHA has maximum flexibility.

Data Input Parameters

It is important to specify all data that may be needed to produce the reports the agency requires, but to avoid unnecessary over-specification of data. In the case of consolidated systems, which are automated and use so-called hard-coding, data needs will have to be carefully developed because the cost of making changes is usually very high. Changes may have to be made by a programmer. Each change can trigger a number of other changes throughout the system. In the case of automated systems using a database design, the cost of making changes to the data parameters is much lower but nonetheless needs careful forethought and planning.

The recommended approach is to analyze the prospective data elements needed to produce a report, which allows data input to be defined by output needs. Earlier chapters examined the issues of cost centers and accounts. The standard is to find the most cost efficient method of ensuring that only the requisite data be collected, and that it be collected and input reliably.

Part of this process involves considering how obtrusive and burdensome data collection and input requirements can be on staff and operations. Some data may cost more to collect than its value to management, and may be more appropriately addressed through a cost allocation methodology.

An important input issue is whether the system components and modules are integrated so that redundant data entry is minimized. The objective should be to integrate the modules so that data (tenant information, for example) can be input only once, but be used for multiple applications and modules.

Processing Parameters

Processing is the way in which the system takes raw data inputs and compiles the information for reporting at different levels or cost centers. Defining the processing requirements of the system consists of defining the compilations and correlations of data required, the frequency with which that data is updated, and the correlations run. Some information may need to be updated only once a year while other information, such as work orders, may need to be entered and updated daily.

It is usually the processing requirements that motivate an agency to consider automation. If the agency is already fully or partially automated, then it needs to re-evaluate the software and hardware capabilities of the system.

Automated entry and processing can be done in a couple of ways. In batch processing systems, data is collected and then input by a data entry person in groups, or batches. For example, withdrawals of items from inventory are recorded manually or electronically during the day. At the end of the day, all inventory transactions are entered into the database either by a person entering it or by electronically releasing the batched data to the system. Another option is real time processing, under which the data is input by a variety of people as it is generated, and the database is updated immediately.

The methods for processing have direct staff and cost impacts. The batch system requires someone dedicated or available to make data entry at night or some other designated time. But the inventory report at any given time, may not be completely current. In a real time system, data entry is done at the time the transaction occurs so reporting is always current. Real time processing requires that the computer have the capacity to process entries at all times, and that many more people be trained in using the computer. Quality control needs to be carefully designed when system access and inputs are so dispersed.

Step 5: Develop a Request for Proposals

Estimate Costs and the Source of Funds

Procurement of a computer system is a critical agency decision. It affects all parts of the agency. Selection of a computer that does not have enough capacity may create a bottleneck, slow agency operations, and have other serious consequences. This phase addresses the process for selecting an automated system appropriate to the needs of the agency.

Chapter Five contains a discussion of the costs involved in converting to a P-BA system. Since P-BA systems are to some extent customized to the unique needs and structure of each PHA, it is not practical to provide precise cost guidelines. Instead, the components of cost and a methodology for estimating costs of an automated P-BA system are identified. Estimating should be done upon completion of specifications.

PHAs can consider several sources of funds for a P-BA system:

- *Comprehensive Improvements Assistance Program (CIAP)* - The CIAP program permits limited funding of management improvements that are in support of physical improvements. A project-based accounting system directly supports project-level management and can be justified as a management improvement.

- *Operating funds and reserves* - The justification for use of operating funds and reserves is based on expected operating efficiencies and improvement in the quality of management.
- *Third parties* - Some PHAs have been successful in raising funds through third party sources, such as CDBG funds, foundations, and even private industry contributions. PHAs should be careful not to allow gifts of hardware and software to dictate or limit the design of the system. A limited system may not be able to meet the needs of the agency. Operating inefficiencies may overwhelm any cost savings of the donation.

Developing an RFP

If P-BA system hardware, software, and technical assistance are to be purchased, the PHA (regardless of size) should develop a formal Request for Proposals (RFP). The Request for Proposals should specify the purposes of the system, the performance characteristics of the software and hardware, the equipment needed and the evaluation methodology.

The RFP should be developed through the same process by which systems parameters were specified -- namely, a user group (see Appendix II for a sample P-BA solicitation package). Given the critical role of the RFP, a PHA may want to utilize a Technical Assistance Provider to assist the user group in delineating the plans and technical specifications of the system required by the agency. By collating the reporting needs of the system, a description of data needed and processing functions required can be developed. This, in turn, drives the software specifications and ultimately the hardware requirements. It is not appropriate to choose hardware first.

The key elements of an RFP are:

- choosing who will guide its development;
- outlining the overall purpose of the automation;
- delineating the contents of the proposal required;

- specifying the system requirements:
 - output (reports)
 - input (data)
 - processing (production)
 - equipment (including central processing and storage hardware, workstations, printers, and remote site hardware)
 - internal controls
 - training and documentation;
- the schedule for implementation; and
- the selection process and criteria.

If the source of funding is CIAP or another HUD-regulated source, the RFP should be prepared and submitted to HUD for review and approval before it is advertised and distributed.

Step 6: Select the System

A PHA which utilizes a fully specified RFP and selection process will find the selection is made easier by the specifications of the RFP. If the agency has clearly articulated the requirements for the system, then it should be possible to develop a checklist for assessing each vendor's responsiveness to the specifications.

Unfortunately, many vendors try to provide a standard presentation of their package which may or may not be responsive to all the articulated needs of the agency. Some vendor systems are oriented to the financial accounting and reporting needs of HUD only and have limited capabilities to incorporate the internal management reporting needs of PHAs, particularly at the project level. Therefore, it is extremely important that PHAs require the vendor to provide an acceptable *demonstration* of the system's capacity to provide the management (and not just the financial) reports specified in the RFP.

In addition to system responsiveness to specifications and demonstration of capabilities, another key criterion is the vendor's experience in installing and

supporting systems in other PHAs. It is recommended that the PHA send staff (or the consultant) to the installed sites for demonstration runs and for interviews with users of the installed system. It is not advisable for a PHA to choose a vendor without demonstrable PHA experience, unless no other vendors are responsive to the RFP and there is other demonstrable experience of the capability of the vendor.

Negotiating the Contract

After the selection of a vendor, the PHA enters into negotiations for a contract. Most vendors will offer to use their own contracts, which they may have used with other PHAs. While such contracts may be acceptable, the PHA is cautioned to approach that contract assuming that it will tend to favor the vendor rather than the agency. Careful legal review of the contract, as well as review of certain sections with the users group is recommended. If the contract has been used with other PHAs, check with those PHAs.

The contract should address the following questions and issues:

- **Definition of Terms** -- Definitions must to be spelled out so that there is a common understanding of what is meant. For example, what constitutes that the system is "delivered"? Its actual delivery to the site? Its delivery plus installation? Its installation and testing? If so, what kind of testing and by whom?
- **What's Included in Costing** -- Does the cost include everything? For example, it might or might not include cabling of the premises. It might or might not include freight charges. It might or might not include supplies to run the operation for a specified length of time (say a month). How long is the price good for? (Approvals by funding agencies can sometimes take longer than the price timeframe specified - if it is specified). If prices drop in the meantime does the agency get the benefit of that?
- **Licensing** -- Does the software include a license? Is the source code in an Escrow Account so that if the vendor goes out of business or refuses to support the software any longer, the agency can hire someone else familiar with the 'language' it is written in?

- **Timeframe** -- Is the timeframe spelled out so that the agency is specifically aware of when each part of the system, including all modules, is to be delivered and operational? Are the training sessions scheduled?
- **Acceptance** -- What constitutes acceptance? Are the performance criteria spelled out? Is the payment schedule tied to the passing of performance tests? If later modules can't be delivered or are delivered but don't work with the system as expected, what are the remedies available to the PHA?
- **Data Conversion** -- Who will convert the data? How much will it cost?
- **Documentation** -- Is the documentation to be provided delineated and/or samples attached? What is the timeframe for its delivery, especially with reference to the software and hardware it relates to?
- **Training** -- What is the training to be provided? How many sessions? Who provides it? Who pays for it (most especially travel and per diems - do these have limits on them such as 'coach class' travel etc.)? When does it happen?
- **Technical Support** -- How is support provided? How much is provided under warranty? How is it provided after warranty expiration? What will it cost?

Step 7: Install the System

Upon execution of a contract for installation of an automated P-BA system, a PHA should appoint a *coordinator or manager of the installation*. This coordinator will be the point of contact between the vendor and the agency. Assisting and advising the coordinator should be the user group, which may have to undergo some changes in membership to fully represent all areas of the PHA that will be impacted by installation.

This coordinator should also be responsible for developing an implementation plan in consultation with senior staff and the user group. Critical elements of the plan include the schedule for testing, training, and implementation of various modules of

the system. It should also specify the time periods for transfer of data and operation of parallel systems until the new system is fully tested, debugged, and operational. The plan should identify staff needed for each step, and should incorporate any support committed by the vendor in the contract.

PHA senior staff should provide regular and careful supervision of the coordinator and monitor the progress of implementation against the plan. When implementation begins to vary from the schedule, senior staff must intervene to determine if additional resources are needed to keep the project on schedule. The credibility of the system among the users can be negatively impacted by disruptions caused by implementation. The general steps of implementation are outlined in Exhibit 4-2.

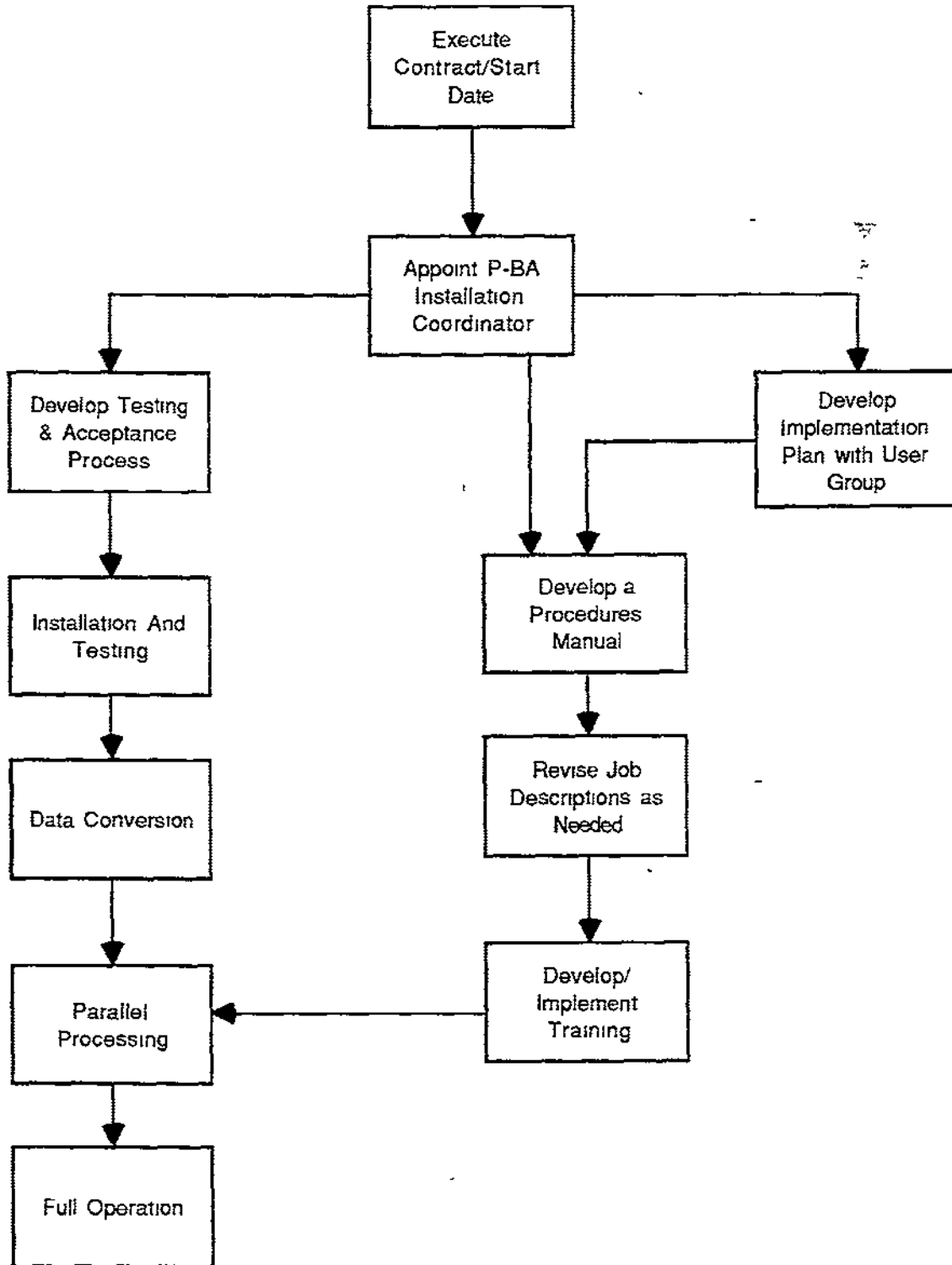
Testing

One of the most important steps during installation is the testing and acceptance of the system. A PHA should incorporate specific testing and acceptance procedures in the RFP. Critical questions about the testing procedures include the following:

- **Dry Run** -- Do you do a dry run? Do you demonstrate all of the elements or just some? If just some, are they chosen randomly by the end user or by the vendor or supplier? How many times and under how many different conditions will the test/s be run?
- **Success** -- What will constitute success? For example, if you install 50 workstations to manage 5,000 units of housing, is the speed or response of the network to be judged only when all the data of the 5,000 units is 'on-line' and all 50 workstations are accessing and manipulating that data at the same time? Or will one workstation running some sample data from the vendor be acceptable? Or 50 workstations running some sample data from the vendor?

EXHIBIT 4-2

P-BA IMPLEMENTATION FLOW CHART



- **Conditional Acceptance** -- Can conditional acceptance be an appropriate choice? (test some stations with some data, but a full test will be conducted when all 50 are running and all 5,000 units of data are in the system).
- **Testing** -- Who will do the testing? The PHA? (Then who in the agency?) The Vendor? The Technical Assistance Provider? All the parties?
- **System Problems** -- How much time should be allowed the vendor/supplier to correct problems? What will constitute final failure and rejection of the system with return of all monies and cancellation of all contracts?

Staffing Requirements and Impacts

Installing a P-BA will probably result in small changes in the job responsibilities of most people, larger changes for a few staff members, and some possible new staff members for some agencies.

There are several short-term staffing needs during installation. Any agency, regardless of size, will need a coordinator as specified above to oversee installation. It should also designate staff who are assigned to test the various modules of the system. Its user group must be available for review and second testing.

Once the conversion to P-BA is completed, the tendency may be to return to the staffing norms which existed prior to P-BA, with some reassignments of central office staff and functions into the field. PHAs with regional management may find it necessary to authorize a small increase in regional staff to gather and verify cost center data. This may be done through reassignment; for example, a Budget Analyst can be reassigned to the region.

Each of the functional areas below may experience some changes in staffing and/or procedures.

- **Accounting** - P-BA cost centers provide greatly enhanced cost tracking. Staff will be required to learn the modified chart of accounts adopted as part of P-BA. The new cost centers and chart of subaccounts will require more extensive initial coding of expense items. The purpose of this is to make

certain that items are properly allocated to each cost center based on the nature of the expense. As noted above, budget analysts may be reassigned to be closer to cost centers.

- **Budget** - As the P-BA system is implemented, accurate cost histories for each cost center will begin to develop, which should enhance budget planning. For instance, a new high-rise elderly development can have an initial budget developed, based on comparable structures with comparable systems, within the PHA's housing portfolio.
- **Purchasing** - The PHA's ability to implement a materials planning program will be enhanced. Given project-specific data on materials usage, stock reordering and maintenance can be improved. This will reduce productivity lost through unplanned trips to obtain inventory.
- **Property Management** - P-BA and budgeting at the project level permits Property Management to identify and track costs. That information is used to detect causes of excess costs. This tends to encourage proactive adjustments and changes in planned activities to accommodate changed budget constraints. As noted above, additional responsibility is assumed at the regional, and sometimes development, level in reviewing and verifying P-BA information.
- **Maintenance** - After utility costs, maintenance is typically the largest expenditure category of a PHA's operation. P-BA enhances the ability to track these costs and to formulate performance goals. In addition, the maintenance costs associated with a specific development can assist in decision-making related to modernization planning and maintenance staffing patterns. P-BA creates the opportunity for greater interaction between Property Management and Maintenance staff.
- **Administrative Departments** - Direct benefits to administrative departments such as Tenant Selection, Leased Housing and Social Services Coordination are less significant here than to the functional areas listed above. However, there are indirect benefits. For example, improvement in daily operations at the site can improve the ability to predict vacant unit turnaround time, which aids Tenant Selection.

Procedures Manual

One of the most important tools of implementation is the use of procedures manuals. These support the various data input, analysis, and reporting functions of the system. It is probable that a P-BA system will require changes in the way many data items are collected, entered into computer, analyzed, reported, and used. These changes should be covered in a manual for use by PHA staff who participate in the P-BA system. The procedures will have been developed or outlined to some extent through the planning and RFP process. Procedures should be assembled in a loose-leaf notebook to permit updating.

