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

Public Housing Authority Experience with Private Management

A Comparative Study

PUBLIC HOUSING AUTHORITY EXPERIENCE WITH PRIVATE MANAGEMENT: A COMPARATIVE STUDY

Prepared for:

U.S. Department of Housing and Urban Development
Office of Policy Development and Research
Washington, DC 20410

Prepared by:

The Granville Corporation
Washington, DC 20005

Contract HC-5548

May 1983

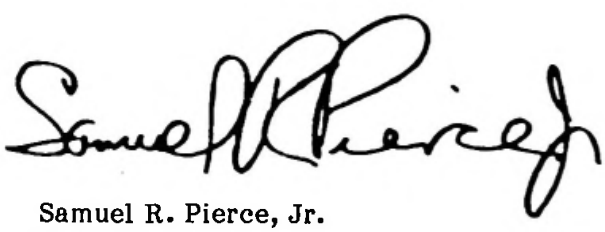
FOREWORD

The need to expand and upgrade public services while cutting costs is a challenge that constantly confronts public officials. The task has been particularly difficult for public housing authorities. To meet this challenge, PHAs are experimenting with various alternatives for reducing their high operating costs. The following study explores one such option: contracting with private firms to manage or maintain public housing.

Throughout my tenure as HUD Secretary, I have strongly encouraged combining public and private sector resources to improve life in our cities. In many cases, this approach results in creative, cost-effective solutions to urban problems.

In addition to exploring the advantages and disadvantages of privately-managed public housing, this publication and its companion volume, Public Housing Authority Experience with Private Management: A Sourcebook, will offer PHAs useful information for structuring agreements and monitoring private contractors' performance.

I am pleased to make this information available for your use.



Samuel R. Pierce, Jr.
Secretary

ACKNOWLEDGEMENTS

The Granville Corporation wishes to thank Robert Sadacca and Frank Wann who served as expert consultants for this study and participants of the NAHRO review panel and HUD central office staff that reviewed drafts of this report. Granville would also like to acknowledge the many individuals that provided us assistance at the study sites, including Board Chairmen, and HUD regional and area office staff. Specifically, we would like to thank the following individuals and their staffs for their time, cooperation, and valuable assistance:

David Blair, Contracting Officer, Meade and Pennington County Housing and Redevelopment Authorities

Ron Morehead and Edna Tate, Tishomingo and Wynnewood Housing Authorities

Ruth Uloth, Executive Director, Barnes County Housing Authority

Vincent Tappe, Executive Director, Housing and Redevelopment Authority of Hibbing

John Wombheim, Assistant to the Director, Housing Authority of the City of Fargo

Irv Heimbuck, Executive Director, Hot Springs Housing and Redevelopment Commission

Charlene Pratka, Executive Director, Prague Housing Authority

H. John Loerch, Mercer County Housing Authority

Blake Strehlow, Cass County Housing Authority

Lewis Spence, Executive Director, Boston Housing Authority

Sidney Glee, Administrator, Property Management Division, D.C. Department of Housing and Community Development

Norman Seay, Executive Director, St. Louis Housing Authority

Thomas Mangogna, former Executive Director, St. Louis Housing Authority

Paul Tom, Executive Director, Hawaii Housing Authority

John Galeotos, Executive Director, Housing Authority of the City of Cheyenne

Robert J. Fitzgerald, Executive Director, Cuyahoga Metropolitan Housing Authority

Jack Quinn, Executive Director, Housing Authority of the City of Pueblo

David Bohl and Scott Carpenter, HUD Regional Office; Denver, Colorado

TABLE OF CONTENTS

LIST OF EXHIBITS

LIST OF EXHIBITS (continued)

LIST OF EXHIBITS (continued)

EXECUTIVE SUMMARY

This study examined an alternative method of providing public housing management services to tenants -- service delivery by private management companies under contract with public housing authorities. The study's objectives were to:

- Examine the direction and extent of differences in cost and performance between the contract sites and comparable conventionally managed sites.
- Synthesize the contract management experiences of PHAs and document them in a format useful for practitioners.

The study team was able to visit and collect detailed data on 19 of the 21 sites in the United States where private for-profit firms had been under contract to manage public housing for longer than one year as of August, 1982. A quasi-experimental design was structured which included a comparision group of conventionally managed sites. The conventionally managed sites were selected based on their similarity with the privately managed sites in terms of 14 critical variables.

The group of privately managed sites was composed of two subgroups: six rural sites where the PHA's entire housing stock was privately managed; and thirteen urban sites where one or more projects were privately managed within a PHA.

Cost and performance data were collected during field visits to both contract and conventional sites. In all, 12 cost indicators and 29 performance indicators were examined. Additionally, structured interviews were conducted on-site with board members, executive directors, and staff of the PHAs, in addition to owners and employees of the various contracting firms and over 500 tenants, including tenants at each contract and conventional site.

Differential results are presented on cost and performance for the six rural contract PHAs, the six urban elderly projects, and the seven urban family projects. The results are stated in terms of comparisons between the sites under contract management and comparable sites under conventional management. Cost and performance comparisons for all 19 contract management sites as a group are not provided in this report because the differences in cost and performance between the urban projects and rural PHAs, and between urban family and elderly projects were so large that aggregate discussions would be misleading.

Rural PHAs

Neither total routine expenses sensitive to management intervention nor major expense components differed significantly between rural contract and conventional sites when evaluated by t-tests and analysis of variance techniques. One minor differential, which was marginally significant, was that employee benefits were about $2.30 per unit month (pum) lower at contract sites.

Another difference noted was that five percent of the tenants at rural sites under contract management did not pay rent in the month that it was due. This resulted in an average of four percent of total rents being delinquent each month, in contrast to a one percent delinquency rate at comparable conventional sites.

Maintenance and groundskeeping were equal at rural sites under contract management and comparable conventional management. This conclusion resulted from analysis of tenant perceptions, our own visual assessment, and a comprehensive set of performance indicators on the volume of work handled, routine and emergency maintenance response times, vacant unit preparation time, performance of preventive maintenance, and the number of times per week that common areas, public spaces, and grounds were cleaned.

The tenant interviews revealed that the contract managers were slightly more strict about tenant behavior than conventional managers. Crime and social problems were rare at the rural sites in general and did not differ noticeably by type of management. Tenant relations with management and with other tenants also did not differ by management type at rural sites.

On balance, **contract and conventional management were approximately equal in cost and performance at the rural sites in this study.**

Urban Elderly Projects

Total routine expenses sensitive to management intervention were $21.00 pum (28 percent) higher at urban elderly sites under contract management than at comparable sites under conventional management. This differential was split somewhat equally between higher administrative expenses ($6.00 pum), higher maintenance and operations expenses ($8.50 pum), and higher expenses of other types including protective services and tenant relations ($6.50 pum). The management fee, which was allocated to the administrative expense line item, was a major cause of the higher value of this line item. Employee benefits also were $2.30 pum lower at contract than conventional sites.

Performance at urban elderly sites under contract and conventional management was similar. Rental delinquencies, maintenance, crime and social problems, and tenant relations all were equivalent by most measures. A few significant differences were observed. At contract sites, management was slightly more strict, and tenants reported that the grounds and trash areas were slightly less clean. Vandalism costs over the past year were roughly $16 per unit at contract sites, but only $2 per unit at conventional sites. And contract managers knew 86 percent of their tenants personally, while conventional managers knew only 34 percent.

Thus, the urban elderly projects under contract management in this study were $21.00 pum more expensive to operate than comparable projects under conventional management, although performance at the contract and conventional sites was largely equivalent.

Urban Family Projects

Total routine expenses sensitive to management intervention did not differ significantly between comparable urban family projects under contract and conventional management. Administrative expenses at the contract sites were an average of $5.00 pum higher than at the conventional sites, primarily due to inclusion of the management fee in this expense category. Conversely, employee benefits were $2.30 pum lower and other expenses were slightly lower at contract sites.

Performance at urban family projects managed by contractors generally was less effective than than at comparable conventional sites. Rental and occupancy differences were particularly noticeable. Average rent delinquencies at month's end over a one year period were 27 percent in terms of both tenants and dollars at contract sites, 12 percent higher than at conventional sites. Without exception, delinquencies at each urban family site under contract management were equal to or higher than at its comparison site under conventional management. Urban contract managers also sent fewer delinquency notices and initiated fewer evictions.

Maintenance performance at urban family sites under contract and conventional management was not significantly different according to the tenants interviewed and as measured by most performance indicators. The only difference observed was that management was a bit more strict about tenant behavior. Tenants also reported that the grounds and trash areas were slightly less clean at sites under contract management.

Crime and social problems indicators revealed greater problems at urban family sites managed by contractors than at comparable sites under conventional management. On average, there were twice as many abandoned cars per 100 units at contract sites (3.2 versus 1.5), the vandalism cost of $26 per unit per year was more than three times the cost at conventional sites, and robberies and burglaries were more than a third higher (11.7 versus 7.0 per 100 units). Safety at the contract sites, however, had increased over the past year according to the tenants, and the percentage of tenants who felt safe on the grounds and in the buildings at sites managed by contractors did not differ significantly from the percentage at conventional sites.

Tenant relations with management and relations among tenants were similar at the contract and conventional sites, although contract managers at urban family sites knew 76 percent of their tenants personally compared to 52 percent at comparable conventional sites.

Thus, **expenses at the urban family sites managed by contractors in this study were not significantly different from expenses at comparable sites under conventional management. Tenant relations and performance on maintenance and operations functions also were equivalent for the two types of management. Urban family sites with contract managers, however, had 12 percent higher rent delinquencies and roughly twice the incidence of crime and social problems as comparable sites with conventional managers.**

Conclusion

On average, neither cost nor performance differed significantly between the rural PHAs in this study under contract and conventional management, except that rural family sites experienced slightly higher rent delinquencies. Thus, if a rural PHA finds it desirable to contract for private management, it probably could do so at a cost comparable to public management and achieve comparable performance. Particular attention should be given to rent delinquency in the monitoring process, and the PHA should seriously consider including a penalty clause in the man-

agement contract that would take effect if month-end delinquencies rose above previous levels. The PHA may be able to obtain private management that is initially more cost-effective than public management, but this differential may not persist without regular competitive rebidding.

Cost effectiveness was evaluated differentially between family and elderly projects at urban sites. The urban elderly projects under private management proved approximately 28 percent higher in cost than comparable conventionally managed projects, but most aspects of performance were not significantly different. Thus, we conclude that it is extremely unlikely to be cost-effective to contract with private firms to manage urban elderly projects if the agreements are structured in a similar manner to those included within this study.

Urban family sites displayed no significant differences in cost, but performance at these sites was mixed. Rental and occupancy functions were handled less effectively by private managers and crime and social problems were worse, but maintenance and tenant/management relations were similar to the results achieved at conventional sites. Private management may be cost effectively implemented at urban family projects. However, special procedures and enhanced performance monitoring probably would be required to ensure performance equivalent to conventionally managed sites. The level of rental delinquencies, in particular, may be reduced if the management fee is stated as a percent of rent collections, with incentive and penalty clauses for particularly high and low collections. However, if the contractor does not control tenant selection at the site, or the eviction process is very slow or unduly forgiving of non-payment of rent, the contractor is unlikely to consider such rent collection incentives acceptable. Another product of this study, the Sourcebook for Private Management of Public Housing, gives further information on how PHAs went about contracting for private, for-profit management and how they structured contracts to encourage good performance.

I. INTRODUCTION

STUDY PURPOSE

Public housing operating costs in the United States now annually exceed 2.4 billion dollars. Many methods have been tried to control the costs of management and operations while maintaining service quality. This study evaluates one alternative method--public housing service delivery under contract by private for-profit firms.

Most of the public housing authorities (PHAs) across the country engage the private sector in some fashion to provide a product or service. These services typically cover a broad spectrum, from highly specialized engineering and maintenance services, to more generalized services such as accounting and bookkeeping. However, a few PHAs have contracted with a private property management firm to assume primary responsibility for the management of their housing stock or to manage specific projects. A recent HUD study concluded that less than one percent of the nation's 3,000 PHAs have attempted private "contract management." The current study's purpose is to compare the operating performance and cost of contract management and conventional management of comparable public housing units. Two research objectives were designated.

Objective 1: To examine the direction and extent of differences in cost and performance between sites or projects managed primarily by private firms and those managed by conventional PHA personnel. The demands for efficiency of public service provision, including public housing management service, is great. An alternative service delivery mode is one potential means for reducing costs. Least-cost solutions are not appropriate, however, unless they yield acceptable levels of results. For this reason, relative performance levels and quality of service also were important focuses of this research.

Objective 2: To synthesize the contract management experiences of PHAs and to document them in a format useful for the practitioner-level public housing audience. One benefit of the limited number of PHAs currently engaging private management firms was that it permitted the research team to visit each site and to conduct interviews with the key PHA personnel, board members, representatives of the management firm, and with a limited number of tenants. From these efforts a body of knowledge was produced to be utilized by the larger public housing audience. This information resource base has been formatted into a companion volume to this final report entitled: Sourcebook for Private Management of Public Housing. The Sourcebook presents practical information regarding the structure of existing PHA/management firm agreements. It also presents valuable "lessons learned" from these endeavors.

Finally, an important sub-objective of this research was to develop a methodology for examining the relative costs and benefits of contracting out other housing functions within public housing authorities. This "discrete function study methodology" appears in Appendix C. The methodology includes an analytic framework for conducting future national level studies of the costs and benefits of contracting out other housing management functions, and an inventory of services performed by the private sector at the study sites visited. This inventory can serve as an initial information source for future national level studies in this area.

Organization of This Report

The remainder of this introductory chapter is organized into sections entitled: the Research Design and Selection of Study Sites, Descriptions of Privately Managed Sites, and, Functions and Responsibilities of Private Management Firms.

Chapter II addresses the Research Methodology and is organized into the following sections: Cost Finding Methodology, Assessing Management Performance, Data Collection Techniques and Procedures, and Data Processing Plan.

Chapter III describes the Results of Interviews with Staff of PHAs and Management Firms and is organized into the following sections: Interviews with PHA officials, and Interviews with Key Project Staff.

Chapter IV presents a Comparative Analysis of Cost and Performance and is organized into the following sections: Statistical Analysis Plan, Comparative Cost Analysis, and Comparative Performance Analysis.

The Appendices include the following:

- Treatment Site Profiles
- General Cost Finding Instructions
- Discrete Function Study Methodology

RESEARCH DESIGN

This section discusses the study design. It is organized into three subsections that address: the identification of treatment sites; the quasi-experimental design; and, the selection of control sites.

Identification of Treatment Sites

Through a previous research effort, HUD's Office of Policy Development and Research identified a group of twenty-three PHAs that currently or previously had used private management. This group served as a pool from which a group of study sites were selected. Specific sites were eliminated from the original pool for the following reasons:

- The site was managed by a non-profit or tenant management organization.
- The site had been under private management for less than one year.
- The site was no longer under private management. Or,

- The site did not currently receive a subsidy under the Performance Funding System (PFS) and also was not receiving one in the year prior to contracting out.

With respect to the last criterion, budget considerations dictated the elimination of one rural site from the study. Granville and HUD decided to eliminate the site that did not receive a PFS subsidy because the lack of subsidy significantly differentiated this site from most housing authorities. We felt that an additional site receiving subsidy would contribute more to the study findings.

The selected group of privately managed or "treatment" sites that met the above criteria are presented in Exhibit 1.

The Quasi-Experimental Design

As indicated in Exhibit 1, the treatment group is divided into urban and rural sites. These two groups are further distinguished from one another by the structure of the respective management agreements. At urban sites only single projects were managed by private contractors. In contrast, at rural sites the PHA (through its board) contracted for overall management of all projects and functions.

Thus the treatment group is composed of two subgroups--entire rural PHAs and individual urban projects. Accordingly, a quasi-experimental design using two matched non-equivalent comparison or "control" groups was constructed. This design is graphically illustrated below in Exhibit 2 and proved to be an effective means of assessing relative costs and performance at the treatment sites.

EXHIBIT 1

PRIVATELY MANAGED SITES

Urban

1. Torre-Unidad (2-49)
   Boston Housing Authority
2. West Newton Street (2-58)
   Boston Housing Authority
3. Edgewood Terrace (1-46)
   Nat'l Cap. Housing Auth.
4. Kuhio Park Terrace (1-10)
   Hawaii Housing Authority
5. Kuhio Homes (1-7)
   Hawaii Housing Authority
6. Waimaha/Sunflower (1-57)
   Hawaii Housing Authority
7. Towne XV (1-15)
   St. Louis Housing Authority
8. University House (1-20)
   SLHA
9. Parkview (1-19)
   SLHA
10. Kingsbury Terrace (1-18)
    SLHA
11. McMillan Manor (1-16)
    SLHA
12. Blumeyer (1-9F)
    SLHA
13. Burke (2-3)
    Cheyenne Housing Authority

Rural

1. Mercer County
   Mandan, N.D.
2. Cass County
   Casselton, N.D.
3. Pennington County
   Rapid City, S.D.
4. Meade County
   Rapid City, S.D.
5. Tishomingo
   Tishomingo, Oklahoma
6. Wynnewood
   Wynnewood, Oklahoma

Exhibit 2

Quasi-Experimental Design

Treatment	Control
1. Contracted Out PHAs	3. Conventionally Managed PHAs
2. Contracted Out Projects	4. Conventionally Managed Projects

Construction of the four discrete subgroups as shown in Exhibit 2 permitted three separate avenues of analysis:

1) Comparisons of cost and performance between treatment PHAs and projects and control PHAs and projects (Cells 1 and 2 combined versus Cells 3 and 4 combined).

2) Comparisons of costs and performance between PHAs and projects (Cells 1 and 3 combined versus Cells 2 and 4 combined).

3) Determinations of whether treatment had differential effects on PHAs versus projects, i.e., whether treatment affected PHAs significantly more (or less) than it affected projects.

While points (1) and (2) above are straightforward, point (3) describes a benefit of the design that permitted testing for the presence of significant interactions between types of sites (i.e. rural and urban) and types of management. That is, for a given variable such as cost, did enhancing or decrementing effects that were not explained by the row and column differences obtained result from the special interaction of management and site types. Tests of the significance of these interaction terms indicated whether one type of management is especially suited for a rural or urban site.

Selection of Control Sites

Because no two PHAs or projects are exactly alike with respect to their surrounding neighborhoods, their tenants, building characteristics, etc. and because these characteristics can significantly affect management performance, great care was exercised in selecting control sites to ensure their comparability with treatment sites. Given that no two projects or PHAs are exactly alike, the objective of the selection procedure was to establish a reasonable similarity between a given treatment site and its matched control site. Moreover, through the procedure employed we sought to establish that the treatment sites as a whole did not systematically differ from the control sites in a manner that would invalidate the treatment/control performance comparisons. A five-step procedure was employed as follows:

1) Based on information available in the latest Consolidated Development Directory[1], candidate control sites were identified.

2) Candidate sites then were contacted and data to support the "matching" process were obtained.

3) Statistical tests then were performed which detected significant differences among the 23 specific variables used for matching sites. Sites causing discrepancies were replaced.

4) Each control and treatment site was visited, and a final determination of its suitability as half of a "matched pair" was made.

5) A final statistical check was performed after the field visits, substituting sites that had been selected during the field visits to replace unsuitable sites.

---

[1]Consolidated Development Directory (Report S-11A), December 31, 1976, Department of Housing and Urban Development.

Initial Identification of Candidate Control Sites. The procedures for locating candidate control sites differed somewhat between the small treatment PHAs and the treatment projects in large PHAs. In both cases, however, the project and PHA information in the latest available Consolidated Development Directory was used initially to identify similar PHAs and projects. Specifically, the items of information referenced were:

> Type of Program--to assure that all projects were conventional low-rent housing (e.g., not leased housing).
>
> Total number of units--to match the projects and PHAs on overall size.
>
> Number of elderly units--to match the projects and PHAs on percent elderly.
>
> Rooms per unit--to match the projects and PHAs on average unit size.
>
> Date of full availability--to match the projects and PHAs on age of buildings.
>
> Number of projects--to match the PHAs on number of projects managed.
>
> Locality--to match the PHAs with nearby PHAs in the same state or, failing that, to match them with PHAs in nearby states.

In matching treatment and control PHAs, all potential control PHAs in the same state first were compared to the treatment PHA on the dimensions listed above and sites that were roughly equivalent to the treatment PHA were identified. This initial screening was more impressionistic than rigorous in a statistical or formal sense. In forming these tentative matches we sought to eliminate differences between the treatment and control sites so sizeable that a reasonable person would be led to reject the notion that the two are roughly equivalent. For example, the difference in size between a 100-unit and a 500-unit PHA would lead to such a rejection, whereas the difference in size between a 50-unit and 60-unit PHA would not. If no likely control PHAs

were located within the state for a given treatment PHA, the characteristics of PHAs in nearby states were examined in order to find one or more promising control sites.

The procedure for matching treatment and control projects was somewhat different from the one used for PHAs. All potential control projects in the same PHA were first compared to the treatment project(s). If no likely control projects were located within the PHA for a given treatment project, one or more similar PHAs in the same or nearby states were identified.

Contacting the Candidate Control Sites. The candidate sites then were contacted by telephone to ascertain/confirm the following items of information concerning the sites:

1. Total number of units in the project/PHA
2. Total number of public housing projects under management for PHA-level sites
3. Whether projects of interest contain scattered sites
4. Number of high-rise and low-rise units
5. Number of family and elderly units
6. Applicable vacancy rates
7. Estimate of MOD needs
8. Bedroom distribution
9. Average age of project buildings
10. Number of adult and child tenants
11. Resident racial composition
12. Number of AFDC households
13. Number of single parent households
14. Average tenant income

Additionally, the individual contacted was asked if any unique quality about the site e.g., a tenant strike, would make it inappropriate as a control.

Statistical Tests. As mentioned earlier we did not expect any given treatment/control site pair to be matched in every respect. We did endeavor to ensure that as a whole the treatments did not differ systematically from the control samples. From the information collected from the candidate control sites (and obtained earlier by HUD on the treatment sites) we then formed 23 variables corresponding to items 1-14 listed above. For each variable, we then statistically compared the means of the matched treatment and control sites using the Student's "t" test. If a pattern of significant differences emerged, we examined the individual matched pairs to find out the source of the largest differences. Data from substitute control sites then were used in the statistical tests to see if the number of significant differences was thereby reduced to a chance level. This iterative process continued until the statistical tests indicated that the treatment and control sites were not systematically different along the dimensions examined.

Given the number of separate statistical tests run (over 60), one might expect on the basis of chance alone that a few significant differences would be found. (At the .05 level of significance, one would expect 3 significant differences, assuming that each test was made independent of the others.) In fact, 3 tests indicated significant mean differences between the treatment and control samples--a finding that can readily be attributed to chance. In other words, the differences in means obtained between the treatment and control sites on the variables tested did not indicate any significant tendency for one type of site or the other to have advantageous building, tenant or operating income characteristics.

Exhibit 3 presents the final list of matched treatment and control groups.

EXHIBIT 3

FINAL LIST OF TREATMENT AND CONTROL SITES

Urban Sites

Treatment	Control
1. Torre-Unidad (2-49) Boston Housing Authority	1. Lower Mills (2-57) Boston Housing Authority
2. West Newton Street (2-58) Boston Housing Authority	2. Whittier Street (2-11) Boston Housing Authority
3. Edgewood Terrace (1-46) Nat'l Cap. Housing Auth.	3. Garfield (1-37) NCHA
4. Kuhio Park Terrace (1-10) Hawaii Housing Authority	4. Kalihi Valley Homes (1-5) Hawaii Housing Authority
5. Kuhio Homes (1-7) Hawaii Housing Authority	5. Palolo Valley Homes (1-8) Hawaii Housing Authority
6. Waimaha/Sunflower (1-57) Hawaii Housing Authority	6. Kawhole Noni (1-56) Hawaii Housing Authority
7. Towne XV (1-15) St. Louis Housing Authority (SLHA)	7. Puritas (3-56, 3-50, 3-38) Cuyahoga Metro Housing Authority (CMHA)
8. University House (1-20) SLHA	8. Apthorp (3-37) CMHA
9. Parkview (1-19) SLHA	9. Bohn Tower (3-42) CMHA
10. Kingsbury Terrace (1-18) SLHA	10. Miles-Elmarge (3-41) CMHA
11. McMillan Manor (1-16) SLHA	11. Mark Twain (1-11) SLHA
12. Blumeyer (1-9F) SLHA	12. Garden Valley (3-13, 3-19, CMHA 3-20, 3-27)
13. Burke (2-3) Cheyenne Housing Authority	13. Mesa Tower (2-3) Boulder Housing Authority

EXHIBIT 3 (Cont.)

FINAL LIST OF TREATMENT AND CONTROL SITES (Cont.)

Rural Sites

1. Mercer County Mandan, N.D.	1. Barnes County Valley City, N.D.
2. Cass County Casselton, N.D.	2. Hibbing Hibbing, Minnesota
3. Pennington County Rapid City, S.D.	3. Fargo Fargo, N.D.
4. Meade County Rapid City, S.D.	4. Madison Madison, S.D.
5. Tishomingo Tishomingo, Oklahoma	5. Stratford Stratford, Oklahoma
6. Wynnewood Wynnewood, Oklahoma	6. Prague Prague, Oklahoma

DESCRIPTIONS OF PRIVATELY MANAGED SITES

As noted in Exhibit 1 on page 5, the treatment sample included 6 rural PHAs and 13 projects in 5 urban PHAs. Exhibit 4 illustrates some salient characteristics of these sites. In the urban sites, 5 projects are for the elderly, 7 are for families, and one houses both families and the elderly. The elderly projects all are high-rise structures; with two exceptions, the rest of the urban projects are low-rise. One of the rural PHAs houses the elderly in a high-rise. The other rural sites offer housing to both the elderly and families, usually in low-rise projects. Brief profiles of the physical characteristics and management histories of treatment sites are provided in Appendix A. Comparison characteristics of the control sample are provided in Exhibit 5.

In all cases, family projects are controlled with family projects and elderly projects are controlled with elderly projects. In general, a close match also was achieved between high-rise and low-rise units and in total units. Urban treatment and control projects were drawn from the same PHA except for projects in St. Louis and one in Cheyenne, which were controlled with projects from other states. In addition to these urban projects, one rural PHA in South Dakota was controlled with an out-of-state project. In these cases, we took care to assure that no major biases arose due to differences in state public housing laws.

FUNCTIONS AND RESPONSIBILITIES OF PRIVATE MANAGEMENT FIRMS

As specified in contracts at the study sites, management agreements always involved the coordination and supervision of multiple areas of housing services. Staff delivering those services alternatively could be employed by the PHA or the contractor, depending on the structure of the individual contract. Although the management contracts were somewhat similar, they are

EXHIBIT 4

CHARACTERISTICS OF STUDY SITES: TREATMENT SITES

PHA/Project	N Units	Type	Years Under Contract	Year Built [1]
St. Louis				
- Blumeyer	574	family mixed low and hi-rise	7	1968
- Kingsbury	147	elderly hi-rise	10	1971
- Town XV	36	family townhouse and scattered	10	1971
- McMillan	34	family townhouse	7	1972
- Parkview	397	elderly hi-rise	8	1973
- University House	201	elderly hi-rise	8	1974
Cheyenne				
- Burke	75	elderly hi-rise	4	1975
Washington, D.C.				
- Edgewood Terrace	334	family, elderly, low-rise	9	1973
Boston				
- Torre-Unidad	201	elderly hi-rise	7	1975
- West Newton	136	family townhouse	9	1973
Hawaii				
- Kuhio Park Terrace	614	family hi-rise	8	1966
- Kuhio Homes	134	family low-rise	8	1954
- Waimaha/Sunflower	130	family low-rise	1	1981
Mercer Co., N.D.	40	family, elderly, low-rise	5	1972
Cass Co., N.D.	196	family, elderly, low, hi-rise	4	1968
Pennington Co., S.D.	476	family, elderly, low, hi-rise	7	1972
Meade Co., S.D.	80	elderly hi-rise	7	1976
Tishomingo, Okla.	36	family. elderly, low-rise	2	1972
Wynnewood, Okla.	28	family, elderly, low-rise	1	1970

[1] For rural sites data is year PHA was established.