Training

Training is another critical component of implementation. Training must occur on several levels:

- **General Staff** -- All staff should be briefed about the pending changes. This will allow them to anticipate some disruptions to normal operations as the new system is implemented, and to understand that the objective is to enhance project-level management. They should also be aware that the system will support closer monitoring of performance. In smaller agencies, this can be accomplished in a meeting of all staff. In larger agencies, a series of meetings (by region, for example) can be used to brief project level staff and other directly affected organizational units. The agency newsletter can provide information to staff less affected.
- **Input and Analysis Staff** -- There will be a need to train newly hired staff and re-train existing staff in accounting, MIS, and Property Management who are directly involved in the flow of data and reports. This training is based on the Procedures Manual, and involves direct experience with the new system. If this is the agency's first experience with automation, then the training should be expanded to include the use of computers. Usually this category of training is incorporated into the vendor's work statement and should only be monitored and supplemented by the PHA.
- **User Training** -- Users of the reports should also receive training in how to read the reports, review the reports for accuracy, provide comments, and

apply the information to improve the performance of their cost center. Generally this training will be for middle level managers at the cost center level.

Parallel Processing

If a new system is to be installed, the PHA should plan to operate parallel old and new systems for a period of three to six months while the new system is debugged. During this time period, additional or temporary staff may be needed to support dual entry and processing of accounting data.

Exhibit 4-3 provides a checklist which can be used in the implementation of a P-BA system. What follows is a discussion pertaining to the operation of a P-BA system after implementation.

EXHIBIT 4-3

P-BA IMPLEMENTATION CHECKLIST

Has the PHA executive staff read the guidebook	YES	NO
Has the Executive Staff decided on implementing P-BA	YES	NO
Has an authority-wide goals and objectives committee been formed to set objectives	YES	NO
Has the committee issued a set of goals and objectives to Department heads	YES	NO
Have the Department heads distributed the report to staff, have comments been received	YES	NO
Have the goals and objectives been finalized	YES	NO
Has a User Group been formed	YES	NO
Has a form of financing been determined	YES	NO
Has the Group met to discuss mission, goals and objectives	YES	NO

EXHIBIT 4-3 Continued

Has the User Group decided whether to call in a technical assistance provider to develop the RFP	YES	NO
Has a technical assistance provider been solicited	YES	NO
Has the RFP been prepared by the technical assistance provider/staff	YES	NO
Has the RFP been reviewed by the User Group	YES	NO
Has the RFP been sent out with a timeframe for responses	YES	NO
Has the vendor and/or P-BA technical assistance provider been selected	YES	NO
Has the contract been reviewed by the User Group, executed	YES	NO
Has an Installation Coordinator been selected	YES	NO
Has a timetable for installing the P-BA system been developed in conjunction with the vendor	YES	NO
Has a discussion begun on personnel changes	YES	NO
Has a new personnel manual and job descriptions been prepared	YES	NO
Has the User Group discussed new policies and procedures	YES	NO
Have new members been added to the User Group to address these issues	YES	NO
Has a P-BA procedures manual been prepared	YES	NO
Has the system been installed	YES	NO
Has the system been tested according to contract specifications	YES	NO
Have training sessions on the system been scheduled	YES	NO
Have training sessions begun	YES	NO
Has the User Group developed sequence and activity tables	YES	NO
Has the User Group begun developing a monitoring plan	YES	NO
Has a monitoring plan been developed with timeframes and responsibilities	YES	NO
Has the monitoring begun	YES	NO
Have long range training sessions been scheduled	YES	NO

OPERATION OF A PROJECT-BASED ACCOUNTING SYSTEM

Public housing agencies are dynamic organizations, constantly modifying and improving operations in response to changing needs and conditions. Changes can be imposed by external elements -- programs and regulations, funding sources, housing needs, and community and neighborhood conditions. Changes can also emerge from needs within the organization as organizational structure, management priorities, staffing, and identified needs evolve.

Project-based accounting systems must mirror the organizations they are created to serve. Like the PHA, P-BA must be a dynamic system that can respond to the changing program environment and needs of management.

This Guidebook has introduced project-based accounting as a system. The dynamic element of a system is the feedback loop -- management's use of the information and its decisions regarding system maintenance and modification. This chapter addresses how the organization uses the information and adapts the system to meet changing needs.

For a P-BA system to be of ongoing value to the PHA, the system must possess three important characteristics:

- **Usability** - The system must produce information that can be used by PHA management and staff to make financial and operating decisions at the project cost center level.
- **Sustainability** - The system must be designed to be maintainable with a reasonable level of staff and cost commitment that can be sustained by the organization over the long run.
- **Adaptability** - The system must be able to respond to the changing needs of the organization.

All three characteristics must exist for the system to survive and to continue to be of value to the PHA.

If a P-BA system cannot be responsive to development or cost center level needs for reporting, it will collapse into just another accounting method, not substantially different than accounting and reporting on a consolidated basis. Many automated consolidated systems, for example, have the capacity to identify data which is auditable and provides a basis for generating reports on a public housing development or project cost center level. But this capacity is often used on an ad-hoc basis only after problems with financial performance or condition have arisen. This type of reactive system is not considered an operating project-based accounting system, and the PHA may be failing to utilize the system to its fullest capabilities.

SYSTEM EVALUATION AND MAINTENANCE

P-BA systems require ongoing attention to the maintenance of the system to ensure that it produces timely and useful data to meet the changing needs of the PHA. The primary activities of ongoing maintenance include:

- Regular quality control review of data input practices and procedures. To ensure that data is properly entered and verified;
- Maintenance of hardware and software to ensure that software errors are corrected, that software updates are installed, and that documentation is distributed on a timely basis;
- Ongoing review of the usefulness of reports by the user group(s) and update of reporting formats as needed to improve information and meet changing needs; and
- Ongoing training (and updates of system documentation and procedures manual) for new staff and staff newly assigned to positions, in addition to supplemental training for existing staff to enhance their use of the data.

P-BA reports provide financial and operating information which helps the agency to identify organizational performance that strays from commonly defined standards. Regular P-BA reporting procedures can be used for purposes of internal control to monitor both system accuracy and agency performance. Improper

allocation or distribution of charges to a cost center can be identified by cost center managers if they receive regular reports. Procedures should require cost center managers to review and verify information on a timely basis.

The agency can also introduce quality control procedures by which accounting, MIS, or internal audit and control staff regularly examine a small percentage of randomly selected transactions to determine whether they have been properly handled. Internal audit and control staff may also be requested to conduct special studies if it is suspected that problems exist in certain areas of the system.

THE ONGOING ROLE OF USER GROUPS

User groups are one of the best methods to guarantee the sustainability of the P-BA system. These groups ensure that users have a shared interest in the success of the system. After the user group has completed its role in designing and implementing the system, there is a role the group can continue to play. The user group should meet on a regular basis throughout the entire process of design and implementation, and periodically (perhaps quarterly) after the system is installed, to perform the following functions:

- **Report Modification** -- review reporting formats to enhance and correct formats which are either providing more or less information than the users need;
- **System Maintenance** -- consider issues related to system maintenance, including improvements to procedures for inputting, editing, and compiling data in order to improve the timeliness, accuracy, and quality of the reports;
- **Training** -- plan and implement ongoing training programs for users of P-BA information; and
- **System Changes**-- constantly assess changes in P-BA inputs and reporting that will be responsive to the changing needs and objectives of the agency over time, including changes in cost centers, accounts and subaccounts, allocation decisions, and reporting formats.

ONGOING TRAINING

Ongoing training in the review and use of P-BA data is important for the usability and sustainability of P-BA systems. For PHAs with decentralized or partially decentralized operations where the group of P-BA users is large and extends beyond senior staff, training is especially critical. Not only must new and newly reassigned staff be introduced to new concepts as part of their orientation, but existing staff needs to be informed of any new procedures and reports as the P-BA system evolves to meet the changing needs of the agency and programs. Existing staff also needs to regularly expand their understanding and use of P-BA information, and become more informed users of the data.

Each PHA needs to hold regular and ongoing trainings, which can be conducted as one-on-one sessions for new or newly assigned staff, group workshops to enhance use of P-BA reports, and meetings to distribute updated procedures manuals and workbooks to staff.

Training sessions for existing staff can explore topics such as the relationship between P-BA and the operating budget, how to read and use P-BA reports, and P-BA system capabilities for special reports. Sessions can be timed to coincide with the annual budget process in order to remind staff of the P-BA link with budgeting. For new employees, a procedures manual as well as some one-on-one training with experienced staff may be sufficient.

Initial training is likely to be provided as part of the contract with the system vendor or the technical assistance provider. For ongoing trainings, the PHA will need to determine if it can meet all of its ongoing needs with in-house staff or if it will need to contract with a professional firm that specializes in this type of training. It is probably useful to have the capacity in-house for ongoing training. As part of the initial implementation costs, a PHA can specify that the vendor or TA Provider develop a training workbook or methodology, which can be revised and updated by the agency as needed.

Updating procedures and training workbooks or methodologies should be done by those with functional responsibilities for budget and MIS, with appropriate support and review by the user group. This ensures that the updated instructions relate

sufficiently to the perspective of the end users. Those responsible for the MIS function (as the producer of the reports and clearing-house for any changes to the P-BA system) can accurately document changes in capacity or purpose.

SUMMARY

This chapter has examined the process of selecting and implementing a project-based accounting system. The process was divided into four phases: Setting up the Process, Specifying the System, Procurement, and Implementation. The chapter has emphasized the importance of the planning process and the involvement of participants through User Groups.

The discussion of the process assumed that the P-BA system to be implemented would be an automated system. This is desirable and strongly recommended in order to maximize the ability of the system to provide timely and flexible reporting, but it is not mandatory. PHAs have implemented manual P-BA systems. For those who choose a manual system, most but not all of the process issues examined herein still apply.

Like the public housing agencies they serve, project-based accounting systems are dynamic systems which must be capable of responding to the changing needs and priorities of the agency. It is imperative that a P-BA system be designed to be *usable* by staff at the project cost center level, *sustainable* by the organization over the long run, and *adaptable* to the changing structure and needs of the organization. These are the standards by which the success of the P-BA system will be judged.

System maintenance activities focus on preserving and enhancing those qualities of the P-BA system. User groups are important to maintaining these standards. They give the users direct input into the design, maintenance, and revision of the system, and vest the users in the success of P-BA. Also, ongoing training will ensure that new and newly reassigned staff learn how to use the system and that existing staff continue to expand their use of P-BA information.

Chapter Five examines cost issues as they pertain to the procurement, installation, and operation of a project-based accounting system.

CHAPTER FIVE

DETERMINING THE COST OF CONVERTING TO A P-BA SYSTEM

INTRODUCTION

This chapter examines the components of project-based accounting systems and how they relate to determining the overall cost of designing, procuring, installing, and operating the system. It serves as a guide to determining the components of cost a PHA must consider in estimating expenses associated with the system.

There are no estimated dollar amounts attached to the components because costs will vary substantially based on a PHA's size, organizational structure, current accounting system, level of information to be collected and disseminated by the system, and other variables. A form illustrating the cost components is included as Exhibit 5-1.

The time frame for undertaking P-BA is critical to the cost estimate. As delineated in Chapter Four, a step-by-step procedure for implementing the P-BA system should be undertaken by the PHA in order to ensure that the design of a system responds to all the needs of the agency. In preparing a cost estimate, the PHA should consider staff time in addition to all third party costs. By considering the elements of a budget for P-BA in terms of time frame, staff commitment, and external funding requirements along with organizational and system requirements, the PHA should be able to minimize any unforeseen events as it proceeds with its implementation of P-BA.

As with the previous chapters, this chapter discusses the cost components of system conversion as if the PHA intends to automate or replace or substantially modify its computer system to adopt project-based accounting. Accordingly, for those PHAs which already have a computerized system that can accommodate P-BA, the costs of conversion to P-BA may be reduced considerably. The items discussed below may not be relevant for all PHAs. For example, PHAs who adopt P-BA without automation, have no need for a discussion of hardware and software costs.

EXHIBIT 5-1

COST ESTIMATE FOR A PROJECT BASED ACCOUNTING SYSTEM

	NUMBER OF UNITS	UNIT COST ITEM/STAFF	TOTAL
CAPITAL COSTS			
CPU			
TERMINALS			
PRINTERS			
SOFTWARE			
WIRING/INSTALLATION			
MODIFICATION TO OFFICE SPACE			
ADDITIONAL FURNITURE			
SUPPLIES			
	SUBTOTAL		
DESIGN AND PROCUREMENT COSTS			
TECHNICAL ASSISTANCE PROVIDER			
STAFF TIME			
RFP PRODUCTION/ADVERTISING COST			
PROPOSAL EVALUATION COSTS			
	SUBTOTAL		
CONVERSION OF DATA			
CONVERSION DATA ENTRY			
PARALLEL PROCESSING			
	SUBTOTAL		
OPERATIONAL AND STAFFING CHANGES			
NEW PERSONNEL PROCEDURES			
HANDBOOKS CHANGES			
CHANGES IN JOB DESCRIPTIONS			
P-BA SYSTEM HANDBOOKS			
	SUBTOTAL		
TRAINING			
COMPUTER TRAINING (ALL LEVELS)			
P-BA SYSTEM/REPORTING TRAINING			
CONTINUING TRAINING			
	SUBTOTAL		
OPERATING COSTS			
MAINTENANCE - HARDWARE			
MAINTENANCE - SOFTWARE			
STAFF COSTS - OPERATING THE SYSTEM			
QUALITY CONTROL			
	SUBTOTAL		
GRAND TOTAL			

THE COMPONENTS OF COST

Given the varying sizes of PHAs, and their differing organization, histories, and mixes of responsibilities, it is difficult to provide precise cost guidelines. Instead, it is more appropriate to examine all the components of cost. A PHA can refer to these cost components to organize its analysis of cost for designing, installing and operating a P-BA system customized to its needs and capabilities.

This discussion is organized into three main categories of expenses:

1. For an automated system, the *initial capital costs* of designing and purchasing the system, including hardware, software, and staff costs;
2. The initial *start-up or implementation costs*, including staff training and start-up time, data conversion, and management; and
- 3 *Ongoing operating costs*, including maintenance of equipment and software, and ongoing training.

Capital Costs

Implementing P-BA without automated data processing restricts the timeliness and variety of reports. It should be noted that the capital cost of the automation of data processing has been decreasing over the years, for expanded services. Thus there is an inherent assumption, in this discussion, that the costing analysis should be based on automation.

Over the last 10 years, a number of automation vendors have emerged who provide accounting systems for housing managers, including PHAs. These *vertical market providers* have responded to HUD and various State Government requirements, and also have interacted with PHAs in the development and revision of their software. As a result, some packaged software systems are available that meet most PHA needs, and may be modified by the vendor to address specific PHA needs. Several vendors now provide PHA software modules at a very modest cost per module (e.g., Payroll, Accounts Payable, Tenant Accounts Receivable, General Ledger, Maintenance, Purchasing/Inventory, Modernization/ Development).

The most notable shift in software for PHAs, in the last decade, has been the emergence of database technology and the gradual decline or transformation of hard-coded systems. The next major shift for PHA software may be the use of relational databases, whereby all the data can be accessed even though they are in separate files. This greatly expands the capacity of the PHA to compile and analyze the data in many different ways.

Most vendors have developed a modular structure for their software offerings. The modules which are generally included, and can be purchased separately, are payroll, accounts payable, accounts receivable, general ledger, work orders & maintenance, purchasing & inventory, assets, and development & modernization.

While some vendors may have entered the market with a preference for a certain type of hardware, or platform, many have shifted to a software-driven mode in which hardware decisions are becoming secondary to software concerns. By making the software *platform-independent* (which means that the software is able to run on a variety of hardware) PHAs have more choices and opportunities for lowering the cost.

Technological advances have radically changed the computer industry, improved performance, and driven down prices. Where expensive minicomputers were specified for PHAs in the late 70s and early 80s, now certain PHAs may be served by cost effective networks of PCs. Now, the primary factor of hardware costs is usually the number of terminals, printers, and remote sites.

In addition to software and hardware costs, there is the cost of installation. This often involves substantial wiring and modification of office space, as well as work stations to accommodate the distributed network of equipment. Sometimes the vendor's bid will include installing the system hardware components, but other times this can be an extra cost which must be contracted to a local installer.

DESIGN AND PROCUREMENT COSTS

The second major cost component is the development of objectives and specifications for the P-BA system. As discussed in Chapter Four, this task can be done in-house, by qualified staff, or through the use of technical assistance (TA) providers. The costs associated with this phase should be estimated, along with the

costs of developing, producing, advertising, and distributing the RFP. Staff and TA provider time should be devoted to a review of the proposals and to visiting existing installations of the top-rated systems for comparison purposes.

DATA CONVERSION COSTS

The costs of converting manual or automated data to the new system should not be overlooked. It should not be assumed that these costs can be avoided even if the system is installed to begin operation with the start of a new fiscal year. There are costs associated with establishing the baseline information on cost centers, accounts, housing development by project number, buildings, sites, staff, residents, and inventory. There may also be costs related to establishing or modifying the Chart of Accounts, the Job Costing (Payroll allocation) System and the Purchasing/Inventory Coding or Identification (Tracking) System. There is also a time period (usually 90 to 180 days) during which the PHA should continue to run parallel accounting systems -- both the new and the old -- until the new system has been fully tested, debugged, and proven to be fully operational.

Many automation vendors do not include the cost of data conversion in their base price, although some now offer to convert the existing manual and/or automated data for an additional fee. If a PHA chooses to convert the data with its own staff, it should consider the long time frame and costs of the diverted staff time associated with such a conversion process.

OPERATIONAL AND STAFFING CHANGES

A number of operational changes may be needed to support the P-BA system. New procedures may be required for maintaining records and information on various transactions, for reporting the information to the P-BA system, and for reviewing and verifying information generated by the system. For instance, new inventory withdrawal procedures, or a new work order system or format may be needed. Scheduled activities which were not previously recorded, such as regular administrative housekeeping responsibilities, may now require recordkeeping in order to allocate staff costs to cost centers. All of these operational changes must be identified, and the procedure handbooks updated.

In addition, it may be necessary to hire new staff, reassign existing staff, or redefine job descriptions and responsibilities to reflect the changing data collection, processing, and reporting requirements of a P-BA system. For example, certain on-site staff may have to assume responsibility for reporting information into the system, or previously centralized accounting staff may have to be reassigned to site offices.

TRAINING

Whenever procedural changes are introduced, training will be needed for employees who are affected by the changes. As discussed in Chapter Four, these training sessions consist of: P-BA overview briefings to all staff; instruction in detailed procedures involving the flow of data and reports; and, user training for all staff at the cost center level (who will now be reporting and receiving financial and operating information).

Automation vendors provide appropriate training and technical assistance in the use of the hardware and software. The training program and the follow-up technical assistance should be fully specified in the purchase contract and should also be coordinated with other procedural and operating changes in the agency. For training in new procedures and internal use of reports, a PHA can provide most of the trainings, if internal capacity is sufficient. If not, it can contract with the technical assistance provider for training services.

OPERATING COSTS

There are two aspects to operational costs which should be included. One is the cost of providing project-based accounting services, including actual data collection and reporting operations, supplies, and maintenance of hardware and software. The other is the cost of monitoring (which ensures that staff provide timely and accurate information).

PHAs which are already automated can expect limited additional costs associated with operating a P-BA system. However, P-BA systems tend to draw more people into the process of entering, processing and extracting data. Terminals and printers tend to multiply. Control over the system to maintain its integrity and

performance becomes more difficult and demanding. Training becomes more extensive. All of the components of the design, development, and implementation of a P-BA system add costs.

There are staff costs associated with the actual collection, entry, editing, and processing of the data required for a P-BA system. Although most data collection and processing may be accomplished by existing staff, some additional data entry clerks may be needed. For example, time sheets, inventory entries and withdrawals, and contract costs may need to be entered in the P-BA system. Additional staff costs can be minimized by careful planning of forms and data collection systems and by taking full advantage of automated system features. Further, a PHA must evaluate whether collection of certain information costs more than the benefit it provides.

Operation of a P-BA system enhances the ability of the PHA to monitor performance at project cost center levels. This may lead to an expansion of internal control, internal audit, and quality control activities which focus on the project level. Additional staff cost to monitor the quality of the data and reporting should be included.

SOURCES OF FINANCING

PHAs have several sources of financing for automation:

- *CIAP* - The CIAP program permits limited funding of management improvements that are in support of physical improvements. Project-based accounting systems directly support project-level management and can be a justifiable management improvement.
- *Operating funds and reserves* - Justification for the use of operating funds and reserves is based on expected operating efficiencies and improvement in the quality of management.
- *Third parties* - Some PHAs have been successful in raising funds through third party sources, such as CDBG funds, foundations, and even private industry contributions. PHAs should be careful not to allow gifts of hardware and software to dictate or limit the design of the system.

A limited system may not be able to meet the needs of the agency. The operating inefficiencies may overwhelm any cost savings attributed to the donation.

- *Local Sources* - CDBG funds are one potential local source. The PHA may also negotiate lower Payments in Lieu of Taxes (PILOT), contingent upon the use of the monies for automation equipment.

SUMMARY

This chapter has presented a framework for determining the cost components of implementing a P-BA system. The discussion has assumed automation as the means for installing P-BA, but the components of cost are similar for designing and maintaining a manual system. A form and checklist are provided to assist the PHA in assembling the cost components into a full cost estimate.

APPENDICES

APPENDIX I

SAMPLE P-BA REPORTS

This appendix displays copies of actual reports generated by public housing agencies who have implemented P-BA systems. As has been discussed throughout the guidebook, each agency that will be implementing P-BA should be prepared to determine their own needs and organizational requirements. These requirements will be reflected in the range of reports they choose to run and distribute throughout the agency. A PHA should be able to provide at the minimum, reporting information based on Modified HUD Form 52599 - Minimum Accounts for a P-BA System, as discussed in Chapter Two, Minimum Requirements for a Standard Project-Based Accounting System. Chapter Three, Enhancements to a P-BA System Which Supports Internal Management Needs, provides examples and guidance for expanding the P-BA reporting system to generate information targeted to a PHA's individual requirements.

The following eight sample reports provide an overview of the different formats and information targeted by selected PHAs who have P-BA in place. The first two samples detail income and expenses for the month for two different PHAs. The reports display actual monies expended for particular line items for that month, and compare the actual expenditures to the monthly budgeted amounts. The third sample is a targeted report, focusing on maintenance costs for the month. This type of report can isolate any category of cost the PHA chooses in order to track targeted costs. The fourth sample displays all of the developments of a specific PHA and the corresponding expenditures for each line item for the month. The fifth report is a sample of department-based budgeting, based on one PHA department's monthly expenditures for a particular category of expense. The sixth sample is a monthly report on receipts and expenditures for one cost center for all non-utility line items. The seventh report is generated from the same PHA as the previous sample. It summarizes the PHA major accounts expenditures for the month. The last sample is a description of monthly expenses for a specific department in the PHA, utilizing subaccounts under the category of administrative expenses.

Sample A

This report is a Monthly Statement of Costs for an individual development. In addition to the description of the category and account number, the report has five columns. This PHA makes use of subaccounts, as can be seen under Sundry - Account # 4190, Gas - Account #4330, and Maintenance Labor and Materials - Accounts # 4410,4420. The first column lists the expenditures for the month, the second column is year to date expenditures, the third column is the annual budget, the fourth column is the variance, and the fifth column is the percent of the annual budget used to date. The variance is the amount of money remaining in the budget for the stated period.

Sample B

This report is entitled a Comparative Statement Sub-Group Report. The report is issued monthly for each housing development in each subgroup (the agency is divided into groups/cost centers). The report indicates what fund the money is allocated from, the group and the subgroup (a subgroup is a housing development). The report has nine columns, more than the other PHA reports reviewed. The first column is the actual expenditure for the current month, and the second column is the actual amount budgeted for the current month. The third and fourth columns are the variance in dollar and percentages of the amount spent and the amount budgeted for the month. The fifth column is the actual spent year to date and the sixth column is the amount budgeted year to date. The seventh and eighth columns are the variance in dollar and percentages of the amount spent and the amount budgeted for the year to date. Finally, the ninth column is the annual budget for the year.

Sample C

This is a sample targeted report. The report is a Summary of Maintenance Costs for the month. Since it is a summary of one item, it is used as an across the board comparison for all the developments. The developments are listed in column one. The report has eleven columns, column one identifies the project, columns two through nine are the maintenance items, and the last column is the total maintenance

costs for each development. This report enables the staff to view the cost of eight discrete maintenance categories by development.

Sample D

This sample is a Summary of Expenses for a particular month. All of the developments for the PHA are listed in numerical order, (only two are referenced here) with a breakdown by account line items. In addition to the description of category and account number, the report has six columns. The first three columns are the current month, quarter to date, and year to date expenditures. The actual budget figure for the particular development line item is shown in column four, followed by the budget variance both in actual dollars and by percent. The management staff receive a complete printout of all of the developments. The last page totals the expense figures for the entire PHA.

Sample E

This sample is a monthly report for one department of the PHA, for a particular category of expense. The report details the amount the Executive Department spends monthly on administrative expenses. In addition to the account number and expense category description, the report has eight columns. The first two columns compare the amount actually spent the previous year and the amount allocated for the present budget year. The next three columns detail the monthly expenditures for budgeted expense, actual expenditures, and the dollar variance. The last three columns state the year to date figures for budgeted amount, actual amount, and the dollar variance.

Sample F

This is a sample report for Receipts and Expenditures for one cost center. The expenditures are for the given month, and only reflect non-utility line items. The report displays the major account and the subaccounts with their titles. This report differs from previous reports in that it traces where costs from other cost centers that are allocated to this particular cost center emanate (see the proj column). The next group

of categories are the financial data: annual budget, prorata budget, actual cumulative year to date figures, actual figures for the current month, and year to date balance. The prorata budget column is the monies that are to be expended by that period assuming equal expenditures over a 12 month period.

Sample G

This report accompanies Sample F, and is a monthly Major Account Summary report. The report lists all of the major accounts (line items) and the monthly expenditures for each account for the entire PHA. There are seven columns: major account number, account title, annual budget, prorata budget, actual cumulative year to date figures, actual figures for the current month, and year to date balance.

Sample H

This report details the expenditures for a specific department within the PHA. There are nine columns; three are descriptive and six are concerned with expenditures. The first three categories are the account number as detailed in the general ledger, the second is the subaccount, which is the indicator of the expense, and the third is the subaccount title (or line description). The next six categories are: annual budget, present month budget (in this case January), year to date expense, present month expense, year to date percentage used, and the balance.

STATEMENT OF COSTS
PERIOD ENDING DECEMBER 31, 1989

DESCRIPTION		ACTUAL CURRENT MONTH	ACTUAL YEAR TO DATE	ANNUAL BUDGET	VARIANCE	%
INCOME						
DWELLING RENTAL	3110 000	(27,117.56)	(152,775.67)	(6,024,553.00)	(5,871,777.33)	(3)
EXCESS UTILITIES	3120 000	(241.01)	(6,627.66)	(250,000.00)	(243,372.34)	(3)
INTEREST INCOME	3610 000	(64,278.38)	(281,104.91)	(589,343.00)	(308,238.09)	(48)
INT.ON GEN FUND INVSMT - INS.	3615 000	(1,847.09)	(1,847.09)	.00	1,847.09	0
SERVICE CHARGE TENANT	3620 010	(1,119.70)	(5,342.85)	(90,000.00)	(84,657.15)	(6)
LATE CHARGES	3630 000	(450.00)	(1,770.00)	(52,000.00)	(50,230.00)	(3)
LAUNDRY INCOME	3650 000	.00	.00	(1,000.00)	(1,000.00)	0
OTHER NON RENTAL INCOME	3690 000	.00	(696.67)	(10,000.00)	(9,303.33)	(7)
TOTAL INCOME		(95,053.74)	(450,164.85)	(7,016,896.00)	(6,566,731.15)	(6)
EXPENDITURES						
ALLOCATED COSTS	4100 104	9,981.81	66,398.59	1,182,573.00	1,116,174.41	6
CONTINGENCY	4100 205	.00	.00	(4,890.00)	(4,890.00)	0
TOTAL ALLOCATIONS		9,981.81	66,398.59	1,177,683.00	1,111,284.41	6
ADM-SALARIES-NON-TECH	4110 120	3,089.56	19,086.57	46,931.00	27,844.43	41
LEGAL FEES	4130 141	102.36	303.11	11,000.00	10,696.89	3
PUBLICATIONS	4160 401	.00	6.64	.00	(6.64)	0
AUDIT FEE	4170 000	.00	.00	21,015.00	21,015.00	0
FISCAL AGENT FEES	4190 040	.00	.00	224.00	224.00	0
SUNDRY ADMINISTRATIVE EXPENSE	4190 100	4.99	161.95	12,985.00	12,823.05	1
COURT COSTS	4190 110	(116.00)	(558.00)	181.00	739.00	(308)
MISC REPAIRS/ALTERATIONS	4190 201	.00	.00	2,760.00	2,760.00	0
SPONSORED EVENTS	4190 230	.00	.00	1,000.00	1,000.00	0
OFFICE SUPPLIES	4190 252	37.41	294.23	3,000.00	2,705.77	10
PRINTING&REPRODUCTION	4190 288	.00	79.64	3,500.00	3,420.36	2
ADVERTISING	4190 303	.00	146.39	2,000.00	1,853.61	7
TOTAL ADMINISTRATIVE		3,048.32	19,520.53	104,596.00	85,075.47	19
SALARIES	4210 000	836.48	5,045.26	9,888.00	4,842.74	51
RECREATION PUBLIC SERVICES	4220 000	302.84	957.45	2,014.00	1,056.55	48
NORFOLK TENANT ORGANIZATION	4240 000	.00	357.75	491.00	133.25	73
TOTAL TENANT SERVICES		1,139.32	6,360.46	12,393.00	6,032.54	51

SAMPLE A

01/09/90

STATEMENT OF COSTS
PERIOD ENDING DECEMBER 31, 1989

DESCRIPTION	ACTUAL CURRENT MONTH	ACTUAL YEAR TO DATE	ANNUAL BUDGET	VARIANCE	%	
WATER	4310 000	.00	3,846.89	49,272.00	45,425.11	8
ELECTRICAL	4320 000	4,284.00	29,151.46	66,898.00	37,746.54	44
HEATING GAS	4330 010	4,316.55	11,851.22	78,008.00	66,156.78	15
COOKING GAS	4330 020	.00	3,780.04	14,095.00	10,314.96	27
FUEL	4340 000	.00	.00	2,831.00	2,831.00	0
LABOR	4350 000	303.41	1,440.99	.00	11,440.99	0
SEWAGE	4370 000	.00	3,068.23	25,518.00	22,449.77	12
TOTAL UTILITIES		8,903.96	53,138.83	236,622.00	183,483.17	22
PARK MAINTENANCE LABOR	4410 020	2,038.81	13,135.45	34,680.00	21,544.55	38
CHD WORK ORDER LABOR	4410 030	4,431.21	27,624.83	44,620.00	16,995.17	62x
CHD NON-WORK ORDER LABOR	4410 035	3,418.75	39,285.29	61,663.00	22,377.71	64x
CENT'L MAINT ADM SUPPORT LABOR	4410 040	2,543.15	15,874.78	22,183.00	6,308.22	72x
PLUMBING	4420 001	4.73	20.27	541.00	520.73	4
ELECTRICAL	4420 002	27.74	358.66	491.00	132.34	73x
HEATING	4420 003	68.03	1,390.78	1,970.00	579.22	71x
GROUNDS	4420 004	68.53	644.98	4,532.00	3,887.02	14
STRUCTURAL REPAIRS	4420 005	335.81	954.06	2,121.00	1,166.94	45
PAINTING	4420 006	223.90	1,433.07	2,029.00	595.93	71x
LUMBER & MILL SUPPLIES	4420 007	.00	131.53	.00	(131.53)	0
GENERAL MAINTENANCE	4420 008	566.44	5,561.54	7,884.00	2,322.46	71x
CHD EQUIPMENT RENTAL	4420 010	1,167.07	7,415.39	19,098.00	11,682.61	39
EXTERMINATING	4420 011	40.43	72.78	257.00	184.22	28
CONTRACT MAINTENANCE	4420 012	17.05	302.94	4,842.00	4,539.06	.6
ELEVATORS	4420 101	.00	40.36	.00	(40.36)	0
MISCELLANEOUS MAINTENANCE	4420 105	.00	.31	.00	(.31)	0
JANITOR SUPPLIES	4420 107	84.86	213.99	488.00	274.01	44
UNIFORM CLEANING	4420 108	5.64	38.38	31.00	(7.38)	124x
VACANCY MAINTENANCE	4420 110	180.35	938.08	1,527.00	588.92	61x
PLANNED MAINTENANCE	4420 111	11.26	57.69	1,255.00	1,197.31	5
TOOL ROOM	4420 112	49.25	321.33	466.00	144.67	69x
APPLIANCE SHOP	4420 114	28.62	543.19	598.00	54.81	91x
SAFETY SUPPLIES	4420 115	34.64	163.20	393.00	229.80	42
ROOFING & SHEET METAL	4420 116	88.73	480.68	403.00	(77.68)	119x
CATHODIC PROTECTION	4420 117	9.00	16.99	268.00	251.01	6
TILE MATERIAL	4420 118	1.40	9.99	418.00	408.01	2
TOTAL ORDINARY MAINT.		15,445.40	117,030.54	212,758.00	95,727.46	55
INSURANCE	4510 000	11.62	69.71	33,600.00	33,530.29	0
INSURANCE-SELF INSURANCE	4511 000	.00	1,831.74	.00	(1,831.74)	0
PILOT	4520 000	.00	.00	9,114.00	9,114.00	0
FRINGE BENEFITS	4540 000	8,724.92	38,697.97	86,413.00	47,715.03	45