EXHIBIT 5

CHARACTERISTICS OF STUDY SITES: CONTROL SITES[2]

PHA/Project	N Units	Type	Year Built[1]
Cleveland			
- Garden Valley	628	family low-rise	1968
- Miles-Elmarge	140	elderly low, hi-rise	1971
St. Louis			
- Mark Twain	18	family town house	1969
Cleveland			
- Paritas	40	family low-rise and scattered	1976
- Bohn Tower	266	elderly hi-rise	1972
- Apthorp	166	elderly hi-rise	1973
Pueblo			
- Mesa Tower	103	elderly hi-rise	1968
Washington, D.C.			
- Garfield	279	family low-rise, elderly hi-rise	1965
Boston			
- Lower Mills	183	elderly hi-rise	1972
- Whittier Street	200	family low-rise	1953
Hawaii			
- Kalihi VAlley	400	family low-rise	1953
- Palolo VAlley	118	family low-rise	1958
- Kauhale Noni	50	family low-rise	1981
Barnes Co., N.D.	50	family scattered elderly low-rise	1973
Hibbing, MN	256	family low-rise elderly low-rise	1963
Fargo, ND	554	family scattered elderly hi, mid-rise	1975
Hot Springs, SD	100	Elderly low-rise	1972
Stratford, OK	61	family low-rise elderly low-rise	1976
Prague, OK	40	family low-rise elderly low-rise	1969

[2] Control sites are listed in the same order as the treatment sites with which they are matched. E.g., Garden Valley is the control for Blumeyer, and Prague is the control for Wynnewood.

more notable for their differences. This section describes the structure of the management agreements at a broad level in order to provide a context for the findings and observations presented in subsequent chapters. It should be noted that the functions and responsibilities of contractors at many study sites often had evolved over time. These changes were prompted by specific experiences with the contractual relationship by both parties and by procedural and organizational changes internal to the respective authority. The reader is referred to volume 2 of this report, the Sourcebook for Private Management of Public Housing for a fuller discussion of this topic.

Only six basic contract formats were encountered, two from rural PHAs and four from urban PHAs. The basic similarities between the urban and rural contracts were:

- All agreements involved multiple services areas (e.g. administration, maintenance).
- Contractors always were involved with maintenance and tenant services.
- Contractors always performed recertifications of tenant eligibility and determined rents.
- Contractors always pursued delinquent rent, even if they were not responsible for collecting rent originally.

Rural contracts were inherently more comprehensive in scope than urban contracts since they covered the management of the entire PHA. In general, at rural sites contractors supervised all activities including:

- Tenant recruitment, screening, and orientation
- Lease execution
- Tenant recertifications
- Collection of rent and other receivables
- Lease enforcement
- Maintenance (routine and non-routine)

- Budget preparation and submission to the PHA and to HUD
- Personnel management (hire, supervise, evaluate, dismiss)
- Disbursement processing, including payroll.

The management fee in one of the two basic rural contracts included the costs of providing administrative and accounting services; the second contract's fee covered these costs plus maintenance personnel expenses. Similarly, one rural contract encouraged the agent to hire residents to fill maintenance and janitorial positions, while the other simply encouraged tenant participation in the maintenance and janitorial functions. In some instances, paragraphs were added to the basic contract to accommodate contractor management of other programs besides low-rent public housing, such as the Section 8 Existing Housing Program or leased housing.

The four urban contracts outlined quite divergent sets of responsibilities. Each PHA had its own perception of which functions to contract out and which to perform "in-house."

On a general level, the urban PHAs limited or defined areas in which contractors could exercise discretion more so than rural PHAs. For example, urban PHAs were more explicit than rural PHAs in their discussions of the contractors' roles in tenant screening and leasing.

The four urban PHAs compared as follows in contracting out management functions:

- Three PHAs allowed contractors to select tenants, while all required that the contractors orient and assign tenants.
- Contractors prepared and executed leases at only two PHAs.
- All four PHAs used contractors to pursue delinquent rents.

- All four PHAs used contractors to recertify tenant income.
- All four PHAs required some contractor involvement in social services, although the extent of involvement varied. Only two dictated an active role in tenant-management relations.
- All four PHAs contracted out management of maintenance and operations services.
- Three PHAs used contractors to prepare project-level budgets for submission to the PHA.
- Only two PHAs used contractors routinely to collect rents. At one of these sites, rent collection only was added to the contracted responsibilities after problems were encountered in PHA collection activities.
- Financial reporting by contractors was limited, and only one PHA required any significant non-financial reporting.
- One of the four PHAs processed all disbursements while contractors paid non-personnel expenses at the other three. All PHAs processed payroll for PHA employees.

The basis for computing contractor compensation also varied considerably among projects. Generally, contractors were reimbursed by the PHA for payment of direct project expenses, in addition to receiving a fee for their management services. Management fees for services rendered were usually based on a flat charge for each (occupied) unit per month or a fixed percentage of rent collections. However, this base fee was adjusted in various contracts to provide performance incentives (or penalties) to the contractor. For example, one contract included a bonus of an additional four percent of the fee if rental income was increased seven percent, accounts receivable was decreased by five percent, and the contractor adhered to the PHA energy conservation program. The same contractor also received a penalty of one dollar per day for each delayed income recertification. A final complicating factor in determining contractor fees was that fee remuneration sometimes was imbedded in reimbursements for

direct project expenses and proved difficult to extract with precision. This latter point made it difficult to examine the impact of fees on cost differentials presented in Chapter IV.

Contractor fees were not established competitively at several sites and were not subject to rebidding when contract terms expired at several sites. The Sourcebook for Private Management of Public Housing provides a detailed discussion of how fee amounts were established and the different bases used to compute them.

II. RESEARCH METHODOLOGY

The first two sections of this chapter address the scope of the cost and performance analysis and are respectively entitled: Cost Finding Methodology, and Assessing Management Performance. The final two sections of the chapter address implementation of the study design and are entitled: Data Collection Procedures and Techniques, and Data Preparation and Data Processing Procedures.

COST FINDING METHODOLOGY

This section has two subsections which respectively address (1) cost finding procedures and (2) availability of multi-year data.

Cost Finding Procedures

For the purposes of this study, we defined "cost" as the total operating cost of a project or PHA. This "bottom line" approach recognizes that the cost of management is best measured by the financial performance of the functions managed rather than the isolated expenses related to management itself. Moreover, the total cost of operations is a more relevant measure than the fee paid the contractor, especially when the array of contracted services vary between study sites.

The need for comparability between sites also dictated that cost information be collected in consistent terms. We therefore decided to use the HUD Low-Rent Public Housing chart of accounts for cost categorization. We selected the Statement of Operating Receipts and Expenditures (HUD 52599) as the basic source document, since this document is required of all PHAs and reports actual expenditures rather than simply the funds budgeted.

Each study site was equated to a cost center for this endeavor. For the rural sites, which were entire PHAs, the operating expenses required for our analysis and the expenses presented on the PHA's HUD 52599 were identical. While minor adjustments were needed (discussed below), data collection thus was simplified.

To the contrary, urban sites demanded the use of a methodology to derive expense data because the cost center was a single project within a multi-project PHA. Although some of these particular PHAs had project-based cost reporting systems, cost reporting did not universally include all relevant direct and indirect operating expenses. For example, many times only certain accounts or portions of certain accounts (e.g., administrative salaries) were reported at the project level. In these cases a cost allocation methodology was employed. In cases where direct project expenses could not be ascertained fully or were not recorded in project level records, centrally recorded expenses were allocated to the subject project to derive a suitable estimate of these costs. Similarly, indirect expenses (e.g. legal expenses) associated with the site but recorded centrally were allocated to the subject project to yield a second component of the total costs associated with the subject project.

Whether allocating direct or indirect expenses, a basic allocation formula was used. Simply stated, the formula prorated the subject project's share of the aggregate expense data that were available in PHA financial records for a particular expense category. The basic allocation formula can be stated as:

$$\text{Project Level Cost} = \text{PHA level cost} \times \frac{\text{Project Value for Allocation Factor}}{\text{PHA Value for Allocation Factor}}$$

where an allocation factor is a quantifiable index that correlates with the service (i.e. expense) being allocated. For example, if administrative expenses were only available at the PHA level and had to be derived for a specific project, the selected allocation factor was "number of bedrooms." That is, we esti-

mated the portion of the PHA administrative expense that went to the project by noting the proportion of bedrooms in the project to total bedrooms in the PHA. If the number of bedrooms was unavailable or seemed inappropriate, an alternative allocation factor was used. (In this case, "number of dwelling units" was used.) When the PHA's project-level cost reporting system automatically allocated indirect expenses, we ensured that the allocation factor used was comparable to, or more reliable than, the allocation factors selected for the study. This latter point was particularly true of PHA costs associated with administering and monitoring contractor services at treatment sites. Every effort was made to achieve a picture of "actual" total costs at these projects. Exhibit 6 presents the allocation factors that were used at each site by budget category and subcategory.

Finally, the focus of the data collection and subsequent analysis was on operating expenditures and excluded capital expenditures. We felt that operating expenditures (which also included both routine and non-routine maintenance) reflected financial management components more under the control of (project) managers. Capital expenditure decisions, on the other hand, are more often made at higher levels in the PHA and are usually based on factors beyond management control (e.g., age of physical structures).

Cost Allocation Instructions. Prior to collecting cost data in the field, all project team members were trained in cost allocation. Each was given a copy of "General Instructions for Development of PHA/Project Cost Data" and a "Sample Cost Case." (Both are included in this report as Appendix B.) The cost methodology presented in these documents comprised three steps for each relevant major account on the HUD Form 52599:

Step 1 — Add Major Items Of Expense which are funded by grants or other agencies and not reported on the HUD 52599, but only if these expenses are under the direct control of PHA/Project management. This also would apply if an employee were given subsidized residence on-site.

EXHIBIT 6

ALLOCATION FACTORS USED BY SITE AND ACCOUNT

Site	Account	Allocation Factor Assignments: Direct Charge	No. of Bedrms	No. of Units	Pct. of Time
St. Louis[a]	Admin. salaries	x[a]	x	--	--
	Admin. other	x	x	--	--
	Tenant services	x	x	--	--
	Utilities labor	x	--	--	--
	Utilities	x	x	--	--
	Maint. opers.	x	x	--	--
	Protect. services	x	x	--	--
	Insurance	x	--	x	--
	Terminal leave	x	--	--	--
	Employee benft.	x	--	--	--
	Collection losses	x	--	--	--
	Other gen. expenses	x	x	--	--
	Extraord. maint.	x	--	--	--
District of Columbia	Admin. salaries[b]	x	x	--	--
	Admin. other[b]	x	x		
	Tenant services	--	x	--	--
	Utilities labor	--	x	--	--
	Utilities	x	--	--	--
	Maint. opers.	x	--	--	x
	Protect. services	x	--	--	--
	Insurance	x	x	--	--
	Terminal leave	--	x	--	--
	Employee benft.[a]	x	x	--	--
	Collection losses[b]	--	x	--	--
	Other gen. expenses	--	x	--	--
	Extraord. maint.[b]	x	x	--	--
Cleveland	Admin. salaries	x	--	x	--
	Admin. other	x	--	x	--
	Tenant services	--	--	x	--
	Utilities labor	x	--	x	--
	Utilities	x	--	x	--
	Maint. opers.	x	--	x	--
	Protect. services	--	--	x	--
	Insurance	x	--	x	--
	Terminal leave	x	--	x	--
	Employee benft.	x	--	x	--
	Collection losses	x	--	x	--
	Other gen. expenses	x	--	x	--
	Extraord. maint.	x	--	x	--

[a]Instances where multiple x's appear for a given line item indicates that multiple allocation factors were used for that account. That is, a lump sum amount was disaggregated and the component parts were allocated based on the most appropriate allocation factor.

[b]For these accounts, control site direct costs were derived through allocation while the equivalent treatment site costs were readily available in project records.

EXHIBIT 6 (continued)

Site	Account	Allocation Factor Assignments: Direct Charge	No. of Bedrms	No. of Units	Pct. of Time
Boston	Admin. salaries[a]	x	--	x	--
	Admin. other	--	--	x	--
	Tenant services[a]	x	--	x	--
	Utilities labor	x	--	--	--
	Utilities	x	--	--	--
	Maint. opers.[a]	x	--	x	--
	Protect. services[a]	x	x	--	--
	Insurance	--	--	x	--
	Terminal leave	x	--	--	--
	Employee benft.	--	--	--	x
	Collection losses	x	--	--	--
	Other gen. expenses	x	--	x	--
	Extraord. maint.	x	--	--	--
Honolulu	Admin. salaries[c]	x	x	--	--
	Admin. other[b,c]	--	x	--	--
	Tenant services	--	--	x	--
	Utilities labor[a]	x	x	--	--
	Utilities	x	x	--	--
	Maint. opers.[d]	x	x	--	--
	Protect. services[b]	x	x	--	--
	Insurance[d]	x	x	--	--
	PILOT[a]	x	x	--	--
	Terminal leave[d]	--	x	--	--
	Employee benft.[d]	x	x	--	--
	Collection losses	x	--	--	--
	Other gen. expenses[d]	--	--	--	--

[a]Instances where multiple x's appear for a given line item indicates that multiple allocation factors were used for that account. That is, a lump sum amount was disaggregated and the component parts were allocated based on the most appropriate allocation factor.

[b]For these accounts, control site direct costs were derived through allocation while the equivalent treatment site costs were readily available in project records.

[c]For these accounts, the number of evictions and the percent of maintenance labor hours expended were also used as allocation factors.

[d]For these accounts, the percent of maintenance labor hours expended was also used as an allocation factor.

Step 2 Perform Adjustments On Line Items Of Expense Which Are Not Stated On An Accrual Basis where the difference between cash and accrual basis reporting would be material. This step ensured comparability between costs computed on different accounting bases.

Step 3 Allocate PHA Expenses To The Project Level on a line-by-line basis, when it was necessary to synthesize project level data from central cost data.

This basic methodology and a sample cost case were reviewed with the project team in detail and served as the basis for all cost computation at each study site.

A cost research issue that arose in this study derived from the desire to directly relate operating costs to management performance. To meet this requirement, performance measures, of necessity, would have to be collected at the time of the site visit. Since PHAs have different fiscal years (any of four different periods were used at the PHAs studied), time periods for performance data and cost data with respect to fiscal year would be incongruous. It was determined that trying to construct identical cross-site time periods from PHA records (particularly for costs) would necessitate complex and/or distorted adjustments. The more desirable alternative available was to use Fiscal Year 81-82 actual expenses for the analysis (regardless of fiscal year start date) and to use performance data at all sites for the twelve month period prior to October 1982.

Multi-Year Data

In studying cost and performance only for a specific year, we implicitly assumed that significant fluctuations in operating expenses from year to year normally do not occur. To assure the validity of this assumption, we therefore wanted to verify that expenditures in the year studied (FY81-82) were consistent with previous expenditure patterns. To do this, we collected HUD 52599 forms over the most recent five-year period at all sites. However, such a "time series" analysis was not possible at the (urban) project level, even in those cases where project level

systems are in place, because insufficient historical project level data was available. For these sites however, PHA-wide summary reports were reviewed. An analysis conducted found no ascertainable problems in using FY81-82 data. Furthermore, several of the management contracts dictated that actual project expenditures conform to project budgets, which ultimately limited single year fluctuations in patterns of project-level operating expenses at those study sites.