STATEMENT OF COSTS
PERIOD ENDING DECEMBER 31, 1989

DESCRIPTION	ACTUAL CURRENT MONTH	ACTUAL YEAR TO DATE	ANNUAL BUDGET	VARIANCE	X
COLLECTION LOSSES 4570 000 .	1,333.29	(934.40)	1,725.00	2,659.48	(54)
INTEREST-EXP. SECURITY DEPOSIT 4595 000	37.35	108.26	206.00	97.74	53
TOTAL GENERAL	10,107.18	39,773.20	131,058.00	91,284.80	30
TOTAL EXTRAORDINARY MAINT	.00	.00	.00	.00	0
TOTAL CASUALTY LOSSES	.00	.00	.00	.00	0
PROTECTIVE SERVICES CONTRACT 4800 000	.00	.00	1,140.00	1,140.00	0
PROTECTIVE SERVICES-LABOR 4810 000	.00	.00	30,000.00	30,000.00	0
TOTAL-PROTECTIVE SERVICES	.00	.00	31,140.00	31,140.00	0
TOTAL EXPENDITURES	40,625.99	302,222.15	1,906,250.00	1,604,027.05	16
NET INCOME & EXPENDITURES	(46,427.75)	(147,942.70)	(5,110,646.00)	(4,962,703.30)	(3)

COMPARATIVE STATEMENT SUB-GROUP REPORT 09/25/89

JAN. 01, 1989 AUG. 31, 1989

O - UNITS
 O - BUDGETED UNIT MONTHS
 O - ACTUAL UNIT MONTHS

	* * C U R R E N T M O N T H * * * *				* * * * Y E A R T O D A T E * * * *				ANNUAL BUDGET
	ACTUAL	BUDGET	** VARIANCE ** DOLLAR PERCENT		ACTUAL	BUDGET	** VARIANCE ** DOLLAR PERCENT		
INCOME									
3110 DWELLING RENTAL	-29,541	50,978	21,437	-42	258,748	-407,824	-149,076	-36	611,734
3120 EXCESS UTILITIES	\$00	500	500	100	\$00	4,000	-4,000	-100	8,004
3190 NONDWELLING RENTAL	325	136	\$189	138	2,600	1,088	\$1,512	138	1,630
TOTAL RENTAL INCOME	29,866	-51,614	-21,748	42	261,348	-412,912	-151,564	-36	-619,368
NON RENTAL INCOME									
3690 OTHER INCOME	\$03	752	-755	-100	2,245	6,016	-3,771	-62	9,018
TOTAL NON RENTAL INCOME	\$03	-752	-755	-100	-2,245	-6,016	-3,771	-62	-9,018
TOTAL INCOME	-29,863	-52,366	-22,503	-42	-263,592	-418,928	-155,336	-37	-628,386
ADMINISTRATIVE EXPENSE									
4150 TRAVEL	\$00	\$71	\$71	100	\$00	\$568	\$568	100	\$848
4190 SUNDRY	\$1,360	\$338	-1,022	-302	\$2,658	\$2,704	\$46	1	\$4,048
TOTAL ADMIN. EXPENSE	\$1,360	\$409	-951	-232	\$2,658	\$3,272	\$614	18	\$4,896
TENANT SERVICES EXPENSE									
4220 TENANT SERVICES OTHER	\$00	\$93	\$93	100	\$00	\$744	\$744	100	\$1,111
TOTAL TENANT SERV. EXP.	\$00	\$93	\$93	100	\$00	\$744	\$744	100	\$1,111
UTILITY EXPENSE									
4310 WATER & SEWER	\$16,689	\$16,977	\$288	1	\$146,956	\$125,375	-21,581	-17	\$196,265
4320 ELECTRICITY	\$14,578	\$12,315	-2,263	-18	\$124,100	\$94,763	-29,337	-30	\$134,740
4330 GAS	\$17,567	\$16,801	-766	-4	\$215,743	\$420,256	\$204,513	48	\$565,695
4390 OTHER UTILITY EXPENSE	\$00	\$660	\$660	100	\$00	\$5,280	\$5,280	100	\$7,903
TOTAL UTILITY EXPENSE	\$48,834	\$46,753	-2,081	-4	\$486,799	\$645,674	\$158,875	24	\$901,603
ORDINARY MAINTENACE									
4410 ORDINARY MAINT. LABOR	\$00	\$00			\$456	\$00	-456		\$00
4420 ORDINARY MAINT. MATERIALS	\$00	\$4,113	\$4,113	100	\$700	\$32,904	\$32,204	97	\$49,373
4430 ORDINARY MAINT. CONTRACTS	\$42,950	\$35,087	-7,863	-22	\$232,384	\$280,696	\$48,312	17	\$421,035
TOTAL ORD MAINT EXP	\$42,950	\$39,200	-3,750	-9	\$233,540	\$313,600	\$80,060	25	\$470,408

SAMPLE B

COMPARATIVE STATEMENT SUB-GROUP REPORT 09/25/89
 JAN 01 1989 AUG 31, 1989

0 - UNITS
 0 - BUDGETED UNIT MONTHS
 0 - ACTUAL UNIT MONTHS

	* * C U R R E N T M O N T H * * * *				* * * * Y E A R T O D A T E * * * *				
	ACTUAL	BUDGET	** VARIANCE ** DOLLAR PERCENT		ACTUAL	BUDGET	** VARIANCE ** DOLLAR PERCENT		ANNUAL BUDGET
GENERAL EXPENSE									
4570 COLLECTION LOSSES	\$11,791	\$2,171	9,620	443	\$34,613	\$17,368	17,245	-99	\$26,056
4570 COLLECTION LOSSES RECOVER	202	\$00	1202		2,224	\$00	\$2,224		\$00
TOTAL GENERAL EXPENSE	\$11,589	\$2,171	9,418	-433	\$32,389	\$17,368	15,021	-86	\$26,056
TOTAL ROUTINE EXPENSE	\$104,733	188,626	16,107	18	\$755,386	\$980,658	\$225,272	22	\$1,407,074
NON ROUTINE MAINTENANCE									
1610 EXTRAORDINARY MAINTENANCE	\$00	\$00			\$00	\$00			\$00
TOTAL NON ROUTINE MAINT	\$00	\$00			\$00	\$00			\$00
CAPITALIZED EXPENDITURES									
7540 PROP BETTERMENTS & ADD'NS	\$00	\$00			\$00	\$00			\$00
	\$00	\$00			\$00	\$00			\$00
VANDALISM EXPENDITURES									
7610 VANDALISM EXPENDITURES	\$20,003	\$00	-20,003		\$163,828	\$00	-163,828		\$00
7690 VANDALISM EXP CONTRA	-20,003	\$00	\$20,003		-163,828	\$00	\$163,828		\$00
	\$00	\$00			\$00	\$00			\$00
PRIOR PERIOD ADJUSTMENTS									
6010 PRIOR YR ADJ AFF. RESID	\$00	\$00			\$00	\$00			\$00
	\$00	\$00			\$00	\$00			\$00
TOTAL EXPENDITURES	\$104,733	\$88,626	16,107	-18	\$755,386	\$980,658	\$225,272	22	\$1,407,074
NET DEFICIT OR RESIDUAL CR	\$74,870	\$36,260	38,610	-106	\$491,794	\$561,730	\$69,936	12	\$778,688

SAMPLE C

HOUSING AUTHORITY -- SUMMARY OF MAINTENANCE COSTS - 09/26/87 TO 10/27/87

	ROUTINE MAINTENANCE..		EXTRAORD.. MAINTENANCE..		NOO FORCE	EXPENSED	APPLIANCE	ADMIN....	CONTRACT	TOTAL FQ
RJ	LABOR....	MATERIAL..	LABOR....	MATERIAL..	LABOR....	MATERIALS	TRANSFERS	SUPPLIES.	LABOR....	ALL COSTS
600	318.28	485.60	5.53	0.00	0.00	0.00	0.00	0.00	0.00	809.4
601	2,038.58	874.20	511.03	389.55	0.00	12.97	0.00	0.00	301.00	4,129.32
602	1,807.01	677.61	1,965.75	111.26	0.00	0.00	0.00	0.00	410.00	4,971.1
603	560.97	494.16	0.00	0.00	0.00	0.00	233.58	0.00	1.00	1,289.7
604	3,071.34	2,353.11	92.94	88.71	0.00	0.00	999.04	0.00	402.00	7,006.82
605	332.98	196.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	529.1
606	759.39	701.88	0.00	0.00	0.00	0.00	214.55	0.00	0.00	1,675.81
608	432.69	447.38	0.00	0.00	0.00	0.00	0.00	0.00	92.00	972.
609	1,067.69	505.89	0.00	0.00	0.00	0.00	13.26	0.00	71.00	1,631.7
10	74.96	34.54	0.00	0.00	0.00	0.00	143.25	0.00	0.00	252.75
11	3,795.81	2,173.55	2,095.56	5,237.66	0.00	0.00	92.39	0.00	295.00	13,689.
12	495.29	451.52	0.00	0.00	0.00	0.00	0.00	0.00	150.00	1,096.81
13	255.49	193.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	448.1
11	368.48	374.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	743.73
L	15,378.90	9,963.70	4,672.80	5,827.18	0.00	12.97	1,669.55	0.00	1,722.00	39,246.20

** END OF REPORT ***

HOUSING AUTHORITY
SUMMARY OF EXPENSES FOR MONTH OF NOVEMBER, 1987

	CURRENT MONTH	QUARTER TO DATE	Y. T. DATE	BUDGET	VARIANCE	%
792: LOW INCOME HOUSING						
45403 EMPLOYEE BEN. H. INS	.00	630.09	630.09	8,570.00	7,939.91	7.36
45404 EMPLOYEE BEN UNEMPL	.00	.00	.00	530.00	530.00	0.00
45700 COLLECTION LOSSES	.00	40.00	40.00	2,000.00	1,960.00	0.47
45900 OTHER GENERAL EXPENS	.00	.00	.00	500.00	500.00	0.00
46100 EXTRAORDINARY MAINT.	.00	3,060.00	3,060.00	.00	3,060.00	N/A
60100 PRIOR YR ADJ RECEIPT	.00	15.91	15.91	150.00	165.91	10.61
TOTAL	5,568.63	15,213.32	15,213.32	266,664.00	251,456.63	65.71
103						
14004 CAPITAL EXPENSES	.00	.00	.00	1,085.00	1,085.00	0.00
41100 ADMIN. SALARIES	2,037.60	5,171.54	5,171.54	47,100.00	41,928.46	10.93
41300 LEGAL EXPENSES	.00	160.26	160.26	2,000.00	1,839.74	8.01
41400 STAFF TRAINING	.00	477.63	477.63	400.00	77.63	119.41
41500 TRAVEL EXPENSES	.00	242.62	242.62	1,300.00	1,057.38	15.66
41900 SUNDRY ADMIN. EXPENS	.00	328.77	328.77	2,400.00	2,071.23	0.50
42100 SALARIES	674.15	1,664.20	1,664.20	23,670.00	22,005.80	7.02
42200 REC.PUB.OTHER SERVIC	.00	25.00	25.00	1,170.00	1,145.00	2.14
42300 CONTRACT COSTS,ETC.	.00	.00	.00	260.00	260.00	0.00
43100 WATER	.00	746.25	746.25	20,000.00	19,253.75	3.73
43200 ELECTRICITY	.00	237.78	237.78	10,000.00	16,237.78	1.49
43900 SEWER	.00	592.63	592.63	17,500.00	16,907.37	3.41
44100 LABOR WAGES	3,166.31	7,961.40	7,961.40	82,290.00	74,329.60	9.07
44200 MAINT. MATERIALS	.00	2,075.42	2,075.42	20,145.00	18,069.58	10.30
44301 GARBAGE CONTRACTS	.00	2,574.00	2,574.00	25,200.00	22,626.00	10.21
44302 PEST CONTROL	.00	292.87	292.87	6,436.00	6,143.13	4.55
44303 OFFICE & SERV. CONTR	.00	287.76	287.76	340.00	52.24	84.64
44304 OTHER CONTRACTS	.00	50.50	50.50	10,514.00	10,463.50	0.48
45100 INSURANCE EXPENSES	.00	195.37	195.37	39,000.00	39,195.37	0.47
45200 FYT. IN LIEU OF TAXES	.00	.00	.00	37,000.00	27,000.00	0.00
45401 EMPLOYEE BENF. FICA	429.52	1,071.84	1,071.84	11,710.00	10,638.16	9.15
45402 EMPLOYEE BEN. RETIREM	845.35	2,115.55	2,115.55	23,170.00	21,054.45	9.13
45403 EMPLOYEE BEN. H. INS	.00	1,068.91	1,068.91	14,540.00	13,471.09	7.35
45404 EMPLOYEE BEN. UNEMPL	.00	.00	.00	300.00	300.00	0.00
45700 COLLECTION LOSSES	.00	367.67	367.67	6,000.00	5,632.33	6.13
45900 OTHER GENERAL EXPENS	.00	.00	.00	800.00	800.00	0.00
60100 PRIOR YR ADJ RECEIPT	.00	26.99	26.99	260.00	286.99	10.33
TOTAL	7,153.49	26,083.24	26,083.24	398,210.00	372,126.76	66.55
104						
14004 CAPITAL EXPENSES	.00	.00	.00	4,585.00	4,585.00	0.00
41100 ADMIN. SALARIES	1,162.62	3,002.61	3,002.61	28,300.00	25,297.39	10.61
41300 LEGAL EXPENSES	.00	84.35	84.35	950.00	865.65	1.89
41400 STAFF TRAINING	.00	251.40	251.40	300.00	48.60	83.80
41500 TRAVEL EXPENSES	.00	127.69	127.69	800.00	672.31	15.90
41900 SUNDRY ADMIN. EXPENS	.00	244.08	244.08	4,350.00	4,105.92	5.61
42100 SALARIES	558.31	589.10	589.10	12,770.00	11,580.90	7.13
42200 REC.PUB.OTHER SERVIC	.00	25.00	25.00	900.00	875.00	2.79
42300 CONTRACT COSTS,ETC.	.00	204.00	204.00	3,125.00	2,921.00	4.51
43100 WATER	.00	247.07	247.07	8,800.00	8,552.93	2.51
43200 ELECTRICITY	.00	222.75	222.75	12,700.00	12,477.25	1.75
43900 SEWER	.00	363.99	363.99	13,000.00	12,636.01	2.80
44100 LABOR WAGES	779.44	1,947.73	1,947.73	20,780.00	18,832.27	9.37
44200 MAINT. MATERIALS	.00	1,322.18	1,322.18	10,875.00	9,552.82	12.14

SAMPLE D

ADMINISTRATIVE EXPENSES

EXECUTIVE DEPARTMENT - 501

Month: 6

Expense	FY 89	FY 90	MONTHLY			YEAR TO DATE		
	Actual	Budget	Budget	Actual	Variance	Budget	Actual	Variance
501415000 Travel	12	5,000	417	0	(417)	2,500		(2,500)
501419010 Telephone (864-0578)/Ten Sen	1,325	1,500	125	200	75	750	613	(137)
501419020 Postage (270 Green Street)	9,464	8,500	708	197	(511)	4,250	5,197	947
501419040 Office equipment rental	329	500	42	0	(42)	250	282	32
501419042 Office equipment/maint	562	250	21	0	(21)	125	278	153
501419080 Publications	1,166	600	50	389	339	300	1,293	993
501419081 Membership Dues/Fees	395	9,000	750	0	(750)	4,500	105	(4,395)
501419090 Office Supplies/Sundry	1,541	400	33	59	25	200	797	597
501419093 Delivery	1,111	1,500	125	41	(84)	750	539	(211)
501419094 Reproduction		250	21	0	(21)	125	2	(123)
501442000 Materials/Supplies	6	50	4	0	(4)	25		(25)
Capital Equipment			0	0	0	0	0	0
TOTAL	15,910	27,550	2,296	886	(1,410)	13,775	9,106	(4,669)

SAMPLE E

Receipts and Expenditures NON-UTILITY DEVELOPMENT SUMMARY REPORT - EAST for the Period 10/89 to 10/89

Cost Center 109

End	Major Acct	Sub_Cat Acct Ctr Prj	Account Title	Annual Budget	Prorata Budget	Actual Cum YTD	Actual Curr Period	Year-To-Date Balance
010	411001	000000 109	109 ADMIN SALARIES	113,296 00	66,089 31	66,726 95	6,961 93	46,569 05
010	411001	000102 109	103 OVERTIME ADMIN SALAR	0 00	0 00	1,524 63	536 79	-1,524 63
010	411001	000102 109	108 OVERTIME ADMIN SALAR	0 00	0 00	208 75	0 00	-208 75
010	411001	000102 109	109 OVERTIME ADMIN SALAR	0 00	0 00	2,194 61	178 93	-2,194 61
010	411001	000102 109	123 OVERTIME ADMIN SALAR	0 00	0 00	468 19	0 00	-468 19
010	411001	000102 109	124 OVERTIME ADMIN SALAR	0 00	0 00	67 79	0 00	-67 79
040	411001	000102 109	501 OVERTIME ADMIN SALAR	0 00	0 00	67 80	0 00	-67 80
040	411001	000102 109	508 OVERTIME ADMIN SALAR	0 00	0 00	29 82	0 00	-29 82
***	411001	***** 109	****ADMINISTRATIVE SALAR	113,296 00	66,089 31	71,288 34	7,677 25	42,007 46
010	415001	000000 109	109 TRAVEL	0 00	0 00	247 44	0 00	-247 44
010	415001	000101 109	109 LOCAL TRAVEL	500 00	291 69	693 47	162 68	-193 47
***	415001	***** 109	****TRAVEL	500 00	291 69	940 91	162 68	-440 91
010	419001	000101 109	109 XEROX RENTAL & SUPPL	1,807 00	1,054 06	0 00	0 00	1,807 00
010	419001	000102 109	109 TELEPHONE	3,819 00	2,227 75	5,324 94	603 60	-1,508 94
010	419001	000103 109	109 OFFICE SUPPLIES	871 00	508 06	311 30	0 00	559 70
010	419001	000104 109	109 POSTAGE	150 00	87 50	25 00	0 00	125 00
010	419001	000120 109	109 OTHER	100 00	58 31	156 11	27 00	-56 11
***	419001	***** 109	****BUNDRY	6,747 00	3,935 68	5,816 95	630 60	930 05
010	422001	000000 109	109 RECREATION, PUBLIC, OT	250 00	145 81	451 54	0 00	-201 54
***	422001	***** 109	****RECREATION, PUBLIC, OT	250 00	145 81	451 54	0 00	-201 54
010	435001	000101 109	109 REGULAR LABOR	48,886 00	28,516 81	27,417 60	3,699 20	21,468 40
***	435001	***** 109	****UTILITY LABDR	48,886 00	28,516 81	27,417 60	3,699 20	21,468 40
010	441001	000101 109	010 REGULAR LABOR	0 00	0 00	494 62	19 71	-494 62
010	441001	000101 109	109 REGULAR LABOR	177,566 00	103,580 19	91,947 72	11,466 36	85,618 28
010	441001	000101 109	182 REGULAR LABOR	0 00	0 00	591 22	232 90	-591 22
040	441001	000101 109	040 REGULAR LABOR	0 00	0 00	368 72	14 69	-368 72
040	441001	000101 109	510 REGULAR LABOR	0 00	0 00	398 14	0 00	-398 14
041	441001	000101 109	041 REGULAR LABDR	0 00	0 00	35 95	1 43	-35 95
041	441001	000101 109	601 REGULAR LABOR	0 00	0 00	62 71	0 00	-62 71
***	441001	***** 109	****ORDINARY MAINT LABDR	177,566 00	103,580 19	93,899 08	11,735 09	83,666 92
010	442001	000000 109	109 MATERIALS	52,298 00	30,507 19	978 74	987 35	51,322 26
010	442001	000102 109	109 PAINT	0 00	0 00	4,624 67	1,203 04	-4,624 67
010	442001	000103 109	109 ELECTRICAL	0 00	0 00	7,256 25	1,954 07	-7,256 25
010	442001	000104 109	109 PLUMBING	0 00	0 00	3,556 46	71 98	-3,556 46
010	442001	000105 109	109 AUTO PARTS	0 00	0 00	168 68	10 46	-168 68
010	442001	000106 109	109 GLAZIER SUPPLIES	0 00	0 00	1,844 79	0 00	-1,844 79
010	442001	000107 109	109 APPLIANCE PARTS	0 00	0 00	783 52	0 00	-783 52
010	442001	000108 109	109 HEATING PARTS	0 00	0 00	651 67	0 00	-651 67
010	442001	000109 109	109 JANITORIAL	0 00	0 00	5,239 68	1,368 55	-5,239 68
010	442001	000110 109	109 HARDWARE	0 00	0 00	4,500 27	1,227 18	-4,500 27
010	442001	000111 109	109 BUILDING SUPPLIES	0 00	0 00	11,118 66	1,976 81	-11,118 66

SAMPLE F

Receipts and Expenditures NON-UTILITY DEVELOPMENT SUMMARY REPORT - EAST for the Period 10/89 to 10/89

Cost Center 109 ?

Major Fnd	Sub. Acct	Cst Acct Ctr Pr	Account Title	Annual Budget	Procrata Budget	Actual Cum YTD	Actual Curr Period	Year-To-Date Balance
010	442001	000112	109 109 CARPENTRY SUPPLIES	0 00	0 00	223.97	82.88	-223.97
010	442001	000113	109 109 FLOOR COVERINGS	0 00	0 00	55 00	0 00	-55 00
010	442001	000115	109 109 GROUNDSKEEPING SUPPL	0 00	0 00	1,028 42	20 00	-1,028 42
010	442001	000116	109 109 HAND TOOLS	0 00	0 00	188.50	0.00	-188.50
010	442001	000117	109 109 MISCELLANEOUS	0 00	0 00	628 36	208 36	-628 36
010	442001	000140	109 109 MISCELLANEOUS	0 00	0 00	393 23	28 59	-393 23
010	442001	000143	109 109 OFFICE SUPPLIES	0 00	0 00	925.94	116.59	-925.94
***	442001	*****	109 ****MATERIALS	92,298 00	30,907 19	44,163 81	9,255 86	8,134 19
010	752001	000000	109 109 REPLACEMENT OF EQUIP	12,027 00	7,015 75	838.60	773.60	11,188.80
010	752001	000101	109 109 RANGES REPLACED	0 00	0 00	5,571 75	1,738 59	-5,571 75
010	752001	000102	109 109 REFRIGERATORS REPLA	0 00	0 00	13,267 92	1,320 00	-13,267 92
***	752001	*****	109 ****REPLACEMENT OF EQUIP	12,027 00	7,015 75	19,678 27	3,832 19	-7,651 27
***	*****	*****	109 ****FRANKLIN HILL	411,570 00	240,082 43	263,656 70	36,992 87	147,913 30

Receipts and Expenditures AREA MAJOR ACCT SUMMARY REPORT - EAST for the Period 04/89 to 04/89

Fnd	Major Acct	Sub Cst Acct Ctr	Proj	Account Title	Annual Budget	Prorate Budget	Actual Cum YTD	Actual Curr Period	Year-to-Date Balance
	411001			*ADMINIBTRATIVE SALAR	1,165,035 99	97,085 49	97,505 40	97,505 40	1,067,520 59
	415001			*TRAVEL	4,599 99	383 33	871 76	871 76	3,728 23
	419001			*SUNDRY	55,395 00	4,616 24	2,928 47	2,928 47	52,466 53
	422001			*RECREATION, PUBLIC OT	1,750 00	145 81	12 95	12 95	1,737 05
	433001			*CONTRACTS, TRNG, TEN	0 00	0 00	2,352 34	2,352 34	-2,352 34
	435001			*UTILITY LABOR	366,318 91	30,526 57	27,813 74	27,813 74	338,505 17
	441001			*ORDINARY MAINT LABOR	2,690,288 01	224,190 65	215,881 43	215,881 43	2,474,406 58
	442001			*MATERIALS	507,352 00	42,279 33	26,920 70	26,920 70	480,431 30
	443001			*CONTRACTS	42,882 99	573 58	4,718 13	4,718 13	38,164 84
	732001			*REPLACEMENT OF EQUIP		7872.41	0 00	0 00	94,469 00
*** Grand Totals ***					94,469 00	410,673 41	379,004 94	379,004 94	4,549,076 95
					4,928,081.89				

SAMPLE G

Report

HOUSING AUTHORITY

16 FEB 1990 PAGE 2

DEPARTMENT NAME		ADMINISTRATION	FISCAL MONTH NUMBER 10				
DEPARTMENT NUMBER		301	TARGET YTD % USED				
GL ACCOUNT	LINE DESCRIPTION	ANNUAL BUDGET	JANUARY BUDGET	YTD EXPENSE	JANUARY EXPENSE	% USED	BALANCE
411001	000000 ADMIN SALARIES	\$327,111	\$27,259	\$197,064	\$25,824	0.60	130,047
415001	000101 LOCAL TRAVEL	\$1,004	\$84	\$1,979	\$307	1.97	-975
419001	000102 LONG DISTANCE TRAVEL	\$4,450	\$371	\$3,388	\$0	0.76	1,062
415001	000103 CONFERENCE AND SEMINARS	\$0	\$0	\$3,322	\$0	0.00	-3,322
419001	000101 XEROX RENTAL & SUPPLIES	\$0	\$0	\$0	\$75	0.00	0
419001	000103 OFFICE SUPPLIES	\$1,501	\$125	\$415	\$192	0.27	1,089
419001	000108 CONSULTANTS	\$1,501	\$125	\$0	\$0	0.00	1,501
419001	000109 COLLEGE WORK STUDY	\$2,500	\$208	\$0	\$0	0.00	2,500
419001	000110 ADVERTISEMENTS	\$1,000	\$83	\$0	\$0	0.00	1,000
419001	000111 PUBLICATIONS	\$3,462	\$289	\$0	\$0	0.00	3,462
419001	000117 PHOTOGRAPHY SUPPLIES	\$1,501	\$125	\$0	\$0	0.00	1,501
419001	000120 OTHER	\$49,301	\$3,773	\$21,770	\$299	0.48	23,531
419001	000121 MEMBERSHIPS	\$37,050	\$3,088	\$24,718	\$-817	0.66	12,332
419001	000124 MEETINGS	\$0	\$0	\$1,500	\$1,500	10.00	-1,500
442001	000103 ELECTRICAL	\$0	\$0	\$98	\$0	0.00	-98
442001	000109 JANITORIAL	\$0	\$0	\$103	\$0	0.00	-103
442001	000143 OFFICE SUPPLIES	\$0	\$0	\$0	\$-65	0.00	0
752001	000000 REPLACEMENT OF EQUIPMENT	\$10,653	\$887	\$0	\$0	0.00	10,653
754001	000000 PROP BETT & ADDIT-NONEXP	\$28,232	\$2,333	\$250	\$0	0.00	27,982
754001	000103 NONEXPEND - STRMT & ADDN	\$0	\$0	\$12,061	\$0	0.00	-12,061
** GRAND TOTALS FOR ADMINISTRATION		\$465,275	\$38,773	\$266,669	\$27,276	0.57	198,606

SAMPLE H

APPENDIX II

P-BA SOLICITATION PACKAGE

INTRODUCTION

Appendix II contains two requests for proposals (RFP) for PHAs to refer to in implementing a P-BA system. The first RFP is for automating the operations at the PHA. The second RFP is to provide technical assistance to the PHA in order for them to develop a sustainable P-BA system. All PHAs which pursue the development of a P-BA system will benefit from the technical assistance RFP. As automation is not a requirement for P-BA, although as discussed throughout the guidebook it is beneficial, the two RFPs are intended to function as stand alone entities. However, if a PHA is automating, it is important to remember that the two processes, technical assistance and automation, are to work together to bring about the development of the P-BA system. The two RFPs are to be tied together to meet the needs of the PHA in a comprehensive manner. It may be useful to insert language into the RFPs upfront concerning the integrated nature of the two contractors and their ability to work closely together. The RFPs are prepared for Anytown Public Housing Agency (APHA).

The RFPs are guides as to formats and issues PHAs should consider in drafting their own RFPs. The PHA should consider their individual operational needs in developing their RFPs. PHAs have different bidding requirements, local procurement regulations, and internal selection criteria. All of these items must be taken into account by the PHA in preparing their RFP.

The two RFPs are drawn up differently due to the audience they are soliciting. The Automation RFP is requesting equipment, materials and a service from a designated computer vendor. Specific deliverables are itemized, and a concrete system is purchased by the PHA. The requirements are specific in nature and correspond to accepted automation standards. The Technical Assistance RFP deals with a service, assistance provided to the APHA in developing and implementing a functioning P-BA system. Specific items are delivered, such as Procedure Manuals, but the basic deliverable is imparting technical assistance to the APHA staff. The goal of the information imparted by the Technical Assistance Provider is to ensure that

the P-BA system developed by the contractor, in conjunction with the staff, can be sustained after the contractor's engagement is ended.

The Automation RFP is set up in a chapter format consisting of an introduction, instructions to bidders, proposal format, applications software functional requirements, proposal evaluation criteria, and hardware quantity requirements. These chapters are intended as guidelines for PHAs to follow in preparing their custom RFPs. The Automation RFP is more precise than the Technical Assistance RFP, in that it is dealing with specified automation requirements and performance indicators. The Technical Assistance RFP is presented in a looser format, modeled after a basic technical assistance RFP. The sections are: introduction, scope of work (which includes objectives and tasks), requirements, and evaluation criteria.

In reviewing the following RFPs it must be stressed again that PHAs operate differently. The PHA must understand what products and information it is soliciting before requesting proposals. The RFPs are intended only as samples to be used as guides for preparing customized RFPs.

APPENDIX IIA

REQUEST FOR PROPOSALS TO PROVIDE AUTOMATION SERVICES TO THE APHA

CHAPTER 1: INTRODUCTION

THE HOUSING AUTHORITY OF THE CITY OF ANYTOWN

The Housing Authority of the City of Anytown (APHA) is an agency of the City of Anytown, Anystate responsible for the administration of federally assisted housing programs for low income families and individuals. APHA receives its funding from the United States Department of Housing and Urban Development (HUD). APHA qualifies under applicable federal law as a Public Housing Agency (PHA) and is entitled to apply for participation in and funding under all federal housing programs for which PHAs qualify.

Housing programs administered by APHA include:

Program	Current	Number of Units	
		Next 3 Years	Next 5 Years
Federal Conventional			
Section 8 Existing			
Section 8 Moderate Rehab.			
Section 8 New/Sub Rehab			
Federal Vouchers			

PROGRAM DESCRIPTIONS

[This section should outline the function and purpose of the housing programs administered by APHA. Terms used in the programs that have a particular meaning

which is important for vendors to comprehend should be defined or used in an informative context.

Programs covered should include:

- Federal Low Rent Public Housing
- Section 8 Existing Housing
- Section 8 Moderate Rehabilitation
- Housing Vouchers]

APHA DATA PROCESSING BACKGROUND AND OBJECTIVES

APHA Objectives

APHA desires to acquire both computer hardware and applications software which will permit APHA to improve the quality of housing services provided to its tenants by delivering effective, timely, and flexible computing services to management and staff. The APHA will be implementing a Project-Based Accounting System. The automated system will be required to track income and expenses at the project level.

Specifically, APHA seeks a system which will provide sufficient processing power, disk storage, operational procedures (e.g. backup and recovery), and task specific applications software to enable APHA management to provide these services in a cost effective, easily administered manner. **The system developed to implement P-BA must satisfy the minimum requirements (as contained in Chapter Two) of The Project-Based Accounting Guidebook.**

All proposed systems must be capable of participating in an array of industry standard LAN (Local Area Network) topologies.

Existing Data Processing Environment

[The existing environment should be explained including internal data processing capability and services used outside the agency; payroll, accounts payable, tenants accounts receivable, Section 8 and other programs.]

Data Processing Services Review and Conclusions

[A Review should be conducted prior to the writing of this RFP in order to review the data processing requirements of APHA. The review should be led by the Deputy Director and conducted with broad based participation encompassing user groups. The findings of the review should be included in the RFP where appropriate, and used for future evaluation.]

PROJECT SCHEDULE

APHA intends to proceed with its data processing acquisition in specific steps. These are:

STEPS	APPROXIMATE DATE FROM RFP ISSUANCE (in months)
1. Receipt and opening of bids	
2. Evaluation of bids	
3. Selection of a "short list" of the most qualified bidders	
4. Evaluation of reference sites and systems	
5. Selection of the preferred bidder	
6. Negotiation of a contract	
7. System delivery and implementation	

The final step, system delivery and implementation, will be broken down into specific tasks (e.g. system delivery, cabling/hook-up, system testing, delivery and implementation of applications software modules).

[The timetable proposed should be roughly 6 to 7 months in duration.]

CHAPTER 2: INSTRUCTIONS TO BIDDERS

PURPOSE

The purpose of this request for proposals is to provide prospective bidders with sufficient information to prepare and submit a proposal for the provision of computer hardware, systems software, applications software, support, and training services to APHA to sustain project-based accounting. Proposals submitted in response to this RFP will be utilized by APHA to select a "short list" of preferred vendors for final consideration. Data submitted in bidders' proposals will be utilized by APHA in calculating system life-cycle costs. For the purposes of this RFP the system life-cycle is presumed to be 5 years but may, in practice, be longer.

HARDWARE/SYSTEM SOFTWARE PROPOSALS

Bidders are free to propose any hardware configuration that, in bidders' estimation, will provide the functionality desired by APHA as described in this document.

SCOPE OF WORK

The scope of work required to satisfy APHA's requirements must first address the applications software system and will be dependent on the degree of customization required, if any, to implement a project-based accounting system. Bidders must then address the hardware configuration required to support the anticipated workloads.

The proposal for applications software may consist of a presentation of specifications and documentation for existing packaged software, the design and programming of custom software, or by a combination of both.

PREFERRED CONTRACTING METHOD

APHA prefers to enter into a contract with a single source vendor, that is, one entity which will assume responsibility for all aspects of the project. Joint bids by a maximum of two entities will be regarded as responsive to this RFP. Bidders should note that, all other criteria being equally satisfied, the single source bidder will enjoy

an advantage in that APHA wants to look to the vendor for Hardware and Software Delivery, Warranty and Maintenance. APHA reserves the right to approve participation by all subcontractors.