ASSESSING MANAGEMENT PERFORMANCE

A comprehensive schema was designed to assess the relative quality and effectiveness of management at treatment and control sites. This schema consisted of both quantitatively and qualitatively based indicators of management performance. Both measurement types are discussed briefly below.

Quantitative Performance Measures

The large legacy of previous research in the public housing field has demonstrated that key elements of management performance can be related unambiguously to a relatively small set of quantitatively based performance measures. Our design focused upon indicators which measure three key dimensions of management performance. These were:

- Maintenance management
- Occupancy and revenue generation
- Activities pursuant to the social purposes of public housing.

These three dimensions of housing management were measured through the set of performance indicators presented in Exhibit 7. To the extent possible, standard HUD definitions were used to maximize consistency and comparability between sites. Specific procedures employed for collecting each data element are elaborated in the following section--Data Collection Techniques and Procedures.

EXHIBIT 7

LIST OF PERFORMANCE INDICATORS

Total Staff
Maintenance Staff
Number Work Orders
Emergency Work Orders
Emergency Response Time (hours)
Non-Emergency Response Time (hours)
Total Evictions (per year --initiated/completed)
Rent Related Evictions
Renters Paying 1st-5th
Renters Paying 1st-10th
Renters Paying 1st-15th
Renters Not Paying - EOM
Amount of Rent Delinquency EOM
Average Vacancies (monthly)
Average Move-ins
Average Move-outs
Visual Assessment (building, grounds)
Vacant Unit Prep Time (days)
Unit Preventive Maintenance (yes/no)
Unit Painting Cycle (years)
Public Space Cleaning Cycle (stairs, lobby, etc.)
Number of Abandoned Cars
Vandalism Cost (dollars)
Referrals to Social Service Agencies
Families Known to Manager
Maintenance Work Order Backlog (nos. and person/days)
Legal notices - Rent
Legal notices - Behavior
Cleaning Cycle Other Than Public Areas (days)

Qualitative Performance Measurement

At treatment and control sites we visually assessed the general conditions of site buildings, grounds, and surrounding neighborhoods. A second source of qualitative data collected for the sites was structured interviews with the following interview groups:

- Chairmen of the Board
- Executive Directors
- PHA Contract Officer/Monitor, for urban sites
- Contracting Firm Officers
- Project Managers
- Tenants

In these interviews, respondents were asked to assess various specific aspects of management performance based on their respective experiences. Another informative source of interview data was informal interviews conducted with HUD field staff, if they were available during field data collection activities. The results and observations of structured interviews with each respondent group are summarized in Chapter III. The PHA contract officer/monitor and contracting firm officer interviews largely formed the basis for the Sourcebook for Private Management of Public Housing and are not formally presented in this document.

DATA COLLECTION TECHNIQUES AND PROCEDURES

Data were collected during two separate site visits to each of the 19 PHAs included in the analysis. First, a reconnaissance visit was made by one of three Granville researchers in order to make contact with each PHA and introduce key people to the study, to make final adjustments to the study sites after determining first-hand their appropriateness for inclusion, and to determine which data were available at each site, in which form, and from whom. These reconnaissance visits took from one day in some rural sites to nearly two weeks in large, urban PHAs.

In the two week period after completing site reconnaissance visits, data collection instruments were finalized.

Data collection visits then took place over the course of the following six weeks. Five team members with low income housing experience, four from Granville and one from Ernst & Whinney, were each responsible for leading data collection at one or more sites. In each of the large urban sites, that is, Boston,, St. Louis, Cleveland, the District of Columbia, and Hawaii, one of three additional team members from Ernst & Whinney also participated in the data collection effort, chiefly in the area of cost records extraction.

Four different methods of data collection were employed at each site. First, formal interviews were conducted with officials of the PHA, with tenants and, for treatment sites, with members of the contract management firm. Chairmen of the Board, executive directors, project managers, tenants of each project, and executives of management firms were among those interviewed. Second, data were extracted from PHA or contractor files in key substantive areas. These included financial records, maintenance workorders, legal records, and rent rolls. As part of the file extraction procedure, extensive informal interviews were conducted with many PHA staff members, in virtually every division of each PHA, to identify the location of records and to facilitate their interpretation. Third, observational data were collected in the form of a visual assessment of every project encompassed by the study. Finally, environmental data describing the communities in which the study projects are located were gathered, ordinarily from city departments and regional planning agencies.

The details of each of these four procedures for collecting data are elaborated below.

Interviews

At each site, a series of interviews was conducted with key Housing Authority staff, with tenants, and for treatment projects, with officals of the management firm. In addition to the

treatment/control distinction, projects varied greatly in size and functional specialization of staff. Thus, it was necessary to tailor interviews specifically to each site. As shown in Exhibit 7, formal interviews were conducted with each of the following individuals.

Chairman of the Board. Because the board chairman is heavily involved in the contracting out decision, we asked the board chairmen for their opinions on the advantages and shortcomings of contracting out various housing authority functions, including management. At treatment sites, we also inquired about the specific events that led to the decision to contract for management services. Of 19 housing authorities, we completed interviews with 13 chairmen. Those not completed include 2 rural treatment sites, Tishomingo and Mercer County, whose chairmen were unavailable, and the four large urban treatment sites. Neither Boston nor Washington has a chairman , and in St. Louis and Hawaii the chairmen did not believe that they had enough familiarity with relevant specifics to be able to comment meaningfully.

Executive Director. In every authority that had an executive director, we interviewed this individual with regard to the condition of the study projects, his or her attitudes toward contract management, and other public housing issues. Rural treatment sites do not have an executive director--the private contract manager serves this function. At these sites, we asked the executive of the contract management firm that portion of the executive director's questionnaire that refers to the condition of the project. In Cheyenne, we interviewed the executive of the management firm as if he were the executive director, since he formerly was the executive director and currently has the title "contract executive director." In St. Louis, there was a change in the executive director between our reconnaissance and data collection visits; we interviewed both individuals.

EXHIBIT 8

INTERVIEWS BY STUDY SITE

Site	Chairman	Executive Director	Project Manager
Tishomingo	--	--	--
Wynnewood	X	--	--
Mercer	--	--	--
Cass	X	--	--
Meade	X	--	--
Pennington	X	--	--
Stratford	X	X	--
Prague	X	X	--
Barnes	X	X	--
Hibbing	X	X	--
Hot Springs	X	X	--
Fargo	X	X	--
Boston:	--	X	--
- Torre-Unidad	--	--	X
- W. Newton	--	--	X
- Whittier Street	--	--	X
- Lower Mills	--	--	X
Washington, D.C.:	--	X	--
- Edgewood Terrace	--	--	X
- Garfield	--	--	X
Hawaii:	--	X	--
- Kuhio Pk. Terrace	--	--	X
- Kuhio Homes	--	--	X
- Waimaha	--	--	X
- Kalihi Valley	--	--	X
- Palolo Valley	--	--	X
- Kauhale Noni	--	--	X
Cheyenne:	X	X	--
- Burke	--	--	X
Pueblo:	X	X	--
- Mesa Tower	--	--	X
St. Louis:	--	*	--
- Town XV	--	--	X
- Univ. House	--	--	X
- Parkview	--	--	X

* The PHA changed Executive Directors during the course of the study. We interviewed both the old and new Executive Dirctor.

EXHIBIT 8 (continued)

Site	Chairman	Executive Director	Project Manager
St. Louis:			
- Kingsbury	--	--	X
- McMillan	--	--	X
- Blumeyer	--	--	X
- Mark Twain	--	--	X
Cleveland:	X	X	--
- Garden Valley	--	--	X
- Puritas	--	--	X
- Bohn	--	--	X
- Miles-Elmarge	--	--	X
- Apthorp	--	--	X

Project Manager. In all of the urban sites, we interviewed the persons who have day to day responsibility for the management of the study projects. This included both managers employed by private management firms and managers who are PHA employees. Our questions were directed toward their opinions of their projects, their attitudes toward tenants and their employers, their descriptions of their duties, and the management of the projects. Managers of rural projects were not interviewed because most rural sites have no project managers; executive directors or contract firm executives perform management tasks.

Contract Firm Executive. The 19 treatment sites we studied were managed by 14 private firms. We interviewed a principal member of each of these firms to find out about the firm, its capacity, and its reasons for involvement in public housing. Other issues we raised included their attitudes toward the housing authority, their opinions of the contract and the way it was monitored, and their appraisals of the projects they manage.

PHA Contract Officer. In order to get the PHAs' explanations of management contracts and opinions of how particular aspects of the agreement worked, the PHA official who was responsible for contract administration was interviewed. In rural treatment sites, where there is little functional specialization of staff, these questions were asked of Chairmen of the Board.

Tenant Interviews. A measure of management performance in public housing is tenant satisfaction. We attempted to interview 15 tenants in each urban project and 15 tenants in rural PHAs. Tenants were asked to appraise the condition of their apartments, to talk about specific problems they might have with their neighbors, to discuss the speed and efficacy of maintenance at their projects, and to rate the performance of the management of their projects.

In most cases, tenant interviews were conducted by interviewers who lived in the same city as the project. During site reconnaissance visits, the Granville researcher asked people in

the PHA or management firm to identify someone who they thought would make a good interviewer. Candidate interviewers could not be residents of the projects where they were to interview, and they had to be people that project residents would not associate with either the housing authority or the management firm. While on the data collection visit, the Granville or Ernst & Whinney team leader interviewed candidates and then hired and trained interviewers. Typical interviewers were laid-off school teachers or other professionals, retired persons, and graduate students. For two rural sites, a Granville staff member performed the tenant interviews.

Tenants were sampled in a two-step process. Before going out on the data collection visit, twenty-five random numbers from among the total number of units for each site were selected (Note: 35 numbers were selected for Hawaiian sites because of anticipated language difficulty in interviewing, and 18 were selected for Mark Twain in St. Louis because there are only 18 units at Mark Twain). Thus, for example, at Burke in Cheyenne there are 75 apartments, so 25 random numbers between 1 and 75 were chosen. When the team leader arrived on site to collect data, he/she went to the tenant ledger and selected households to interview based on the pre-selected random number, in the order that the numbers were selected. If the first random number was 60, the address at which the first interview would be conducted would be the 60th one in the tenant ledger. If the second number was 2, then the address at which the second interview would be conducted would be the 2nd one in the tenant ledger. When all 25 addresses were identified, interviewers were instructed to attempt to interview the first 15 on the list. If any of the 15 were unreachable, they should dip into the remaining 10, in the order that they appeared, for replacements.

In 29 of 38 sites, the specified target of 15 tenant interviews were completed. At the other 10 sites, the number of tenant interviews completed were as follows:

Site	Number of Interviews
Wynnewood	12
Mercer County	13
Cass County	13
Torre-Unidad	13
West Newton	14
Fargo	5
Palolo Valley	14
Waimaha	5
Blumeyer	14
Mark Twain	8

In sum, then, of the target of 570 tenant interviews, we completed 530 (93%). With the aid of translators when necessary, interviews were conducted in English, Spanish, Pidgin, Samoan, and Laotian. The interviews were evenly divided between treatment (264 interviews) and control (266 interviews) sites.

As a means of ensuring the integrity of the data, interviewers were instructed to ask tenants for their phone numbers. After the interviews were turned in to the Granville or Ernst & Whinney team leader, three of the tenants were selected at random to receive a call verifying the interview. The team leader made these calls, and in every instance the tenant indicated that he/she had been interviewed on the noted date and that the interview had taken an appropriate amount of time.

File Extraction

Records kept by study PHAs provided an important source of data. Source records were located either with the contractor or at the site. These records fell into four basic areas: 1) financial records, 2) maintenance workorders 3) legal records, and 4) tenant information, including vacancies, income recertifications, demographics, and rent delinquencies.

Financial Records. The basic report that was used for extraction of financial data was the HUD 52599, "Statement of Operating Receipts and Expenditures." During site reconnaissance visits, we determined whether the PHA accounting was project-based, what records were available to determine project expenses where accounts were consolidated, whether any project expenses were not reported on the HUD 52599, whether the accounts were kept on a cash or accrual basis, and what data were available to accrue cash accounts.

During data collection visits, the HUD 52599 for the most recently completed fiscal year (i.e. year ending December, 1981 or March, June, or September, 1982) was analyzed and adjusted. These adjustments included assigning costs per project based on the best available information, adding costs that were not part of the HUD 52599 but which were legitimate costs of operating that project (such as where project staff costs were paid by social services grants), and accruing cash-based accounts wherever possible. In rural sites, accounts were not broken down by project because the unit of analysis was the PHA. Other adjustments were made, but accounts for rural sites were left in their consolidated state.

In addition to the adjusted HUD 52599 for the most recently completed fiscal year, unadjusted forms also were gathered for the previous four fiscal years or for as many prior years as were available. These prior year data were collected to provide contextual background against which to analyze the most recent data.

In all of the urban sites, financial information was collected, and adjustments were made by Ernst & Whinney staff. In the rural sites, the Granville researcher gathered cost data as well as the other requisite information.

Maintenance Workorders. Maintenance is a vital performance area for any public housing development. As a means of appraising the efficacy of project maintenance, we investigated the records that were kept to determine the volume of workorders

per project, the speed at which workorders were completed, the backlog of work waiting to be done, and vacant unit turnover time.

Workorder data were for the year October 1981 through September, 1982. The number of workorders per project was gathered by printout where the PHA had a computerized system, by actual hand count, or, in two instances, by an estimate based on volume. A sample of 100 workorders was taken to analyze response time. This sample was selected by dividing the total number of workorders by 100, yielding a dividend of n, and then selecting every nth workorder. Thus, if there were 1000 workorders for a project in the year, the sample of 100 included every tenth workorder. If there were less than 100 workorders, all were included in the sample.

In some sites, particularly rural PHAs, hard copy maintenance records were not kept comprehensively. In these sites alternative sources of maintenance response time data were used; interviews with tenants, project managers, and maintenance staff provided supplementary information that was generally consistent.

Legal Records. Another area of management performance in public housing concerns the initiation and prosecution of legal proceedings against tenants for rent delinquency or for behavioral reasons. Legal records were analyzed to determine, between October 1, 1981 and September 30, 1982, how many tenants had been:

- Evicted for rent delinquency
- Evicted for behavioral reasons
- Sent a legal notice for rent delinquency
- Sent a legal notice for behavioral reasons.

Tenant Information. PHA records containing tenant demographics and rental information were analyzed at every site. Project demographic data as of September 30, 1982 were gathered, including such items as the ethnic/racial composition of the

residents, the age of the resident population, the number of residents receiving AFDC, the average income of residents, and the average monthly rent.

Rent information was collected for the year between October 1, 1981 and September 30, 1982. The data were sampled by selecting records from four months during that year: October, January, April and July; if data were unavailable for one of these months, data were extracted from an adjacent month. Information included:

- Number of vacant units
- Number of occupied units
- Number of move-ins
- Number of move-outs
- Number of households not paying rent by the end of the month in which it is due
- Amount of rent money due that month that was not collected by the end of the month
- Number of families paying rent according to the date they paid, or where this was unavailable, number of rent delinquencies and the date they were considered delinquent.

All of these data were gathered from tenant ledgers and rent rolls. In a few instances, computerized management information systems made these data readily available.

Observation

Another category of data that was collected at all sites was observational--a visual assessment of each project and its surrounding neighborhood. At each site, these visual assessments were conducted by the team leader. The visual assessment separately rated the condition of the project buildings, the project grounds, and the surrounding neighborhood. Notes were made supporting the rationale behind the rating. Except for the Cleve-

land controls of St. Louis projects, the visual assessment of each matched pair was conducted by a single individual. Special efforts were made after we returned from the field to assure the consistency of the Cleveland and St. Louis ratings.

The purpose of collecting observational data was to provide an additional measure of maintenance at the project, both objectively and relative to its neighborhood. On each of the three elements, the rating scale ran from 1 (very good) to 5 (very poor). In assessing the condition of the buildings, team members focused on maintenance, not structural, items. Thus, items whose presence would lower scores would be, for example, poor exterior paint or trim, missing screens, broken windows, and missing rain gutters--items that should be repaired during routine maintenance.

Landscape maintenance and custodial items were the basis of the grounds rating scale. Conditions that would lower this score were presence of litter and debris, obvious lack of care for lawns and shrubbery, playground equipment in disrepair, and the presence of abandoned cars in project parking areas. That is, lower scores went to projects that exhibited signs that ordinary custodial functions were not being properly carried out.

Finally, the observer drove the project neighborhood for approximately a five block radius. Items that were included in this assessment were the same as those on which the project was rated: the general condition of buildings from the standpoint of routine maintenance, the cleanliness of streets and yards, and the presence of abandoned cars.

In urban sites and in rural sites that had but one project, each project was rated separately. In rural sites with two or more projects, first each project was rated and then a summary rating of the PHA was compiled. Thus, in these rural PHAs, the PHA was assessed as if it were one big project. Because of the relative homogeneity of projects and neighborhoods in these rural sites, this procedure did not result in averaging grossly disparate conditions.

The difficulty of collecting meaningful visual assessment data was mitigated by the two-step data collection procedure followed in this study and by training team leaders in the items that constitute the three scales. During site reconnaissance visits, team members visited every project in the study and made note of the presence of conditions appropriate for inclusion in a visual assessment instrument for this study. Then, during the interim between reconnaissance and data collection visits, everyone who was to perform visual assessments met in a lengthy training session to review slides of public housing projects not included in this study. The rating scale and scores were discussed during this session. Team members observed and rated the conditions in various projects and then compared those conditions to the conditions in the study projects. The assessments were begun several days after this meeting during the data collection visits.

Environmental Data

In order to provide a context that might help to explain differences in treatment and control sites, we collected data that describe the communities where study projects are located. These data are of three general types: housing data, crime data, and unemployment data. In all instances, the goal was to secure the best and most recent information that was available. Information was sought for both the city and neighborhood or census tract in which the projects are located.

Housing information ordinarily was available through local community development agencies and regional planning agencies. Usually, the best information available was data from the 1980 census. Residential vacancy rates and residential rental vacancy rates were the housing data that were collected.

Crime data were supplied by municipal and county police departments, and also, to an extent, by PHA security departments. The information available usually was 1981 summary crime reports. Burglary and robbery rates for the city (or county), neigbhorhood, and project were collected.

Unemployment data usually were available through local employment agencies or regional planning offices. Unemployment rates for a month shortly before data collection visits, i.e. late summer or early fall, 1982 ordinarily were collected at the city or county level.

DATA PROCESSING PLAN

This section discusses the translation of data collected in the field to computer-readable format for subsequent quantitative analysis. Data base generation is of course a potentially error-prone task and requires special quality control mechanisms to ensure that data are translated in a meaningful and accurate manner. The steps employed and the order in which they were performed are:

- Manual editing of instruments by field teams
- Key entry
- Machine editing and cleaning.

Manual Editing

Each set of instruments, including interview guides and cost/performance collection instruments all were reviewed on-site by the respective team leader before returning from the field. This on-site review ensured that each interview had been conducted (in some sites up to thirty-five separate interviews were administered) and that each cost/performance data item had been collected. Any items that were not available during the on-site activity were listed so that the respective team member subsequently could follow up with the PHA.

Upon return from the field, team members were responsible for "cleaning up" the interview guides (particularly for open ended responses), transposing performance data onto a consolidated form used for key entry, and following up with the PHA with regard to missing data items.

Keypunching

Because of the relatively small number of chairmen, executive directors, and managers interviewed, it was not cost effective to computerize these data. The tenant interviews, consisting of 530 instruments, however, were keyed and key verified. The computerized data base included not only the tenant interview data, but a large array of cost and performance data.

Machine Editing and Cleaning

Data were passed through a custom tailored computer edit routine to isolate transcription and other data errors. After this (iterative) process was completed, one-way tabulations were generated. These univariate runs were examined in detail as a final quality check on the data before data analysis proceeded. This step also served to highlight any remaining missing data elements that would significantly impact the analysis. Team members then made final attempts to obtain these data. The data base was "frozen" after this round of updates was completed, and the cross tabulations and other statistical runs discussed in Chapter III were made. All computer based output was generated by the Statistical Package for the Social Sciences (SPSS) or computer programs written by the study team.

III. RESULTS OF INTERVIEWS WITH STAFF OF PHAs AND MANAGEMENT FIRMS

This chapter discusses the results of interviews with board chairmen, executive directors, and project managers in treatment and control sites. The first section of the chapter addresses the attitudes and perceptions of board officials and executives regarding the effectiveness of contract management at their authorities. The chapter's concluding section presents interview results of discussions with key project management staff at both treatment and control sites at urban localities. Exhibit 9 illustrates which officials and staff members were interviewed at each study site. In brief, the chairman of the PHA/board was interviewed at every site except: Boston, Hawaii, Washington, D.C., St. Louis, Mercer, and Tishomingo.[1] Executive directors were interviewed at every PHA in the study that had a director (i.e., everywhere except at rural treatment PHAs), and project manager interviews were completed at every urban project.

Interviews conducted with the officers of contracting firms principally focused on the firm's organizational structure and staffing; previous experience managing low-rent public housing; and the structure of their present management agreements. The results of these interviews are reported in the Sourcebook for Private Management of Public Housing.

---

[1] Boston and Washington, D.C., did not have boards at the time of the interviews. At St. Louis, Hawaii, Mercer, and Tishomingo, the Chairmen were unavailable at the time of field visits.

EXHIBIT 9

PUBLIC HOUSING OFFICIALS INTERVIEWED BY TYPE OF SITE

Interview Group:	Urban Treatment	Urban Control	Rural Treatment	Rural Control
Board Chairman	x[a]	x	x[b]	x
Executive Directors	x	x		x
Project Manager	x	x		
Executive of Contracting Firm	x		x	
PHA Contract Officer	x[c]			

Legend:

a = Only Cheyenne

b = Except Tishomingo and Mercer

c = Except Cheyenne

INTERVIEWS WITH PHA OFFICIALS

This section presents perceptions and experiences of key board chairmen and executive directors with private management. It is organized around three areas of interest:

- Reasons for adopting contract management
- Attitudes of respondents concerning the cost and quality of contractor's performance
- Impacts of contract management.

Reasons for Adopting Contract Management

An interview with the executive director was conducted at every site that had one, that is, at all but the rural treatment sites. Additionally the officer of the contract management firm in Cheyenne, who also has the title "contract executive director," and who formerly was the executive director in Cheyenne, also was interviewed. Thus 14 interviews were completed with executive directors: 6 at rural controls; 5 at urban sites that have both treatment and control projects; Cheyenne, an urban site with only treatment projects; and 2 at urban sites with only control projects.

Because so few executive directors of treatments were available, it is not appropriate to analyze the executive directors' answers in terms of treatment versus control. Rather we can look at them for insight into the conditions under which they think their sites would resort to contract management. Executives were asked "...about the influences or factors that (led/might lead) your authority to adopt private management for some or all of its projects. Please tell me if each of these factors (was/would be) very important, somewhat important, not too important, or not at all important in arriving at (the/a) decision to adopt private management in your PHA." Eleven factors were then mentioned, as listed in Exhibit 10. Among these, the four factors that proved important were:

EXHIBIT 10

EXECUTIVE DIRECTORS' RATINGS OF IMPORTANCE
OF FACTORS IN CONTRACTING DECISION

Factor	Very Important	Somewhat Important	Not too Important	Not Important	Don't Know	Total
Quality of contractor's work	7	3	0	3	1	14
Financial controls of contractor	5	3	1	4	1	14
Service delivery of contractor	4	4	1	4	1	14
Difficulty in maintaining good PHA staff	7	2	2	1	2	14
Local elected officials	3	3	2	5	1	14
Tenant pressure	2	2	2	6	2	14
Special interest groups	2	0	2	8	2	14
Local media pressure	2	2	1	8	1	14
HUD pressure	1	5	1	6	1	14
Feelings of PHA staff	5	1	0	6	2	14
Board of Commissioners	3	2	1	6	2	14
TOTAL	41	27	13	57	16	154

- The difficulty of hiring and keeping good staff
- The quality of job the private management firm would do
- The financial controls the private management firm would impose
- The service delivery of the private management firm.

Attitudes toward Cost and Quality of Contractor's Performance

The chairmen of the board were interviewed at five treatment sites and at eight control sites. Chairmen differed sharply among themselves in their attitudes toward employing contract staff, according to whether they were at treatment or control sites.

To assess attitudes toward contract performance, chairmen were presented with a list of 10 jobs that ordinarily must be done in the course of running public housing. These jobs were: (1) performing maintenance of buildings and grounds; (2) security; (3) extermination; (4) selecting tenants; (5) rent collection and tenant accounting; (6) organizing recreation for tenants; (7) working with local government agencies; (8) helping tenants find jobs; (9) enforcing tenant behavior rules; and (10) investigating tenant complaints.

The first question asked was: "Please tell me if you believe these jobs would generally be done better by regular PHA staff or by private contractors, or whether both types of workers would do the jobs equally well. Please do not allow cost considerations to influence your decision as to who would do the job better. By better I mean a higher quality job."

As Exhibit 11 illustrates, chairmen of PHAs that employed contract managers indicated that contract staff would perform all the jobs at least as well as PHA staff. Five chairmen commenting on 10 tasks provided, in effect, 50 chances to say PHA staff would perform better. For only 1 task, finding jobs for tenants, did one chairman say that PHA staff would be better, or 2% of the opportunities to say so.

EXHIBIT 11

PHA TASKS BY WHOM CHAIRMEN THINK WOULD PERFORM THEM BETTER

Task	TREATMENT CHAIRMEN				CONTROL CHAIRMEN			
	PHA Worse	PHA Same	PHA Better	NA/ DK	PHA Worse	PHA Same	PHA Better	NA/ DK
Maintenance	2	3	0	0	1	0	7	0
Security	0	2	0	3	2	2	2	2
Extermination	3	1	0	1	5	1	1	1
Tenant selection	2	3	0	0	1	0	6	1
Rent collection	2	3	0	0	1	1	5	1
Organizing recreation	1	3	0	1	1	1	5	1
Working with local government	2	3	0	0	0	1	7	0
Finding tenants jobs	1	2	1	1	2	1	5	0
Enforcing behavior rules	2	2	0	1	1	1	6	0
Investigating complaints	2	2	0	1	0	1	7	0
Total	17	24	1	8	14	9	51	6
Total row %	34	48	2	16	18	11	64	7

In contrast, chairmen of PHAs that were managed conventionally identified PHA staff as better. For all but 2 of the jobs, security and extermination, the clear majority of chairmen said that PHA staff would perform better. Those who said contractors would perform extermination better all are at rural sites, where budgets were too small to have a licensed exterminator on staff. With 8 control chairmen commenting on 10 tasks, there were 80 chances to say that PHA staff perform better. In 51 of these opportunities (64%) control-site chairmen said that PHA staff would do better.

Next the chairmen were asked, "Now I'd like to go through the same list of jobs and ask you who in your opinion would do each job more expensively at your PHA taking into consideration all costs related to the personnel and material involved." The responses to this question are summarized in Exhibit 12.

Once again the pattern of answers between treatment and control respondents differed considerably. For treatment chairmen, the pattern was that all jobs would be done more expensively by PHA staff or that cost would not differ. Significantly, no treatment chairman said that any job would be done less expensively by PHA staff. Control chairmen were quite different in their answers; most indicated that most jobs would be done less expensively by PHA staff, although at least one control chairman indicated that each task would be done more expensively by PHA staff. Two jobs, security and extermination, were notable for the number of control chairmen who thought that contractors would do them more cheaply.

The general conclusion to be drawn from these conversations with chairmen is that "Where you stand depends on where you sit." PHAs that were managed by private contractors had chairmen who displayed a positive attitude toward contracting out PHA functions, and chairmen of conventionally managed PHAs displayed a more positive attitude toward performing those functions with in-house staff.

EXHIBIT 12

PHA TASKS BY WHOM THE CHAIRMAN THINKS WOULD PERFORM THEM AT LESS COST

Task	TREATMENT CHAIRMEN				CONTROL CHAIRMEN			
	PHA More Expensive	Same	PHA Less Expensive	DK/ NA	PHA More Expensive	Same	PHA Less Expensive	DK/ NA
Maintenance	2	3	0	0	2	1	4	1
Security	0	1	0	4	3	0	2	3
Extermination	1	3	0	1	3	1	3	1
Tenant Selection	2	3	0	0	2	1	4	1
Rent Collection	2	3	0	0	2	1	5	0
Organizing Recreation	1	2	0	2	1	1	6	0
Working in local government	2	2	0	1	1	1	6	0
Finding tenants jobs	1	3	0	1	2	1	5	0
Enforcing behavior rules	1	2	0	2	1	1	6	0
Investigating complaints	1	2	0	2	1	1	6	0
Total	13	24	0	13	18	9	47	6
Total row %	26	48	0	26	23	11	59	7

Responses to other questions in the chairmen's interviews reflected this same pattern. Since these questions also were asked of executive directors, the responses of both chairmen and executive directors have been analyzed together.