PROPOSALS

In order to be regarded as responsive to this RFP bidders must submit a complete proposal, covering all areas addressed in this RFP and any other material that bidders' may feel relevant to the selection process, no later than the date specified in the Introduction. [APHA should also state the number of copies desired and the location to which the proposals should be sent.]

All proposals submitted in response to this RFP, plus any other sustaining materials submitted by bidders, will become the property of APHA and will not be returned to bidders.

Other Issues that should be addressed include:

- Incurring Costs
- Performance Bond
- Conciseness of Proposals
- Source Code Ownership
- Taxes
- Assignment or Transfer of Interest
- Requests for Information
- Bidders Proprietary Information
- System Demonstration
- Rejection of Proposals
- Modification or Withdrawal of Offers
- Addenda to this RFP
- Authority to do business in Anystate
- Payments
- Minority Business Enterprise/Women's Business Enterprise Participation

CHAPTER 3: PROPOSAL FORMAT

OVERVIEW

It is the goal of APHA to solicit proposals which effectively communicate the basic, underlying processing assumptions of the applications software and the processing capabilities of the hardware proposed to meet the needs of the PHA for a functioning P-BA System. To this end bidders should utilize concise, non-technical English prose in describing applications software functionality and proposed hardware function and capacity. Technical presentations must accompany all hardware descriptions and should be presented in a concise, direct fashion. Advertising material or promotional literature will not be acceptable in place of accurate technical presentation.

[This chapter will describe the required format of responses to both the hardware/systems software and applications software sections of this RFP.] Bidders should follow the section of this RFP on applications software functional requirements in preparing their applications software bids. Bidders must address each point in all sections in the order presented in this RFP.

All bids must contain the following information and must be organized according to the following outline:

Package One

Part A: Proposal Overview

1. Letter of Transmittal
2. Company Overview
3. Proposal Overview

Part B: Software Proposal

1. Statement of Conceptual Approach and Other Information

2. Description of Each Module
3. Description of how modules are integrated

Part C: Hardware Proposal

1. Description of Each Element
2. Description of Upgrading/Maintenance Approach

Part D: Cost Proposal

1. Consultant's Evaluation Disk
2. Spreadsheet for Initial Costs and Maintenance/Upgrade costs

Part E: Corporate Information

1. Company Overview
2. Financial Statement
3. Financial Analysis
4. References

Part F: Proposed Implementation Schedule

Part G: Bidder Additions

Package Two - Samples and Examples

CHAPTER 4: APPLICATIONS SOFTWARE FUNCTIONAL REQUIREMENTS

OVERVIEW

This chapter describes the specific functions which the applications software must perform for each applications module. The proposed applications software system must be modular; that is, APHA must be able to purchase only those applications modules that meet its needs.

The Bidder shall discuss the implementation of the P-BA System requirements. The software functional requirements for each module are especially important in terms of the ability to merge operating information with financial information. The P-BA System is to provide a complete picture for the PHA.

Bidders with existing products designed for the PHA customer may enjoy a distinct advantage. Bidders who wish to propose custom programming must be prepared to estimate costs and time consequences for development of detailed functional specifications and software development.

The format of this chapter will consist of the following:

- A prose description of each applications subsystem
- Transaction volumes for each applications subsystem
- A set of functional requirements for each applications subsystem.

GENERAL APPLICATIONS REQUIREMENTS

The following are the applications required by APHA in this RFP:

Data Redundancy

Applications software must utilize a Database Management System (DBMS) architecture. Data redundancy must be minimized.

Report Formats

The P-BA System must be able, at the minimum, to generate the Form 52599. Please refer to the Project-Based Accounting Guidebook Chapter Three for the reporting formats required by APHA.

Data Storage Requirements

It is the desire of APHA to maintain two years of data records for each module. Bidders' estimates for hardware requirements and process run times must accommodate these storage requirements.

Modules

A full testing of the available modules is listed below. All of the modules may not apply to P-BA, but they are included to demonstrate the full capacity of the automated system that APHA is requesting.

Data Entry/Update Environments

All data entry must be full menu driven. Data entry techniques which utilize, command line prompts will not be regarded as responsive to this RFP.

Applications Software Security

Proposed software systems must provide for password-based security protection for each menu selector.

Proposal Format

Bidders' proposals should follow this section of the RFP in presenting their applications software products. Bidders should demonstrate their systems' responsiveness to this RFP for each applications module as follows:

- Required Inputs Section.
- Processing Functions Section
- Required Outputs Section.

TENANT ACCOUNTS RECEIVABLE

General Description

The Tenant Accounts Receivable module manages all of the APHA Federal and State program rental receipts. The system must be capable of posting monthly accrual amounts, posting cash receipts, aging past due receivables, differentiating among types of receivable (rent, maintenance charges, legal charges, etc.), producing monthly rent statements, producing delinquency reports, delinquency notices and notices to vacate), tracking arrearage agreements and payments against them, flagging payment violations under such agreements, producing recertification notices and worksheets, tracking third party payments, management of security deposits, and production of a broad variety of financial and management reports. Also attached to this section will be a list of the Inputs, Outputs and Processing Functions required for each application.

TENANT APPLICATION/WAITING LIST

General Description

The Tenant Application Waiting List (TAWL) provides a unified repository for data on individuals and families that have applied for participation in APHA programs. This module is the entry point to the system for future tenant records. The system maintains demographic and income data on all applicants, ranks applicants according to user specified criteria, tracks assignments to APHA projects/programs, interfaces with the Tenant Accounting and Section 8 HAP systems, schedules pre-assignment interviews, and produces required HUD forms. It is the desire of APHA to utilize a single applicant system and file(s) for all APHA programs in order to avoid duplication.

GENERAL LEDGER

General Description

The General Ledger manages the financial transactions and central financial reporting requirements of the APHA. It must interface to Accounts Payable,

Payroll/Personnel, Tenant Accounts Receivable, Inventory Control/Fixed Assets, and Section 8 HAP systems.

ACCOUNTS PAYABLE

General Description

The Accounts Payable system maintains data on vendors, vendor invoices, recurring payables, APHA cash disbursements, and vendor payments histories. It interfaces with the General Ledger, the Purchase Order, and the Inventory Control systems. APHA staff must be able to enter invoices on receipt and control check generation.

PURCHASE ORDERS/CONTRACTS

General Description

The Purchase Order system manages the requisition, order, and receiving portions of APHA materials acquisition as well as executed contracts (which are given a PO number). The system stores data on materials requisitions from both APHA central inventory and direct orders/shipments to field maintenance staff. It generates purchase orders, acknowledges receipts against them, and interfaces with the Accounts Payable, Inventory Control, and General Ledger systems.

INVENTORY CONTROL

General Description

This module is required to manage the APHA inventory and distribution of materials and supplies. The goal of the system is maintenance of current data on materials stocking and usage while providing APHA with sufficient data to minimize carrying costs. The system will interface with the General Ledger, Purchasing, Fixed Assets, Accounts Payable, and Work Order systems. The system will accept materials into inventory, track issues, track back orders, maintain historical data on stock usage, and manage the reorder process. The goal of the Inventory component of the system

is the maintenance of data on non-expendable items owned by APHA, their location, issue date and value and the use, cost and status of expendable items.

FIXED ASSETS

General Description

The goal of the Fixed Assets component of the system is the maintenance of data on non-expendable items owned by APHA, their location, issue date, and value. The Fixed Assets subsystem will interface with the General Ledger, Purchasing, Accounts Payable, and Work Order systems.

The system will enable the establishment of an asset record at time of purchase via the Purchasing system. It will allow logging of receipt via the Inventory system and installation via the Work Order system. Increments and decrements to the asset accounts maintained in the General Ledger will be created via automatically generated transactions based on receipts and disposition, receipts at the Inventory System, disposition activity to be logged from the Fixed Assets system.

WORK REQUESTS/MAINTENANCE

General Description

The purpose of the Work Request system is to provide scheduling, tracking, and analytical information on APHA maintenance activities. The information generated by the system will be utilized to improve the overall delivery of maintenance services to APHA tenants while assuring that services are rendered using the most cost effective manner. The system will track maintenance activities by establishment of a Work Request record on service request. The system must have the capacity to produce all work items either as Work Orders or as Schedules.

CAPITAL PLANNING DEVELOPMENT AND MODERNIZATION

General Description

Capital planning, development and modernization are those functions of the agency which acquire or develop new housing projects or which manage the estimation, funding and contracting for major replacement or repair of systems. Normally these latter projects, commonly known as modernization, are handled outside of regular maintenance and funding cycles. However, there are some items handled by regular maintenance which require and use capital planning skills.

Modernization funding for HUD projects is handled through a process known as CIAP (Comprehensive Improvements Assistance Program) utilizing a five year rolling planning tool known as the CPM (Comprehensive Program for Modernization).

PAYROLL AND PERSONNEL

General Description

The Payroll/Personnel system will be utilized to manage the hiring, payment (weekly payroll), and benefit management functions associated with APHA staffing requirements. The system will maintain demographic, pay level, work history, and benefits calculation/payment data for each APHA employee. It must automatically generate paychecks and all audit documents, produce labor distribution (GL) transactions, calculate and track all benefits, maintain employment history data, and interface with the Work Order system. The system will be the source of all regulatory agency reporting requirements including Equal Employment Opportunity Commission reports and health benefits required data.

HOUSING ASSISTANCE PAYMENTS

General Description

The purpose of this system is to manage and control the federal and states programs which fall under the Housing Assistance Payments (HAP) umbrella; the Section 8

Existing Housing Program, the Section 8 Moderate Rehabilitation program, the Anystate Rental Assistance Program (RAP), and the Housing Vouchers program. All HAP programs involve placing APHA clients in privately owned housing with monthly payments from APHA bridging the gap between 30% of a client's net income and the contract rent level (except for the HUD voucher program).

ADDITIONAL OFFICE AUTOMATION

[Additional Automation should be determined and stated in this section. Such additional applications might include:

- Word-Processing
- Spreadsheet
- Database/Filers
- E-Mail/'Rolodex'/CALENDARS
- Multi-Part Forms]

CHAPTER 5: PROPOSAL EVALUATION AND SYSTEM PERFORMANCE CRITERIA

This chapter outlines the minimum system performance criteria and the methodology by which APHA will select a preferred vendor. APHA reserves the right to employ technical assistants to aid APHA in the system selection, testing and evaluation process.

PERFORMANCE CRITERIA

APHA intends to express its desired performance criteria in functional, operational terms. APHA intends to set specific goals for the proposed system's operational characteristics. Given this approach, it will not be possible to test and judge the performance of hardware/system software configurations separate from the proposed applications software. All performance criteria will be expressed in production system timings.

Screen Response Times

APHA requires that screen response times must not exceed 5 seconds response time for both record fetches and writes. Response time will be defined as the number of seconds which elapse from depression of the ENTER key to screen refresh after the operation is finished. The average will be determined under varying load conditions.

Disk Utilization

APHA requires bids which form the system with sufficient disk capacity so as to enable APHA to store historical data in the quantities stated in this document and operate the system in full production mode while maintaining a minimum of 25% of the system disk capacity in a free and contiguous condition. The system must be supplied with disk space recapture utilities that are simple to operate and require a minimum of operational down time to recapture disk space "lost" to system activity.

Print Job Management

The proposed system must provide a simple, largely automatic, stable method for management of print jobs. The print job management subsystem must impose no limitations on APHA system utilization and must interface in a transparent fashion with the applications software.

Backup/Archival Subsystem

The proposed system must include a reliable, fast backup/archival subsystem. The system must be able to write and read media with a minimum of 99% accuracy. This minimum applies to entire media (disks, tapes) and to the data stored on them.

Hardcopy Output Devices

Vendors should propose a combination of hardcopy output devices sufficient to enable APHA to manage its printing requirements given the peak load scenario outlined above.

Batch Subsystem

All proposed systems must provide a facility for running production routines (e.g. rent accrual, financial statement production, paycheck print image production, all check trial runs) in unattended, phantom mode.

EVALUATION CRITERIA

APHA will evaluate proposals for development of the "short list" according to the following general criteria: (For a complete evaluation checklist refer to Appendix III of the Project-Based Accounting Guidebook)

Content and Form of the Proposal

The bidder is to follow the outline presented earlier in this RFP. [Did the proposal meet the requirements specified? Have the main components of implementing an automated P-BA system been addressed?]

Applications Software

The stated modules and their outputs are to be reviewed as listed in the proposal. This criteria also includes training, technical assistance, reports, and upgrades.

Hardware/Systems Proposal

[This has to do with the number of terminals, printers, storage capacity, backup capacity, updates, and state of the art ability of the components.]

Experience of the Bidder/Provision of References

Has the bidder installed a system with P-BA capabilities? Other considerations are length of time in business, and ability to provide documented references.

Cost of System

This includes the cost of the hardware and software, delivery and installation charge, training and technical assistance. This also includes the methods of payment, guarantees, and terms and conditions of payment.

After compilation of the "short list", references will be checked, site visits arranged, and a final, preferred vendor chosen.

Other areas for evaluation include security of system, ownership and warranties. In addition, the system should reflect the integral relationship of the organizational information and financial information that is key to utilizing a P-BA system.

CHAPTER 6: HARDWARE QUANTITY REQUIREMENTS

[This chapter outlines the proposed quantities of hardware required initially. Bidders should note that there is a likely expansion of users in the future. It should state the geographical location of all sites that will affect this RFP (Maintenance, Main Office, Site Offices) as well as the number of work stations and printers.]

APPENDIX IIB

**REQUEST FOR PROPOSALS TO PROVIDE TECHNICAL ASSISTANCE
TO APHA IN DEVELOPING A P-BA SYSTEM**

INTRODUCTION

The APHA is soliciting proposals for technical assistance providers to assist the PHA in implementing a Project-Based Accounting (P-BA) System. Project-Based Accounting is the term used to describe accounting systems which track income and expenses at the project level. This assistance does not include providing automation services to the APHA. It is strictly limited to requesting implementation guidance in developing a sustainable accounting and budgeting system. The firm selected for this engagement will be responsible for interfacing with the automation vendor if so required.

The implementation assistance necessitates the contractor to understand the organizational workings of the APHA. It is the responsibility of the contractor to provide guidelines and information to the APHA on tasks, responsibilities, job descriptions, and organizational changes. These guidelines will enable the system to function after the contractor and (if used) the automation vendor leave the APHA.

The contractor will work closely with the User Group established for this project. The contractor will report directly to the Chairperson of the User Group, and all progress reports will be distributed to said group. In addition to the User Group, a member will be designated as the Installation Coordinator by the APHA.

SCOPE OF WORK

Objectives

The contractor will provide assistance and guidance to the APHA to enable a smooth and informed transition from consolidated accounting to Project-Based

Accounting. The contractor will provide written procedures and policies to enable the PHA to manage their P-BA system. The contractor is responsible for designing, developing, and implementing the P-BA system for the PHA. The P-BA system, as designed, will enable the PHA to track income and expenses at the development level.

The system must be designed to meet the minimum P-BA requirements as referenced in the Project-Based Accounting Guidebook. The requirements include:

- The system is to delineate information at the project level.
- The minimum set of accounts is defined as the HUD Chart of Accounts included on the HUD Form 52599, Statement of Operating Receipts and Expenditures (line 060 - line 620).
- Items which fall into the categories of non-project specific or central office income and expenses must be distributed or prorated by bedroom count.
- The system must be capable of generating a modified Statement of Operating Receipts and Expenditures and HUD required consolidated reports.

The contractor will be knowledgeable on the processes needed to sustain the system. The contractor will analyze the PHA's organizational operations to determine the customized components and issues of the PHA that will form the basis for developing the system. The contractor is to prepare all materials necessary for the APHA staff to run the system, as well as formally conduct training sessions for APHA staff. These trainings should include budgeting, cost center development and application, personnel reorganization, and other topics germane to the operation of the P-BA system.

Tasks

The following are a list of tasks that must be undertaken by the contractor to meet the requirements and objectives of the contract. The contractor is not

necessarily limited to the following tasks. The contractor is responsible for providing monthly updates on the progress of the P-BA system schedule.

Task 1 - Conduct a Review of Present Operations/Accounting Systems

The contractor is to take steps to develop familiarity with the operations of the APHA. Staff will provide the contractor with organization charts, procedure manuals, and personnel policies. Staff will be interviewed if necessary.

Task 2 - Prepare User Specifications for the System and/or System Modifications

The contractor will assist the User Group in identifying user specifications to be included in the RFP for automation. The contractor will assist the User Group in selecting a vendor if required by the APHA.

Task 3 - Prepare a Comprehensive Organizational Assessment

The contractor will assess all of the organizational factors necessary to serve as input into the P-BA system. This assessment will enable the contractor to delineate the capacity of the organization to implement specific requirements of the system, such as the number of cost centers, budgeting, and reporting. This assessment will determine the presence and number of accounts and subaccounts.

Task 4 - Develop an Implementation Schedule for the APHA

The contractor will prepare an implementation schedule and accompanying narrative to enable the PHA to track progress and gauge milestones for major changes. The schedule will be prepared in conjunction with the automation vendor and the User Group. An Installation Coordinator will be selected from the User Group, to serve as a liaison with the contractor.