Impacts of Contract Management

The questionnaires administered to chairmen and executive directors contained a series of five questions that probed some of the possible results of pursuing contract management. Those questions were:

- Would community acceptance of the PHA's projects be greater, the same, or less under private contract management?
- Would local elected officials give the PHA more, the same, or less support under private contract management?
- Would relations between tenants and management at the PHA be better, the same, or worse under private contract management?
- Would tenants be more satisfed, equally satisfied, or less satisfied under private contract management?
- Would the HUD Area Office give the PHA more, equal, or less support under private contract management?

The responses to these questions are summarized in Exhibit 13. This table represents answers from officials from 17 of the 19 study PHAs. Missing are two rural treatments, Mercer County and Tishomingo. The categories of respondents are: 5 chairmen from treatment PHAs (Wynnewood, Cass, Pennington, Meade, and Cheyenne); 8 chairmen and 8 executive directors from control PHAs (Stratford, Prague, Hibbing, Barnes, Hot Springs, Fargo, Cleveland, and Pueblo); and 5 executive directors from 4 urban PHAs that have both treatment and control projects (Hawaii, Boston, Washington, D.C.; and 2 executive directors from St. Louis, where there was a change in leadership between reconnaissance and data collection visits).

EXHIBIT 13

SOME EFFECTS OF CONTRACT MANAGEMENT BY TYPE OF PHA OFFICIAL

PVT. MGMT. WOULD BE	Chairmen of Board: Treatment [a]					Chairmen of Board: Control [b]					Executive Directors: Control [b]					Executive Directors: Urbans Having Both Treatment And Control Projects [c]				
	Community Acceptance	W. Local Officials	Tenant-PHA Relations	Tenant Satisfaction	HUD Support	Community Acceptance	W. Local Officials	Tenant-PHA Relations	Tenant Satisfaction	HUD Support	Community Acceptance	W. Local Officials	Tenant-PHA Relations	Tenant Satisfaction	HUD Support	Community Acceptance	W. Local Officials	Tenant-PHA Relations	Tenant Satisfaction	HUD Support
BETTER	3	3	3	2	0	1	0	0	0	0	2	0	0	0	1	2	2	1	1	0
SAME	2	2	2	3	5	4	4	1	1	0	5	5	4	3	5	2	1	2	2	4
WORSE	0	0	0	0	0	3	4	7	7	8	1	3	4	5	2	1	2	2	2	0

a = Wynnewood, Cass, Pennington, Meade, Cheyenne
b = Stratford, Prague, Hibbing, Barnes, Hot Springs, Fargo, Clevland, Pueblo
c = Hawaii, Bosfon, Washington, D.C., and 2 Executive Directors from St. Louis

The general conclusion to be drawn from this exhibit is that officials at treatment sites thought that contract management had favorable consequences, officials at control sites thought that contract management would have unfavorable implications, and officials with experience in both contract and conventional management expressed mixed opinions.

The response pattern of chairmen supported the conclusion reached in the previous paragraph with respect to hiring contractors to perform PHA functions. Treatment chairmen were unanimous in their opinion that in none of the mentioned areas would private management be worse than conventional management, and in three areas, community acceptance of the PHA, dealing with local government agencies, and in tenant-management relations, a majority thought that private management would be better.

Control chairmen were exactly the opposite of their treatment counterparts. With only one exception they all agreed that private management would be no better in any of the five areas. Moreover, in three areas, tenant-management relations, tenant satisfaction, and support from the HUD Area Office, they agreed overwhelmingly that private management would be worse. (Notably, in our interviews with tenants, the concern about tenant satisfaction was not borne out.) Also 14 of the 17 other officials with whom we spoke indicated that Area Office support would be the same regardless of management technique.

Executive directors of control PHAs were strikingly similar to their chairmen in their attitudes toward the anticipated consequences of adopting contract management. While they were somewhat less likely to say that private management would be worse, they also were near unanimity in their opinion that private management would not be better. In short, like their chairmen, executive directors of control PHAs were diametrically opposite from chairmen of treatment sites in their opinions of the consequences of contract management.

The final category of PHA official, executive directors of large urban sites that had both treatment and control projects, fell between treatment and control officials in their opinions of consequences. The only thing that the executive directors with responsibility for both treatments and controls agreed on was that HUD Area Office support would be the same, regardless of management technique. On each of the other four items, they were as divided as five individuals possibly could be.

The pattern of response among these four categories of PHA officials was brought into sharper focus when we considered their responses to another question that they all answered. That question was: "Considering everything, if you could have things the way you wanted them, would you prefer to have the project(s) in this Authority managed by PHA employees or by a private management firm?" Responses are presented in Exhibit 14.

The dichotomy between treatment and control officials again is apparent. All 5 treatment chairmen preferred contract management. Fifteen of 16 officials at control sites preferred conventional management. And the executive directors of PHAs that employed both types of management were as evenly divided as they could be. Indeed, in St. Louis where we spoke with 2 executive directors when one succeeded the other, one preferred PHA management while the other favored private contractors. At another urban PHA, the executive director indicated that his views towards contracting out were considerably different than the views of the PHA's comptroller.

Our interviews with chairmen and executive directors probably provided more insight into human nature than they did into the question of whether private or conventional management of public housing was better. Officials who had experience only with conventional management proclaimed its superiority. Officials who had gone exclusively to private management said that it was better. Executive directors who were responsible for running both types of projects were split on which was better. Apparently it was easier to reach an unequivocal choice between two

EXHIBIT 14

PREFERRED MANAGEMENT TYPE BY TYPE OF PHA OFFICIAL

Type Official	Management Preference	
	Private	PHA
Treatment Chairman	5	0
ED of both T&C Projects	2	3
Control Chairman	0	8
Control E.D's	1	7

alternatives when one had experience with only one of those alternatives.

MANAGER INTERVIEWS

At each of the 26 urban projects, both treatment and control, we interviewed the person responsible for the day-to-day management of the project. Areas included in the questionnaire were the managers' years of property management experience, the amount of time they spent managing each project in the study, the tasks they got involved in, and their attitudes toward tenants and their jobs. For the most part, there was no substantial difference between treatment and control managers in their tasks, in their attitudes toward tenants, or in their attitudes toward their jobs.

Experience and Length of Work Week

We asked the managers how long they had been working in housing management, and how many hours they spent in managing the project each week. Their answers are displayed in Exhibit 15.

Control managers, on average, had nearly 5 more years of management experience than treatment managers. Closer scrutiny of the difference in experience, however revealed that the gap might not be very important. The difference in means was explained by the fact that 6 control managers, and only 1 treatment manager, had more than 10 years of experience. Equal numbers of each group had fewer than 6 years of experience. In short, the disparity in years of experience did not occur because inexperienced people were being installed as managers of treatment sites. Both groups of managers had what would appear to be adequate experience in housing management.

Contract managers worked almost twice as many hours as conventional managers--32 versus 16 on average and 30 versus 10 at the median. This difference in hours worked is puzzling. Some possible explanations that were explored and rejected were

EXHIBIT 15

NUMBER OF TREATMENT AND CONTROL MANAGERS BY YEARS OF EXPERIENCE AND HOURS WORKED PER WEEK

Years of Experience	Treatment	Control
0 - 2	4	2
3 - 5	1	3
6 - 10	7	2
11 - 20	1	4
> 20	0	2
MEAN:	6.1	10.7
MEDIAN:	6	10

Hours Worked	Treatment	Control
0 - 10	2	7
11 - 20	3	3
21 - 30	3	1
31 - 40	1	1
40	4	1
MEAN:	31.5	16.2
MEDIAN:	30	10

that the differences resulted from differing lengths of experience, differences in size of project staff, and number of units per project employee. Hours worked were related to the number of units in the project, but this was true for both groups, and project sizes were equivalent. The difference appeared to be that conventional projects were managed in a more centralized fashion, with management responsibility shared by central PHA staff as well as by the manager: hence seven managers worked 10 or fewer hours per week at managing the project. Contract managers seemed to have less responsibility shared by others in their firm, and so worked more at managing the project. Also, while all but two conventional managers managed other properties, four contract managers ran only the study project, and each of these four worked more than 40 hours per week on the project.

Managers' Duties

Although managers of control projects worked fewer hours per site, they got involved in the same activities as treatment managers, and indeed, were likely to say they got heavily involved in more of these activities.

One question that was asked to detail the duties managers performed was: "I'd like you to tell me whether you get heavily involved, moderately involved, or hardly involved in each of these activities." Fifteen activities then were mentioned, including:

- Making up the project budget
- Changing rents charged to tenants
- Setting occupant selection rules
- Setting occupant behavior rules
- Making major equipment repairs or replacements
- Making the employee payroll
- Keeping project accounts
- Collecting regular rents

- Collecting delinquent rents
- Training maintenance staff
- Supervising maintenance staff
- Investigating complaints about project staff
- Working with local government agencies
- Organizing recreation for residents
- Helping tenants find jobs.

Results of this question appear in Exhibit 16.

Of these 15 activities, managers of control projects said that they got involved heavily in more of them. Exhibit 16 shows that control managers got involved heavily in an average of 5.4 activities while treatment managers became heavily involved with 4.4 functions. Conversely, treatment managers hardly got involved in an average of 6.8 functions, compared with 5.6 for control managers.

Although control managers indicated that they got involved more heavily in carrying out these functions, the functions that they got involved with differed little from those pursued by treatment managers. The activities that most managers of control projects said that they got involved in heavily were collecting delinquent rents (11 of 13 managers) and investigating tenant complaints (9 of 13 managers). These also were areas of heavy involvement for most treatment managers.

The pattern was also quite similar between treatment and control managers with respect to the activities that they less frequently got involved in. Both treatment and control managers reported that they were only moderately involved in working with local government agencies and were "hardly" involved in helping tenants find jobs, or in making the project payroll. Some differences were apparent between the two groups: control managers indicated that they got more involved in budgetary and accounting matters and in rent collection, and less involved in organizing recreation for tenants. The prevailing pattern of work activity for treatment and control managers, however, was one of similarity.

EXHIBIT 16

TREATMENT AND CONTROL MANAGERS BY HOW INVOLVED THEY GET IN 15 PROJECT FUNCTIONS

Function	Hardly Involved		Moderately Involved		Heavily Involved	
	T	C	T	C	T	C
a. Making the project budget	8	3	2	3	3	7
b. Changing rents charged to tenants	6	4	2	2	5	7
c. Setting tenant selection rules	7	6	3	4	3	3
d. Setting tenant behavior rules	4	2	2	7	7	4
e. Making repairs/replacing equipment	5	3	2	2	6	8
f. Making the project payroll	10	10	3	2	0	1
g. Keeping the project accounts	9	5	3	4	1	4
h. Collecting regular rents	10	4	2	2	1	7
i. Collecting delinquent rents	2	1	4	1	7	11
j. Training maintenance staff	8	9	5	3	0	1
k. Supervising maintenance staff	4	3	3	4	6	6
l. Investigating tenant complaints	0	1	3	3	10	9
m. Working with local government agencies	0	2	9	9	4	2
n. Organizing recreation for tenants	5	9	4	4	4	0
o. Helping tenants find jobs	10	12	3	1	0	0
Totals	88	74	50	51	57	70
Average/manager	6.8	5.6	3.8	3.9	4.4	5.4

T = Treatment

C = Control

We asked managers another question that lends further support to this conclusion of similarity in work patterns. Managers were presented a list of seven activities and were asked to identify the two they spent the most time doing and the two they spent the least time doing. As indicated in Exhibit 17, the two groups pursued the same activities.

Cleaning and trash removal and maintenance occupied the least amount of time for both treatments and controls. Dealing with tenants and paperwork took the most time, again, for both groups. And both groups agreed that inspecting grounds and units, supervising staff, and rent collection ranked in the middle in the burden they placed on their time. There were slight differences between the groups--as Exhibit 15 also showed, treatment managers got less involved in rent collection--but, clearly, the prevailing pattern is one of similarity.

Attitudes Toward Tenants. The attitudes that managers of treatment and control projects had toward tenants displayed little difference. Generally, both groups thought favorably of tenants with clear majorities agreeing that tenants kept the insides of their apartments well, tenants should pay for their accidential damage, managers need enough authority to run their projects with an iron hand, tenants should be involved in running the project, and families with social or behavioral problems should be rejected from public housing. (See Exhibit 18.)

The managers differred slightly in what they thought of tenants' attitudes toward the projects, with treatment managers agreeing that tenants were careless with the property but being split on whether tenants cared how the project was kept. Control managers agreed that tenants cared about how the project was kept, but they split when asked whether tenants were careless about the property.

The major difference, however, appeared in an item that reflected an attitude toward management style more than toward tenants. When faced with the question of whether "the best way to get something done in this project is to jump in and do it

EXHIBIT 17

TREATMENT AND CONTROL MANAGERS BY HOW MUCH TIME THEY SPEND ON SELECTED ACTIVITIES

Activity	Least Time		Moderate Time		Most Time	
	T	C	T	C	T	C
Cleaning and trash removal	9	13	2	0	2	0
Maintenance	9	7	4	6	0	0
Inspecting grounds and units	1	3	10	10	2	0
Paperwork	0	1	6	5	7	7
Rent Collection	3	0	6	8	4	5
Dealing with tenants	2	0	2	3	9	10
Supervising staff	2	2	9	7	2	4

T = Treatment

C = Control

EXHIBIT 18

TREATMENT AND CONTROL MANAGERS BY WHETHER THEY AGREE WITH A SERIES OF OPINIONS TOWARD TENANTS

Opinion regarding tenants:	TREATMENT		CONTROL	
	Agree	Disagree	Agree	Disagree
Tenants keep the insides of their apartments well	12	1	12	1
Tenants understand managers problems	9	4	9	4
Tenants don't care how project is kept	7	6	3	10
Tenants are careless with property	10	3	6	7
Manager has to run project with an iron hand	11	2	10	3
Best way to get things done is to jump in and do them yourself	9	4	2	11
Tenants should have no role in running project	2	11	3	10
Families with social/behavioral problems should be rejected from public housing	10	2	9	3
Tenants should pay for accidential damage	12	1	11	2

yourself," 9 of 13 treatment managers agreed that it was. In contrast only 2 of 13 control managers supported doing it yourself. Very likely, the reason for this difference of opinion related to why treatment managers worked more hours per project; they assumed more personal responsibility, while the control managers were able to delegate responsibility to other individuals.

Job Satisfaction. Managers were asked a series of questions to ascertain whether those at treatment sites were happier with their jobs than were PHA employees. Once again, there was very little difference between the two groups, as Exhibit 19 shows.

Generally, treatment and control managers expressed satisfaction with their duties, their roles in policy-making, the loyalty of their staffs, and the support of their bosses, although control managers as a group were somewhat less pleased with their bosses. Managers were generally less satisfied with the flexibility that they were allowed under HUD and PHA regulations, but the same numbers of treatments as controls expressed dissatisfaction.

Summary of Interview Findings

When asked about the factors that led or were apt to lead their PHA to adopt contract management, executive directors stated that performance-related factors were more influential over pressure by individuals and groups concerned with public housing. Where private contract managers were engaged, they were expected to provide better quality management and impose strong financial controls. Contract managers also often were sought to overcome the difficulty of hiring and keeping good staff. Executive directors saw pressures from the local media, interest groups, tenants, their board of commissioners, and from HUD as less important in the contracting out decision.

EXHIBIT 19

TREATMENT AND CONTROL MANAGERS BY AREAS OF JOB SATISFACTION

	TREATMENT		CONTROL	
Is Manager:	Satisfied	Dissatisfied	Satisfied	Dissatisfied
Satisfied with job duties?	11	2	12	1
Satisfied with role in policy-making?	11	2	12	1
Satisfied with boss' support?	12	1	10	3
Satisfied with HUD and PHA regs?	8	5	8	5
Satisfied with staff loyalty?	12	0	13	0

In our interviews with chairmen, we gathered further evidence that perceptions of the efficacy of the private sector were important in the decision to engage a contract manager. For a variety of public housing functions, including maintenance, security, marketing, and others, chairmen of treatment PHAs generally thought contractors were cheaper and did better work than PHA staff. Chairmen of control PHAs, conversely, thought that their own staff generally would be better and more cost effective.

The dichotomy of opinion between officials of treatment and control sites was further evidenced when chairmen and executive directors were asked what the consequences of using a contract manager would be in such areas as tenant relations and relations with the community. Officials of treatment sites said that contract management would lead to better results, and those at control sites said that conventional management would be better. Executive directors of PHAs that used both contract and conventional management disagreed as to which was better. Officials, thus, tended to like what they had, and those who had both were divided over which was better.

Managers of treatment projects tended to have less experience and to work more hours than managers who were PHA employees. Despite this, the tasks that the two groups of managers performed did not differ substantially. If anything, managers of control projects said that they got heavily involved in more management tasks. The two groups of managers did not differ in their attitudes toward tenants, and they were about equally satisfied with their jobs.

IV. COMPARATIVE ANALYSIS OF COST AND PERFORMANCE

An extensive statistical analysis was undertaken using the cost and performance indicators and tenant interview data collected in the field. The analysis plan emphasized comparative assessment of cost and performance at sites managed conventionally and by contractors. After presenting the statistical analysis plan, this chapter reports the findings functionally, with an initial section organized around cost, and a second section organized around performance, including subsections on rental and occupancy, maintenance and groundskeeping, crime and social problems, and tenant relations. The chapter concludes with a summary of the findings.

STATISTICAL ANALYSIS PLAN

The data used in the statistical analysis were derived from tenant interviews and a cost and performance indicator data base constructed through record review, visual observation by the data collection team, and to a more limited extent, the interviews described in Chapter III with PHA and project staff. This section presents, in turn, the analysis plan for the tenant interview data and for the cost and performance indicator data base. The section concludes with a discussion of the significance of possible explanatory variables that were considered for inclusion in the analysis.

Analysis Plan for Tenant Interview Data

At each rural PHA and urban project, 15 randomly selected tenant interviews were desired. Interviews were completed with 530 of the 570 we desired (93 percent). Of the completed interviews, 266 were at control sites and 264 were at treatment sites.

At least five interviews were completed at every site, and at least 12 were completed at all but two sites, as described in Chapter II.

Most of the tenant data were collected as responses to 39 yes-no questions. The remainder were collected as responses to four questions that used a three-point scale, generally using better, the same, or worse. The units of analysis for this study are PHAs or projects. For this reason, we analyzed the tenant data in two stages. In the first stage, the percentage of yes responses at each project/PHA was calculated for each yes-no question. For questions on a three-point scale, the positive response was assigned a value of 2, the neutral response a value of 1, and the negative response a 0 value. The average response value then was calculated for each project/PHA. In the second stage of the analysis, we calculated the differences between the average percent response to each question for each treatment-control pair. The significance of these differences was evaluated using both a non-parametric signs test, which simply examines the likelihood that a given percentage of the differences would have the same sign, and a t-test for differences in means. When differences were not clearly significant, we also examined the differences for rural versus urban projects, and separately for family versus elderly projects, using the signs test.

A disadvantage of the fact that we are using the site as the unit of analysis is that we have only 38 rather than 530 observations. To gain insight into whether we had missed any broader trends because of the considerably smaller sample size, we developed a set of tables on aggregate treatment versus control responses using the tenant as the unit of analysis. The significance of differences between treatment and control projects was examined in these tables using a chi-squared test. This check revealed only one question that we previously had judged as insignificant which might be significant from this broader perspective. A more detailed examination of this

question was undertaken ("Do most of your neighbors in this project have the same beliefs about what is right and wrong as you have?") in terms of rural-urban and family-elderly splits.

Cost and Performance Indicator Data Base

In addition to the tenant data base, which provided subjective performance measures, an extensive cost and performance indicator data base was developed, with performance data that derived largely from records and our own observations. Exhibit 20 indicates the number of observations available for one aspect of the cost and performance data base--32 variables that might influence cost and performance and were intended as possible explanators of cost and performance other than the type of management.

Some of the explanatory variables that might influence performance--e.g., the percentage of high rise units in the project, the rental vacancy rate in the jurisdiction--were clearly beyond the control of management. Others, such as maintenance staff per unit and the number of children per unit, were clearly within the control of the PHA management, albeit sometimes not of the management at a specific project.

Of the 32 explanatory variables, 23 provided information about the PHA or project. No observations were missing for any of these variables except modernization needs, which was missing for three of the 38 sites. Explanatory variables about the neighborhood and jurisdiction generally had some missing observations. Indeed, statistics about the neighborhood were obtained so rarely that most of these variables had to be dropped from consideration as explanatory variables.

Data were collected on 10 cost indicators shown in Exhibit 21. No cost data were missing, although data on the two operating reserve indicators only were collected at the rural PHAs. All cost data were expressed as costs per unit month except the percent of available reserves at rural sites.

EXHIBIT 20

NUMBER OF OBSERVATIONS AND SIGNIFICANCE
OF POSSIBLE EXPLANATORY VARIABLES

Variable	Description	Number of Observations
1	*Total number of units in the project/PHA	38
2	*Percent of lo-rise units	38
3	*Percent of hi-rise units	38
4	Percent of elderly units	38
5	Percent of family units	38
6	Whether projects of interest contain scattered sites	38
7	Estimates of MOD needs per unit	35
8	*Average age of project buildings	38
9-11	Bedroom distribution (percent 0/1, 2/3, 4+)	38
12	*The last available PFS allowable expense level PUM, for PHA-level sites	12
13	Adult tenants per unit	38
14	Child tenants per unit	38
15-19	Resident racial composition (percent white, black, Hispanic, Asian/Pacific Islander, American Indian)	38
20	Percent of AFDC households	38
21	Percent of single parent households	38
22	Average tenant income	38
23	PHA vacancy rate	38
24	Whether tenants are allowed to make repairs	38
25	Visual assessment of neighborhood conditions	38
26	Robberies and burglaries per 1000 population--neighborhood	8
27	Robberies and burglaries per 1000 population--jurisdiction	23
28	Unemployment rate--jurisdiction	34
29	Unemployment rate--neighborhood	9
30	*Vacancy rate--jurisdiction	28
31	Rental vacancy rate--jurisdiction	23
32	Vacancy rate--Census Tract	16

*Significantly different Between contract and conventional sites; Urban, rural and/or combined

EXHIBIT 21

COST AND PERFORMANCE VARIABLES WITH NUMBER OF OBSERVATIONS

		Number of Cases
A.	Cost Variables	
1.	Administrative salaries	38
2.	Total administrative expenses	38
3.	Maintenance and operating expenses	38
4.	Maintenance and operating expenses (labor)	38
5.	Utilities	38
6.	Employee benefit contributions	38
7.	Total routine expenses	38
8.	Total routine expenses less utilities and pilots	38
9.	Annual provision for operating reserve	12
10.	Percent of available operating reserve	12
11.	Total staff per unit	38
12.	Maintenance staff per unit	38
B.	Rental and Occupancy	
1-3	Tenants paying rent by time of month	18
4.	Rent delinquent at end-of-month (%)	38
5.	Tenants not paying by end-of-month (%)	38
6.	Legal notices sent (rent related) per unit	27
7.	Rent-related evictions per unit	38
8.	Evictions per unit	38
9.	Average move-ins	37
10.	Average move-outs	37
11.	Average vacancy rate	38
12.	Delinquent income recertifications (%)	14
C.	Maintenance and Groundskeeping	
13.	Number of workorders processed/unit	30
14.	Number of backlogged workorders/unit	22
15.	Emergency maintenance response time	37
16.	Regular maintenance response time	36

EXHIBIT 21 (Cont.)

		Number of Cases
D.	Maintenance and Groundskeeping	
17.	Preventive maintenance performed (yes/no)	38
18-20.	Cleaning cycles (common areas, public spaces, grounds)	29
21.	Vacant unit preparation time	28
22-23.	Visual assessments (buildings, grounds)	38
24.	Unit painting cycle	37
E.	Crime and Social Problems	
25.	Vandalism costs per unit	29
26.	Abandoned cars per unit	29
27.	Robberies and burglaries (site)	29
F.	Tenant Relations	
28.	Percent of families known by manager	36
29.	Referrals to social service agencies	13

Exhibit 21 also lists the 29 performance indicators that were collected and included in the analysis data base. Some observations were missing for 20 of these indicators. More than a third of the values were missing for only seven indicators, and more than half for only three.

Matched pair t-tests were performed for each of the 73 indicators in the data base on the 6 rural pairs, the 13 urban pairs, and all 19 pairs combined. The initial step in performing the matched pair t-test was to subtract the control value from the treatment value for each matched pair. If the treatment or control indicator value was missing (e.g., because it was unavailable in the field or because the value available clearly was erroneous, and an accurate estimate could not be made), the difference between the matched treatment and control values also was considered to be missing. Once all the differences were computed, their mean values and standard deviations were computed. The t-test statistic then was calculated to determine whether each mean difference was significantly different from zero. The results of the t-tests on the explanatory variables are discussed at the end of this section, based on the criteria for significance described below. The results of the t-tests on the cost and performance indicators are described in the sections on cost and performance. In addition, all variables that differed significantly between the treatment and control sites (based on the criteria for significance) have been marked with an asterisk on Exhibits 20 and 21.

For the cost and performance indicators, if any one of the rural, urban, or combined ts was significant at the 95 percent confidence level, or two ts were marginally significant (85 percent confidence level or higher), the significance of the indicator was probed further using analysis of variance (ANOVA) and covariance (ANCOVA) techniques. A 2 x 2 ANOVA design was used as follows:

	Rural	Urban
Conventional Management	I	II
Contract Management	III	IV

The ANOVA analysis addresses three questions, namely:

- Does the indicator differ between conventional and contract management, i.e., do cells I and II combined differ from cells III and IV combined?
- Does the indicator differ between rural PHA and urban project sites, i.e., do cells I and III combined differ from cells II and IV combined?
- Are there significant interactions, i.e. does the relation between cells I and IV differ from the relation between cells II and III?

The ANCOVA analysis differs from the ANOVA in that the indicator is adjusted to remove variation caused by one or more explanatory variables (covariates) that also are thought to influence the indicator. The ANOVA procedure then is applied to the adjusted data. Only those explanatory variables that varied significantly at the 95 percent confidence level for one of the rural, urban, or combined ts were viewed as candidates for use as covariates.

Since many PHA and HUD staff had indicated to us that they viewed contracting out as having a differential likelihood of being cost-effective at elderly and family projects, we examined what influence the project type had on cost-effectiveness. For this analysis, projects/PHAs were defined as elderly if 80 percent or more of their units were elderly units. A three-way analysis of variance model was used with contract-conventional management, rural-urban, and elderly-family splits. This analysis is essentially equivalent to an ANCOVA with a dichotomous covariate for elderly-family site. Where necessary, the significance of mean differences between subgroups in the ANOVA and ANCOVA models was evaluated using the method of Planned Variations.

Significance of Explanatory Variables

As Exhibit 20 indicates, of the 32 possible explanatory variables, 26 did not differ significantly between the sites with contract and conventional management according to the significance criteria. Those explanatory variables that did vary significantly between the contract and conventional sites and therefore were considered as possible control variables for use in the ANCOVA runs, were:

- Total units (rural contract sites have less units)
- Percent of high-rise (versus low-rise) units (overall, contract sites have more high rise units)
- Age of structure (contract sites are older, at urban sites and overall)
- PFS allocation at rural PHAs (contract sites received higher allocations)
- Jurisdiction vacancy rate (urban contract sites are in jurisdictions with higher vacancy rates).

RESULTS OF THE COMPARATIVE COST ANALYSIS

This section reports on the results of the comparative cost analysis. As shown in Exhibit 21, cost indicators examined in this analysis included total routine expenses less utilities and payments in lieu of taxes (PILOTs), administrative expenses, maintenance and operating expenses, salary expenses for the administrative and maintenance and operations functions, and utility expenses. For rural sites, the provision for operating reserves and percent of available reserves also were examined. All expenses were expressed on a per unit month (pum) basis.

The two measures related to rural operating reserves did not differ significantly between the contract and conventional sites, nor did the utilities expenses or maintenance and operations expenses pum. Administrative salaries and maintenance and

groundskeeping salaries per unit also did not differ significantly between the contract and conventional sites. Employee benefits, however, were about $2.30 pum lower at contract sites, although the difference was somewhat marginal in its significance (94 percent confidence level), as the ANOVA reported in Exhibit 22 indicates. Notably, rural benefits were almost $6.00 pum less than urban benefits.