Task 5 - Development of Cost Centers

The contractor will assist the APHA in developing the cost centers to be used as the basis for the APHA system. The assessment conducted in Task 3 will yield the basis for the cost center configuration of the PHA. This will include identifying costs that

can be direct charged and those which are to be allocated. These methodologies will guide the use of the system by APHA staff.

Task 6 - Development of P-BA System Procedure Manuals and Handbooks

The contractor will develop comprehensive handbooks to be used by the APHA staff. These handbooks will detail the operation of the system. The contractor will work in conjunction with the vendor if the system is automated. The handbooks will detail all of the procedures necessary to operate the P-BA system. They are to be suitable to be used for training tools.

Task 7 - Staff Training

The contractor will conduct staff trainings based on the activities to be carried out by each department/staff member. Trainings will include implementation assistance, budget training, scheduling, inputting, reporting, and tracking. The P-BA system manual prepared in Task 6 will be used as reference. The training will also be used to enable selected staff to train future employees.¹

Task 8 - Personnel Reorganization

The contractor will revise the organizational structure if needed to implement the system. New job descriptions and qualifications will be prepared in conjunction with the development of a new personnel policies manual by the contractor.

REQUIREMENTS

Based on the above scope of work and APHA guidelines the proposal must include the following:

1. List of references.
2. Cost breakdown for the project, including direct and indirect costs.

¹This training is in addition to any computer training provided by the vendor. Please see Appendix IIA of the Project-Based Accounting Guidebook for the RFP for Automation Services

3. Schedule of tasks and staff to be assigned to said tasks. Timeframe of contract and milestones for identified deliverables.
4. HUD Form 2530, Previous Participation (marked Modernization)
5. Minority Business Enterprize (MBE) or Womens Business Enterprize (WBE) Certification (if applicable).

EVALUATION CRITERIA

Proposals will be evaluated on the strength of the narrative scope of work and understanding of the goal of implementing a sustainable P-BA at the APHA. The firm's knowledge of P-BA and federal housing programs is important. The experience of the firm with developing implementation plans and policies and staff qualifications will be assessed. All of the above stated requirements must be included in the proposal to warrant consideration and serious evaluation.

Demonstrated ability to perform the stated work. This includes an understanding of the deliverables needed and methodology to implement P-BA.

Background on firm and staff that will be involved in the project, including any independent subcontractors. Profile of the respondents' facilities. History detailing experience in performing similar services.

Description of scope of work and deliverables

Previous experience with similar work, success, and demonstrated ability to complete work

Qualifications and experience of team members

Consultants References

Quality and content of proposal

MBE or WBE participation

APPENDIX III

SAMPLE CHECKLIST FOR PHAs TO FOLLOW IN EVALUATING P-BA SYSTEMS

The checklist that follows is general in nature, and can be applied to all PHAs that will be automating and/or upgrading for a P-BA system. The checklist is to be used in evaluating the capabilities of a particular system and vendor to provide the services required by the agency. Please refer to Appendix II for an example of a solicitation package and a discussion of technical assistance services. In order to focus on the attributes of a system as related to the capacity to implement P-BA, the items on the checklist are geared to P-BA, although they can be used as general criteria for automation. Be aware of additional software, hardware, and pricing issues that are basic to any automation conversion.

As mentioned in Chapter 5, the PHA may benefit from a having a consultant assisting the PHA in preparing the RFP. This same consultant would assist the PHA in evaluating the system. The idea is for the consultant and PHA staff to work together in evaluating the system. Key PHA staff involved in the evaluation should be the Executive Director (or designee), Director of Finance and/or Budget, and Director of MIS or similar position. If another staff member is to be the designated "keeper of the system" (such as a programmer), they are also to be included. The evaluation team should not be too large as to hinder the process. The User Group should also participate in the evaluation.

General Requirements

Corporate/Vendor Capabilities

Has your firm installed a system with P-BA capabilities?
Are references provided?

How long in business?

What percentage of revenues is dedicated to R&D?

Main Features of the Proposal

Is it manual or automated?

Can software be leased with the option to buy?

Does it provide all the basic requirements of the RFP?

P-BA Requirements

Detail on Personnel, Materials, Contracts and Equipment to the Project Level?

Central Cost Allocation System

Reporting at:

Project levels?

Area or Cost center levels?

HUD minimum requirement levels?

Agency wide levels?

Operating or Software Requirements

Accounts Payable

General Ledger

Leasing/Occupancy

Payroll/Personnel

Modernization and Development

Purchasing/Inventory/Fixed Assets

Tenant Accounting

Work Orders/Maintenance

Office Applications

Word Processing

Spreadsheets

Database

Desktop Publishing

Equipment or Hardware Requirements

Number of terminals

Number of printers

Amount of on-line storage

Amount of back-up (off-line) storage

All communications equipment (modems, multiplexers etc.)

For Both Manual and Automated Systems

Does it provide audit trails?

Are there internal controls?

Is there a procedure manual?

Does the system have specialized reporting capability?

Is there user training;

 Have you trained using a P-BA system?

Who converts existing data to the PBA system?

Cost?

For Automated Systems

General features

Testing and acceptance

Will the software and hardware be tested, measured and verified?

Who will define the tests?

When do they occur in the payment cycle?

Is the software compatible with the hardware line?

Is the system 'State of the Art'?

Does the operating software comply with industry standards?

Does the documentation comply with industry standards?

Is this hardware configuration compatible with the other product line equipment?

Is this the latest version of the hardware?

Is there a new product line slated to supercede this within the next year?

Is there any other hardware which can be substituted?

 CPU?

 Archival Equipment?

Terminals?

Printers?

Modems/Multiplexers?

Is print spooling available?

Are industry standard communications protocols used?

Security

Does the system contain recovery and restart programs?

Does it include system backup?

Are there utilities for monitoring disk space?

Is there password security?

Is there terminal security?

Can all applications be accessed from all terminals?

Is function access restricted by password?

Is there file security?

Is there data security within each file?

Is there a security mechanism to prevent damage through unauthorized operation of the system?

Ownership

Who owns the software?

Are there buying rights (is the code in an escrow account) if the vendor terminates business?

What are the rights to software upgrades?

Can software be customized by the agency without voiding the vendor's warranties?

Warranties

What warranty is available; what is its length?

What is covered under the warranty; after the warranty expires?

Who is responsible for the software?

Maintenance and Upgrades

Is there a maintenance contract?

Does the hardware contract pass through the software vendor or is it from the manufacturer only?

Can it be renewed?

What is the guaranteed response time for service calls?

Can the software be upgraded; who provides them?

Does the user have any rights to modified software?

Application Software

Training and Technical Assistance

Is there project management support; software support?

Are there also specialists available?

How many hours of assistance are provided free?

Data Integrity

Is the data in the system integrated across all modules?

Can it edit and validate data?

Does the system batch update or in 'real-time' processing?

How is data deleted?

How many data files can be maintained on-line at the same time?

At what level is there record locking for 'multi-user' systems?

Reports

Does it come with a report generator?

Are the reports easily definable by the user?

Can online inquiries be made?

Are standard reports available as part of the software package?

What is the software language used for reports?

Upgrades

Is the upgrade guaranteed to be compatible with the application software?

Are future enhancements offered?

At what cost?

Are these upgrades mandatory or optional?

How are they provided?

Hardware

Operating Environment Factors

Is there a power surge protector?

Are there any non-office environmental operating requirements?

Delivery and Installation

FOB or delivery included?

Who wires the premises?

Is the unloading, unpacking, moving, and installation part of the package?

Are there hardware reliability figures?

Is the hardware guaranteed to operate reliably?

Load Issues

How many users can access the system simulatenously without noticeable slow down of response times?

Does archiving or back-up have to be done when users are 'off-line'?

Cost

Application Software:

Rent/Lease/Purchase Price

Maintenance Charges

Systems Software:

Rent/Lease/Purchase Price
Maintenance Charges

Hardware:

Rent/Lease/Purchase Price
Maintenance Charges

Delivery/Installation Charges

Wiring and other Environmental Charges
Delivery Charges
Installation Charges

Training and Technical Assistance

Training Costs
Base Training
Per Diems/Travel

Technical Assistance

Base Costs
Additional Costs (rate/travel/per diem)

Pricing Policy

Pricing Guarantees

How long is the price good for?
Is this long enough to permit all approvals for purchase being obtained?
If prices go up or down during the purchase period does the agency get the benefits or protections?

Payment Schedules

What are they?

Do they fit into the approval system of the agency?

Are they tied to testing?

Are there cancellation penalties?

Terms and Conditions/Performance Guarantees

Are there credits for lack of performance?

Is there a guarantee on delivery?

Bonding requirements?

What are the available purchase options?

Are credits given for upgrades to hardware or software?

APPENDIX IV

CASE STUDY #1

I. BACKGROUND INFORMATION

The agency is located in the southeast, in an urban area with a population of approximately 280,000. The agency functions as a redevelopment authority as well as a public housing agency. The portfolio consists of 4,084 federal conventional units throughout 16 designated developments, of which one is scattered site. Four of the developments are exclusively for elderly, totaling 373 units. In addition to the conventional developments, the PHA has two homeownership, and one new Section 8. The PHA manages one development that is locally owned, consisting of 492 family units.

The PHA is divided into three divisions (encompassing 14 departments): Administration and Financial Operations; Development; and Housing Operations. Administration and Finance handles all the finance, accounting, budgeting and computer activities for the PHA and consequently for the P-BA system. The three departments most involved in P-BA are, Financial Accounting, MIS, and Financial Control, and Budgeting.

The Housing Operations Division has four departments, three of which are pertinent to the public housing operation: Housing Management; CIAP-Physical Improvements; and Central Maintenance. Managers are site based, and some managers have responsibility for more than one site. All sites have at least one administrative specialist, with most having two or three, to handle the rent collection, recertifications, and administrative activities. The sites have computers which are in the process of being fully hooked up to their mainframe. There are maintenance staff that are site based and staff which have specialized trades that serve the entire agency. Each site (or combination of sites) is assigned approximately three maintenance staff; one is a supervisor (working foreman) and two are assistants. Housing management for the federal conventional units is divided into two sections, each overseen by a Housing Operations Manager. The Housing Managers are responsible for rent collection, safety and security, public relations, social services

(to some extent), civic duties, and they generally oversee the maintenance activities at their sites, although they would like more say in contracting versus staff activities.

II. PHA GENERAL CONDITION

The agency is considered extremely well run both by HUD Management staff and the Independent Public Accountant who performs the agency-wide audit. As noted above, the agency encompasses other functions in addition to its public housing activity. These include real estate development, rehabilitation, community development, design and engineering, and marketing and public relations. Due to the wide range of activities, and varied cost centers such as community development, housing modernization, and local development, the agency has to be extremely budget and financial management oriented to keep itself on track.

The agency has high occupancy, approximately 99%, with limited turnover. The agency is not on the list of HUD's Financially Troubled PHAs. As of the 1989 operating budget, the agency maintained close to 75% of the maximum operating reserve level.

The housing stock is undergoing modernization at certain developments. All of the conventional family developments were built between 1942-1957, with the majority built in the mid 1950's. As is the case with most low rent housing in the southeast, the design is low rise, each site indistinguishable from the others. This factor, in and of itself, facilitates easier monitoring of maintenance costs due to the similar building structures.

III. HISTORY OF P-BA AND AUTOMATION AT THE PHA

The agency started out with P-BA from its inception. They added the ability to produce consolidated reports in the 1970's to correspond to HUD's requirements. The agency uses the cost center approach to track all their different funding sources and allocations. Because it is an all encompassing agency, it receives funding from numerous entities. Tracking costs to the development level is but one component of P-BA. There is department-based accounting, whereby the funds are allocated across departments and cost centers.

The agency was fully automated by 1981. The system was funded through the agency Data Processing fund. The original hardware was an IBM System 38, with the software developed for their needs by a variety of companies, as well as in-house programming. The agency is in the process of upgrading their system to an IBM AS 400 this spring. The upgrades of the system in the last nine years have been funded to a large part through CIAP funds. The agency was part of the Public Housing Urban Initiative Project-Based Budgeting Program in the early 1980's to enhance their capability for budgeting at the cost center level. Although they had used budgeting at the cost center level and P-BA previously, they became more proficient and sophisticated in internal reporting and participatory budgeting. For example, the agency has the capacity to program all their information in-house, therefore any requests for reprogramming can be undertaken by agency staff.

Although the agency has always had some form of P-BA, until the mid 1980's, the developments themselves were not part of the system in an integral manner. The concept of project-based accounting and budgeting was more applicable to the departments and cost centers. Since approximately 1985, Housing Managers have been receiving development based information to be used for informational and budgeting purposes.

The agency recognizes the need for training at all levels. Budget staff meet with Housing Management staff for budget training. All staff that use the computers undergo training by in-house Data Processing Staff. There is also a staff computer analyst whose main responsibility is to trouble shoot at the developments, out in the field patrolling the sites.

IV. PROJECT-BASED INFORMATION

The use of the project-based information is wide spread, with the agency generating a multitude of reports. All of the staff in the Finance, Budget, and Data Processing Departments use P-BA to some degree. Housing Management staff receive monthly reports. The interviews and document collection did not reveal any additional informational requests. In fact, it appears that there may be an information overload, with not enough targeting to a particular audience. Some of the reports that are available.

- Statement of Costs: monthly reports for income and expenditures, for all account classifications. The information is given by current actual month, actual year to date, annual budget, variance (by dollar and percent.)
- Tenant Ledger
- Delinquency Report
- Aged Accounts Receivables
- Statement of Expenses by Department
- Work Order
- Tenant Profile (social characteristics)
- Specialized reports, such as Evictions and Drug Use.
- Performance Indicators: units occupied, tenant accounts receivable, write-offs, vacancy

The information is broken down into much more detail than the HUD chart of accounts. One example is maintenance labor which is broken down into park maintenance labor, work order and non-work order labor, and central maintenance administrative labor. (Developments are referred to as parks).

The Housing Management and Operations staff all reported that P-BA has made them better managers. They are able to track costs and gather needed data on their developments and the residents. Information is available on a timely basis, and they can generate more input as a manager. The manager and staff has the capacity to question operations and results of specific actions.

The information is used in budget preparation for both departments and developments. The Housing Managers do play a part in budget preparation but due to the large number of items out of their control they feel peripherally involved. The budget department distributes to all managers a Housing Management Worksheet which indicates the items they have direct control over. Priorities are set after the worksheets are sent in, and the amount of money available is determined. Managers do not prioritize, nor is there any actual incentive or disincentive for managers to stay within their budgets.

V. CONCLUSION

Since P-BA in some form has been with the agency since its inception, it is difficult to determine its historical overall impact. P-BA and budgeting at the development level has increased staff participation and awareness. Direct costs can be monitored and accountability is now at the development level. The system does enable an agency with many accounts and functions to operate in a smooth and systematic manner. The PHA has a detailed and comprehensive process for developing their budgets. The capacity of the agency and the system to track specific costs is impressive as well as their overall budgeting system. A general comment from different sources reflected the need for more analysis of the data and a focused approach for distribution of the reports.

CASE STUDY #2

I. PHA BACKGROUND INFORMATION

The PHA is located in a very densely-populated urban community, known for high rental rates and purchase prices, which is part of a large metropolitan area in the northeast. It has 1,854 units of federally-subsidized conventional public housing units located in six elderly developments and twelve family developments. The PHA also operates almost 900 units of state-subsidized conventional public housing units located in five elderly developments and eight family developments.

The delivery of management and maintenance services to the public housing units is supervised by a Director of Management. Reporting to him are an Assistant Director for Maintenance, a Deputy Director for Elderly Housing, and two Senior Managers for Family Housing. Each development has a management and maintenance team, comprised of a Project Manager, usually a Clerk, and unskilled and semi-skilled maintenance staff.

The Project Manager is typically assigned to more than one development (usually two to four developments). However, Project Managers either manage all elderly developments or all family developments, rather than a mix of family and elderly. The Project Managers are responsible for all administrative and management duties, such as rent collection and lease enforcement, as well as assignment and supervision of the unskilled and semi-skilled maintenance staff. The Project Manager is also responsible for preparation of an annual development cost center operating budget, and for using P-BA reports to monitor the budget. The Project Managers of elderly developments are supervised by the Deputy Director for Elderly Housing. Each of the two Senior Managers for Family Housing supervises Project Managers in a specific geographic area.

All skilled and licensed maintenance staff are grouped into three teams, each supervised by an Area Maintenance Supervisor, who in turn is supervised by the Assistant Director for Maintenance. Each skilled maintenance team serves a specific geographic area.

II. PHA GENERAL CONDITION

In its most recent Maintenance Review, HUD rated the PHA "Above Average", with only one finding for the conventional public housing program. The finding was related to writing work orders for each work item found in the preventive maintenance inspection process. The PHA had no significant findings in its most recent HUD Management Audit.

The PHA has a 95% occupancy rate, with vacancies concentrated in three developments that are undergoing, or scheduled for, comprehensive modernization work. The Comprehensive Occupancy Plan focuses on these three developments. The PHA faces rent collection problems in a few specific developments, including the high vacancy developments that are now undergoing comprehensive modernization. The PHA has delinquent Tenant Accounts Receivables of slightly less than 10%.

The most recent IPA Audit Report contained no significant findings. In response to audit findings in the previous IPA Report, the PHA implemented all recommendations made by the IPA Auditor.

III. HISTORY OF P-BA AND AUTOMATION AT THE PHA

In the face of rent collection and maintenance problems in the mid 1970's, the agency decided to decentralize its operations, placing more responsibility and accountability on development level staff. In order to facilitate the shift to decentralized management, the PHA began development cost center budgeting in 1977, funded under the HUD Urban Initiatives Program. Initially, accounting at the development level was designed to serve the budget monitoring process. At the time, the Agency had a mainframe computer which serviced its consolidated accounting system, but development-based income and expense reporting was done manually.

When the PHA began the process of upgrading its computer capabilities in the late 1980's, its requirements included system capacity for project-based accounting and reporting. In order to select new computer hardware and software the agency established a committee of representatives from each department to define the needs to the agency. The PHA hired a large well known accounting and management firm as a consultant to develop a Request for Proposals, and to review vendor proposals.

submitted in response to the RFP. The committee called and visited numerous other PHAs to find out how the proposed systems actually worked for public housing agencies. The committee's final decision was "software driven." They selected software packages that best met their needs, and then looked at the various brands of hardware on which the software could be run. Two basic criteria were used in the final analysis of software/hardware packages:

- 1). How well does the system meet PHA needs?
- 2). How responsive is the vendor to PHA questions and problems?

The committee ultimately chose a software package that was not as powerful as other proposed packages. Rather, the final decision was based on representative customer service experience of other PHAs. They selected a software package with which other PHAs had experienced supportive customer service relations.

P-BA has evolved since it first began in the late 1970's. While P-BA reports were initially prepared manually, the Fiscal Department began preparing them on a personal computer in order to improve the timeliness with which reports could be delivered to operations staff. Department cost center accounting (for administrative units), budgeting, and reporting was implemented around 1985.

IV. PROJECT-BASED INFORMATION

The PHA's automated system generates two reports each month for department cost centers and for project cost centers. One report covers activity during the most recent month, and one includes year-to-date activity. Department cost center reports are distributed to department heads, while development level reports are transmitted to the Director of Management, who distributes and reviews them with Project Managers.

It should be noted that none of the reports include information on staff costs. The development cost center reports do include income and expense data on the following accounts:

- Dwelling Rental
- Non-salary Administrative Expense broken down into 11 subaccounts including travel, telephone, postage, etc.
- Tenant Service Recreation, Publication, Other
- Tenant Service Contract Costs, Training, Other
- Water
- Electricity
- Gas
- Maintenance Materials
- Maintenance Contract Costs
- Extraordinary Maintenance
- Replacement of Equipment
- Betterments and Additions

The department cost center reports include only the non-salary administrative expense accounts.

The report on activity during the most recent month includes four columns, under which information is provided for the accounts listed above. These columns, which facilitate budget monitoring, provide the following information:

- Amount expended (or amount of income) during the month
- Amount budgeted for the month; equal to 1/12th of the annual approved cost center budget
- Amount of variance (the dollar amount that the cost center has over-spent or under-spent the expense budget, or the dollar amount that the development has over-collected or under-collected budgeted dwelling rental)
- Percent of variance (the percent of over- or under-spending or over- or under-rent collection)

The report on year-to-date activity includes four similar columns, that facilitate comparison of income and expenses to the year-to-date budget. (The PHA's fiscal year ends on March 31st. Therefore, in the year-to-date report for June 30th, when 25% of the fiscal year has passed, the Y-T-D budget amount shown equals 25% of the approved annual budget).

The use of department cost center P-BA reports varies widely within the PHA. The majority of department heads apparently do not take the budgeting process or P-BA reporting components seriously. However, according to one department head, "It would be very difficult to function without knowing department-based cost information."

Unlike department cost center information, reports on development level information are used consistently throughout the agency.

The Director of Management uses P-BA reports to compare Project Managers' performance, illustrate points to tenant councils, and evaluate whether or not Project Managers are accomplishing what they established in their project cost center budgets. He analyzes each development's report and reviews the reports with every Project Manager at monthly meetings. The Director of Management would like a report that includes maintenance labor actual vs. budget, broken down by labor category (painter, laborer, plumber etc.) and by regular time vs. overtime.

Project Managers tend to use the P-BA reports to keep track of maintenance materials and supplies, and extraordinary maintenance. They believe that project cost center budgeting and reporting gives them more control. Because they prepare and get an approved budget with specific amounts and specific non-routine items at the beginning of the fiscal year, they feel like they have more autonomy. Budgeting makes Project Managers develop goals for their development. The P-BA reports help them to determine "if they are going under or over budget; whether they need to slow down or speed up. The budget is the most important thing that the Manager does. If you don't get it right, you miss it for the year". Project Managers would like more detailed reporting, including a breakdown of maintenance contract costs by category (plumbing, electrical, etc.), as well as a breakdown of extraordinary maintenance expenditures into specific work items.

The Fiscal Director reviews actuals vs. budget each month for every department and development in order to locate any gross variances. Having information broken down to the cost center level is very useful in analyzing and researching significant over-or under-runs.

V. CONCLUSION

According to HUD maintenance reviews and management audits, financial statements, IPA audits, and staff comments, the PHA appears to be more operationally and financially sound than it was before it decentralized operations and implemented P-BA and project cost center budgeting. Department cost center budgeting and accounting seems to have had little effect on operations, but project level budgeting and accounting has changed the management character and climate of the PHA. In part, it has had a profound effect on the PHA's efforts to decentralize the organization and responsibilities for the delivery of essential on-site operating services to public housing developments.

The Fiscal Director believes that P-BA and cost center budgeting have resulted in changes in management style. "It is a mind set issue. Project Managers now think about where in their budgets a requisition will come from. It has resulted in much more communication between the fiscal department and housing management. The budgeting and reporting processes are communication processes."

According to the Executive Director, "P-BA forces considerations about staffing that take specific developments into account. Because of P-BA we can think of distributing resources based on development characteristics - not just number of units. It enables me to fix accountability and responsibility on the Project Manager."

CASE STUDY #3

I. PHA BACKGROUND INFORMATION

The PHA is located in an urban community located in the southeastern region. It is located in an area of the State which has not seen as extensive growth as other portions of the State, but still remains vital. The surrounding communities are rural and semi-rural in composition, and much of the employment in the area has a seasonal aspect to its existence with a mix of manufacturing and agriculture. Land values appear to be steady but adequate open space remains even in the area of the central business district near which a large portion of the agency's housing is located.

The entire housing stock of the agency was funded and built with federal funds. The oldest developments, which are for families, are almost fifty years old and represent 312 of the 1,320 total units under management. There are 654 other family housing units at five other developments, two elderly highrise with 256 units, and 98 scattered site units. All family units are low-rises, located on large sites built on slab with low unit densities. It is no surprise that 60% of the units are either two or three bedroom units.

The delivery of management and maintenance services to the public housing units is divided between a Director of Management and a Director of Maintenance. The Director of Management also takes the lead role for all MIS activities. This is an atypical arrangement and appears to relate to the importance that is placed on effective MIS to assist in the review and decision-making process for field operations as well as the specific skills of the individual serving in the position. In support of the Director of Management there is an Assistant Director and six Housing Manager positions to cover the eleven major sites plus the scattered sites. Maintenance operations are run out of a central facility and the agency maintains an extensive fleet of regular and specialized vehicles to accomplish its mission. All fiscal matters are handled through the Comptroller's office including accounting and budget preparation. Although Housing Managers are site based, they have no responsibilities for maintenance at the site. Their primary role is rent collection and lease enforcement with no participation in the development of site-based budgets.

The Director of Leased Housing has only tangential involvement in agency operations beyond the leased housing program.

While there are Housing Managers at the sites which is a typical aspect of decentralized operations, the fact that maintenance is centralized and the budget is developed by senior administration with minimal input from line staff seems to point to a highly centralized decision-making and program performance review process. The Executive Director, the Director of Maintenance, the Director of Management (with MIS oversight), and the Comptroller review all reports and make all adjustments to operations based on the performance data provided in the reports.

II. PHA GENERAL CONDITION

The PHA has averaged a 95% occupancy rate over the last three years, exclusive of modernization. If on schedule modernization is taken into account, then the PHA can be considered a high occupancy agency. The Authority has been pursuing an aggressive rent collection program, resulting in the doubling of evictions in the last three years (from 53 to 121). The PHA has a Tenant Accounts Receivable balance for residents in possession of slightly more than 6.5% on a monthly average. Operating statistics generated by the PHA indicate that the average time span a unit is vacant is twenty days. The average work-order is completed in four (4) days, and of the 347 units which were vacated in 1989, 279 were filled from a waiting list that had 816 new applicants.

III. HISTORY OF P-BA AND AUTOMATION AT THE PHA

The PHA development of P-BA is linked to the availability of funding in the late 1970s through HUD's Urban Initiatives Program. The PHA saw the funds which were available as a valuable resource to accomplish the automation of the agency. The fact that the funds were targeted for the design and installation of what was known as project-based budgeting (P-BB) had no impact on the decision to pursue funds. P-BB was seen as a requirement of the grant. While the features which were required had obvious benefit for increased detail on agency operations, there was no special internal nor program support for the use of such a system. Even now the use of the system, which can track detail down to the unit level, is often used retrospectively. The detail which is available is not often used except to analyze issues identified at a

more general level of reporting. The Authority budget which is broken down and tracked at the development level is often only used to investigate indications of problems shown on an aggregated level.

The hardware system which was selected was a Data General mini-computer. A decision was made for the PHA to have its software custom-written for its needs. This addresses to the fact that ten years ago there was little if any software designed for the unique needs of PHA operations. The major benefit of the custom-designed software was that the PHA had complete control of the source code and did not suffer from the fear the software company they might have purchased the software from would go out of business. The PHA has been able to refine the software for its needs without complex coordination with an outside vendor.

The PHA is currently changing and upgrading its system to take advantage of the increased performance and value of new hardware available on the market. This move entails shifting from a mini computer and tape drive to a micro-computer with increased internal storage capacity and a tape back-up system. Once again the software is being developed in-house. The Director of Management, who also is responsible for all MIS activities, is custom-writing all software and screen displays. The major benefit of the user being the designer is that the system has been made extremely responsive to management needs without the extensive back and forth that often occurs between software designers and end-users. Besides this benefit, lower maintenance costs were cited as important reasons for the change. Only the hardware requires a maintenance contract, and this is anticipated to be at 1/10 the cost required to maintain the Data General system.

IV. PROJECT-BASED INFORMATION

The PHA's automated system generates a variety of reports, the majority of which can be considered operations orientated rather than financial. Because the group of report readers is small, many reports can and are requested as needed. Monthly summaries of budget information (income and expenses) are generated on a budget versus actual basis. Some reports are generated on a current year versus prior year basis as certain financial data is considered better evaluated against the same period prior year. This is especially true of utility expense data. The report readership consists of only the most senior staff with the Executive Director, the

Director of Management and the Director of Maintenance being the primary readers of these reports.

The development cost center reports do include income and expense data on the entire chart of accounts. There are no reports on a department by department budgetary expense basis that are generated on a routine basis. However, the PHA has developed an extensive set of reports on operations. Some of these reports cover tenant selection and leased housing operations but only in so far as they impact occupancy and program participation. These reports describe maintenance activities at a very high level of detail and show average costs for each type of maintenance task Authority-wide and development specific. Materials usage is reported on an aggregated basis and by development. Utilities are reported by development and variations between month to month and prior year are used to identify problems and capital improvement needs. For instance a determination to replace a water line was made based on increased water usage that could not be explained. The PHA uses these reports to help to evaluate the information carried in the monthly income and expense summaries by development.

The Executive Director is the primary reader and uses P-BA reports to compare project performance. In conjunction with the Comptroller, and the Director of Management and Maintenance, development activities are analyzed and necessary changes to resource allocation are made. Housing Managers do-not see any reports for their developments except for Tenant Accounts Receivable . However, periodic staff meetings are held in which information in the reports is discussed with line staff.

V. CONCLUSION

The PHA has developed tremendous internal capacity in the area of automation. Because of the strong control over its data processing needs, the PHA has developed a very sophisticated system of reports. This appears to be necessary because the decision-making process is highly centralized. In order to make informed decisions, senior staff rely on a high level of detail on operations, especially in the maintenance and purchasing areas.

Some individuals at the senior level of the PHA expressed an opinion that while the benefits of the system were significant, the organizational commitment to the

system needed to be very high in order for the system to work effectively. Because the software was designed in-house, the ability to change the system in response to changing organizational needs is strong. The PHA contends that it is able to run and maintain its system at lower than average costs because of the in-house control in design and maintenance. In addition, the cost saving realized by the use of operating and cost standards defined through the system's use has enabled the PHA to increase reserves and to plan effectively for needed improvements in a manner that appears to have improved its financial condition.

CASE STUDY #4

I. PHA BACKGROUND INFORMATION

The agency is located in an urban area with a population of approximately 68,000. The agency was established in 1934 and completed its first and still standing development in 1938. Its first CIAP expenditures occurred in 1983 (for this same development). This was also the year that the agency began developing project-based accounting.

The agency has seven developments with 1,032 units. In addition it has 1,500 Section 8/Voucher certificates in 8 different programs.

The agency is organized centrally into four divisions. The Assistant Executive Director supervises all occupancy, leasing programs, community services and special projects. The Finance Supervisor attends to purchasing, budgeting, data processing and all accounting for public housing and leasing programs. The CIAP Coordinator handles all modernization projects. The Maintenance Foreman administers all maintenance activities. P-BA and budgeting are handled by the Finance Supervisor Department.

There are no site-based managers although staff in maintenance and occupancy will be given site responsibilities where appropriate. These may be 'rotated' over a two year period most often because of the changing nature of the demands from a particular site and the need to match personnel skills accordingly.

II. PHA GENERAL CONDITION

Our observations and the HUD Field Office evaluations would lead to the conclusion that this agency has very few problems. The agency has a high occupancy rate. Of the 60 vacancies (5.8% of total units), 55 are due to CIAP renovations leaving only 5 or .5% due to turnover. It has a low turnover rate and turns around vacancies in less than 30 days. In terms of operating reserves the past year they were at 80% of maximum and were anticipating this year to be at 53%.

As noted above CIAP began in 1983 and most developments have been or are scheduled to be modernized. In general the developments are in good physical shape and require routine maintenance. The agency in fact is not budgeting for any extraordinary maintenance or betterments and additions.

III. HISTORY OF P-BA AND AUTOMATION AT THE PHA

The PHA began with P-BA in 1983, when the agency was trying to track project costs more closely. To that date there had been no way to charge costs to a particular project. From 1983 through 1987 the agency struggled to create an effective system without much success because of the inability to track inventory to projects and the difficulty of managing accounting information manually. At that point it was decided to automate with a standard packaged PHA system. This provided an inventory module which enabled the agency to establish a "perpetual inventory" system.

The agency hired a consultant in 1987 to develop an RFP for automation which was issued in August 1988. Proposals were received shortly thereafter. The agency proceeded to visit PHAs which had these systems installed and focused most particularly on the ability of the system to provide project level reports. In November of 1988 the agency had narrowed the choice to four vendors and the Board voted in favor of the most expensive system due to its high ratings on 28 variables. The system was paid for with CIAP management improvement program funds.

Installation commenced in January 1989 and will not be complete until the end of the first quarter of 1990. Consequently, the P-BA elements which are operating at the time of this report were Tenants' Information (demographics, accounts receivable, waiting list), General Ledger, Accounts Payable, Payroll, Inventory and Purchasing. Still to come was Work Orders. The system included Desktop Publishing which has been used extensively through all departments of the agency.

IV. PROJECT-BASED INFORMATION

The only regular project-based information being prepared at this time were analyses of the income, collection and vacancy losses at each project. However, it

had also been used to track utility expenditures and identify some specific causes of unusual increases in contract expenditures. At the time of the site visit, they were moving to incorporate job costing by means of time sheets. They also expected to begin providing information on project maintenance by project and by maintenance specialties and teams as soon as the work order system was functioning.

They have no intention at this time of moving to site or project-based personnel and management. However, they intend to use unit, building and project information to monitor the service needs and the agency's delivery performance more specifically than heretofore.

At the moment the agency does not have a complete list of the reports which it intends to produce. However, the original Request for Proposals to produce the MIS applications and the Proposal accepted have a lengthy list of reports which are standard. The most significant development so far has been the intensive use of the "Plain English Report Writer". Several staff use it more than the "Standard Reports" to provide information requested and most particularly to answer questions from the Executive Director and the Board.

V. CONCLUSION

The staff of this centrally managed agency are enormously enthusiastic about automation and the PBA functionality of the system. This can be attributed in part to the fact that they have had some real questions answered by the Report Writer capacity of the system, because of the agency's use of the standard financial applications and because of the improvement in efficiency in accounting. In the case of these items, staff have received immediate and tangible benefits.

HUD-1273-PDR(1)
June 1991