Initially, a total routine expense measure was constructed that included all expenses pum except non-routine maintenance expenses and payments in lieu of taxes. Subsequently, this measure was adjusted to remove utility expenses since the t-tests indicated that these costs were not significantly related to the different management modes. Further, these expenses generally are believed to relate primarily to such factors as degree days, utility prices, building age, modernization needs/energy retrofitting, master versus individual metering, and bedroom size distribution rather than factors that are subject to short-term management control. Nevertheless, utility expenses can vary widely between projects, so their subtraction from the total routine expense measure removes an extraneous source of variance from the total expenses measure. This variable, then, is an approximate measure of <u>total operating expenses sensitive to management intervention</u> pum. Analysis of this cost measure should be more informative/definitive than analysis of the unadjusted measure would have been.

Exhibit 23 shows the means of the two expenses pum measures (total operating expenses sensitive to management intervention, and administrative expenses) that differed significantly for sites with contract and conventional management. T-test values are provided as an indicator of the significance of the differences observed. Administrative costs pum are significantly higher at the 95 percent confidence level for contract management at urban sites and marginally significant for urban and rural sites combined. The operating expenses sensitive to management intervention also are higher for contract management in these site groupings, but the difference is only marginally

EXHIBIT 22

ANALYSIS OF VARIANCE RESULTS:
EMPLOYEE BENEFITS

Locus:	Rural	Urban	Total
Management Mode			
Conventional	$4.18	$9.81	$8.03
Contract	$1.40	$7.73	$5.73
Combined	$2.79	$8.77	$6.88

Significance Tests (F)

Rural-Urban **22.2 Conventional-Contract @3.8 Interaction 0.1

**Significant at the 99 percent confidence level
@Significant at the 90 percent confidence level

EXHIBIT 23

TESTS ON MEAN COSTS PUM OF CONTRACT AND CONVENTIONAL MANAGEMENT

	RURAL			URBAN			COMBINED		
	Contract (N=6)	Conventional (N=6)	T On Differences In Matched Pairs	Contract (N=13)	Conventional (N=13)	T On Differences In Matched Pairs	Contract (N=19)	Conventional (N=19)	T On Differences In Matched Pairs
Total Operating Costs Sensitive to Management Intervention, pum	$54.32	$55.16	-0.31	$86.17	$76.26	1.83	$76.11	$69.59	1.66
Administrative Costs, pum	$17.45	$18.27	-0.31	$25.33	$20.22	2.36*	$22.84	$19.60	1.81

Total Operating Costs Sensitive to Management Intervention, pum

		Elderly	Family
Rural	Conventional	$61.97 (N = 2)	$51.75 (N = 4)
	Contract	$63.36 (N = 1)	$52.51 (N = 5)
Urban	Conventional	$55.92** (N = 6)	$93.69 (N = 7)
	Contract	$77.12** (N = 6)	$93.93 (N = 7)

*Significant at 95% confidence level
**Significant at 99% confidence level
N is the number of observations in the cell.

significant. At rural sites, administrative expenses and total operating expenses sensitive to management intervention are roughly equal under contract and conventional management.

The lower table in Exhibit 23 provides a further breakdown of total operating expenses sensitive to management intervention into elderly and family sites. As this table indicates, the significant difference in total operating expenses sensitive to management intervention pum between contractor and conventional sites is attributable to a differential of roughly $21 pum in urban elderly sites. For the six urban elderly sites under contract in four different cities, the contracted out sites were from $13.20 to $32.90 pum higher in total operating expenses sensitive to management intervention than their matched control sites or from 17.2 percent to 44.3 percent higher. This difference was significant at the 99 percent confidence level according to a t-test. A further examination of the data on the components of operating expenses revealed that this cost differential at urban elderly sites managed by contractors was split somewhat equally between higher administrative expenses ($6.00 pum), higher maintenance and operations expenses ($8.50 pum), and higher expenses of other types including protective services and tenant relations ($6.50 pum). Total operating expenses sensitive to management intervention were roughly comparable under contract and conventional management in the urban family projects, the rural family projects, and the rural elderly projects included in this study.

Simple tabular analysis was not enough to explain the differential in mean administrative expenses pum between contract and conventional sites. This differential was probed further using a three-way ANOVA model with rural-urban, family-elderly, and contract-conventional splits. Exhibit 24 displays the ANOVA results. As the exhibit indicates, administrative expenses for urban sites using contract management were roughly $5.00 to $6.00 pum more than for conventionally managed sites, regardless of whether the sites were family or elderly. This differential,

which the method of Planned Variations indicated was marginally significant, almost certainly was attributable primarily to the management fee paid at contract sites and allocated to the administrative expense line item. At urban family sites, slight expense savings in other categories offset the fee, while at urban elderly sites, the opposite effect occurs. Notably, the cost variation did not result from differences in staffing intensity. Both total staff per unit and maintenance and operations staff per unit did not differ significantly between contract and conventional sites.

In summary, the comparative cost analysis indicates that total operating expenses sensitive to management control at urban elderly projects were roughly $21.00 pum (or 28 percent) higher at contractor-managed sites than at comparable sites under conventional management. Neither total operating expenses nor the component expenses differed significantly by management mode for rural sites or urban family sites, with the minor exceptions that employee benefits were roughly $2.30 pum lower at contract sites and administrative expenses were about $5.00 pum higher at urban family sites under contract management. The latter difference, which also was observed at urban elderly sites, was attributable primarily to the management fee. At urban family sites, this differential apparently was offset by minor savings in maintenance and operations, tenant relations, and protective services expenses. In contrast, at urban elderly sites, it was accentuated by small expense differentials in these categories. Thus, with the exception of urban elderly sites, the issue of relative outcome of contract and conventional management becomes strictly a matter of comparative performance.

EXHIBIT 24

ANALYSIS OF VARIANCE RESULTS:
ADMINISTRATIVE COSTS

		Elderly	Family	Total
Rural	Conventional	$22.72	$16.05	$18.27
	Contract	$17.73	$17.39	$17.45
Urban	Conventional	$12.95	$26.44	$20.22
	Contract	$18.96	$30.79	$25.33
Combined		$16.97	$23.99	$21.22

Significance (F)

Elderly-Family **9.2 Rural-Urban *5.5 Contract-Conventional 1.2

Interactions: Family-Location *7.3 Family-Management 0.0
Location-Mangement 0.9 3-Way 0.4

Planned Variations (F) Testing Significance of Contracting Out

Urban @ 2.76 Rural 0.22

* Significant at the 95 percent confidence level

** Significant at the 99 percent confidence level

@ Significant at the 90 percent confidence level

RESULTS OF THE COMPARATIVE PERFORMANCE ANALYSIS

The performance of contract and conventional sites was compared through a range of performance indicators and through tenant interviews. Essentially, the performance indicators provided an objective measure of outcomes, while the tenant interviews provided insight into the management actions shaping the outcomes and into the acceptability to tenants of those outcomes which affected the adequacy of their housing situation. This section describes the comparative performance assessment by functional area using the following categorization of areas:

- Rental and occupancy
- Maintenance and groundskeeping
- Crime and social problems
- Tenant relations.

Rental and Occupancy

The performance indicators examined in the rental and occupancy area, as shown in Exhibit 21, were month-end rent delinquency, in terms of both dollars and numbers of tenants delinquent; legal notices of rent delinquency sent; rent-related evictions (per unit); average move-ins and move-outs; and the average vacancy rate. (The percentage of tenants not paying rent by set times of the month and the frequency of late income recertification were not assessed as too little data were available.) Although all of these indicators are relevant to the quality of performance of the rental and occupancy functions, the amount of rent collected is the bottom-line issue in rental and occupancy. Therefore, the analysis focused primarily on the issue of collections, and the other rental and occupancy indicators were used to interpret the collections situation.

Conventional public housing managers achieved higher collections than contract managers. In rural PHAs, 1.2 percent of the tenants and 1.5 percent of the dollars were delinquent at

month's end in conventionally managed sites, while 4.8 percent of the tenants and 3.7 percent of the dollars were delinquent at the treatment sites. In urban projects, 10.2 percent of the tenants and 9.7 percent of the dollars were delinquent at month's end at conventionally managed sites, while 17.5 percent of the tenants and 18.0 percent of the dollars were delinquent at contract sites. The ANCOVA model applied to evaluate the significance of these differences used the percent of high rise units as a covariate. High rise complexes often have many elderly occupants, who generally are more responsible about rent, and also can influence collection efficiency by their more concentrated configuration. The ANCOVA model results, as reported in Exhibit 25, show that the rent collection differences were extremely significant. Further, the mean difference in delinquencies between contract and control sites was larger after covariate adjustment than before adjustment, roughly 8.5 percent of both rents and tenants.

An examination of the differential in collections between elderly and family sites, as summarized in Exhibit 26, revealed that collection differences at the family sites accounted for the differential between management types. In urban areas, family projects managed by contractors averaged roughly a 27 percent delinquency rate in terms of both tenants and dollars, compared to a 14.5 to 15 percent rate for conventionally managed sites. At rural PHAs that include family projects, conventional managers achieved a one percent delinquency rate while contract managers had 4.4 percent of the tenants and 5.8 percent of the dollars delinquent, a differential that was not statistically significant given the small sample size involved. At elderly sites, the differentials between contract and conventional collection rates did not differ significantly, although the percent of tenants delinquent at urban contractor sites was slightly higher in absolute terms.

EXHIBIT 25

ANALYSIS OF COVARIANCE RESULTS: RENT DELINQUENCIES

Percent of Dollars Delinquent
(Means Adjusted by Covariate Percent of High-Rise Units)

Locus:	Rural	Urban	Total
Management Mode			
Conventional	0.0	9.4	6.0
Contract	3.7	19.3	14.6
Combined	1.5	14.3	10.3

Significance Tests (F)

Rural-Urban **20.0 Conventional-Contract **10.1 Interaction 0.5

Percent of Tenants Delinquent
(Means Adjusted by Covariate Percent of High-Rise Units)

Locus:	Rural	Urban	Total
Management Mode			
Conventional	0.0	9.9	6.3
Contract	5.5	18.7	14.5
Combined	2.0	14.3	10.4

Significance Tests (F)

Rural-Urban **14.8 Conventional-Contract **7.6 Interaction 0.1

**Significant at the 99 percent confidence level.

EXHIBIT 26

ANALYSIS OF VARIANCE RESULTS ON RENT
DELINQUENCIES AT ELDERLY AND FAMILY PROJECTS

Percent of Tenants Delinquent

		Elderly	Family	Total
Rural	Conventional	1.5	1.0	1.2
	Contract	0.0	5.8	4.8
Urban	Conventional	5.2	14.4	10.2
	Contract	6.2	27.1	17.5
Combined		4.0	14.1	10.4

Significance (F)

Elderly-Family **16.6 Rural-Urban **19.7 Conventional-Contract @4.1

Interactions: Family-Location @3.3 Family-Management @3.3
Location-Management 1.1 3-Way 0.2

Planned Variations (F) Testing Significance of Contracting Out

Rural Elderly 0.02 Urban Elderly 0.04 Rural Family 0.73 Urban Family **8.0

Percent of Dollars Delinquent

		Elderly	Family	Total
Rural	Conventional	2.0	1.2	1.5
	Contract	0.0	4.4	3.7
Urban	Conventional	3.7	14.9	9.7
	Contract	7.2	27.3	18.0
Combined		4.6	14.0	10.3

Significance (F)

Elderly-Family **21.7 Rural-Urban **27.1 Conventional-Contract *5.7

Interactions: Family-Location *5.3 Family-Management 2.5

Location-Management 2.3 3-Way 0.1

Planned Variations (F) Testing Significance of Contracting Out

Rural Elderly 0.05 Urban Elderly 0.7 Rural Family 0.4 Urban Family @4.1

** Significant at the 99 percent confidence level.
* Significant at the 95 percent confidence level.
@ Significant at the 90 percent confidence level.

The higher delinquency in urban family projects may have resulted from fewer formal attempts by contract than conventional managers to pursue delinquencies. Urban contract managers sent fewer delinquency notices and initiated fewer evictions, although these differences were at best marginally significant, and an average of roughly 80 percent of the tenants interviewed in both contract and conventional projects felt that the managers were strict about rent being paid on the day it was due. Interestingly, at three urban contract projects (two elderly and one family) in two PHAs where the management fee was partially dependent on rent collection, contractor collections were better than or equal to collections at the matched conventional sites. In a third urban PHA where the fee for managing three family projects was rent-related, contractor collections were lower than those of conventional managers. This PHA was changing its contract to impose a penalty when delinquencies rose above a certain level; in exchange, the contractor would be given control over tenant selection.

The causes of less efficient rent collection by contract managers were less apparent in the rural than the urban family projects. In rural areas, the number of legal notices of rent delinquency per unit and the number of rent-related evictions per 100 units were both higher at contract sites, and the difference was at least marginally significant. Rural contract sites did appear to experience a slightly higher vacancy rate, although the difference again was only marginally significant. Even more important, an average of 81 percent of the tenants at the contractor-managed PHAs reported that management was strict about rent being paid on the day that it was due, compared to only 62 percent at the conventionally managed PHAs.

In summary, the percent of dollars and tenants delinquent in rent are both roughly 8.5 percent higher at the family projects managed by contractors than at comparable projects under conventional management. At urban family sites, the differentials were both 12 percent, while rural sites with family

projects experienced five percent differentials. Rent delinquency at elderly projects under contract and conventional management was roughly comparable.

Maintenance and Groundskeeping

The performance indicators examined with respect to maintenance and groundskeeping, which are shown in Exhibit 21, included our independent appraisal of the appearance and upkeep of grounds and building exteriors, the volume of work handled and backlogged, routine and emergency maintenance response times, vacant unit preparation time, whether preventive maintenance was performed in units and common areas, and how frequently common areas, public spaces, and grounds were scheduled for cleaning. Among all these maintenance and groundskeeping performance indicators, only the vacant unit preparation time differed at even a marginally significant level. The data on vacant unit preparation time, which were only available for urban sites, indicated that units were prepared on average in 17.6 hours at contract management sites and 7.4 hours at conventional management sites. A further examination of the data revealed that this differential was strictly the result of differences observed between the six contract projects in St. Louis, where vacant unit preparation is done by a central PHA staff, and their publicly managed controls, five of which were in Cleveland. At four other contract projects which were controlled by projects in their own PHAs, contractor managers achieved comparable or lower vacant unit preparation times than public managers.

As discussed earlier, our staff assessed the appearance and upkeep of the grounds and buildings at each contract management site and each corresponding site under conventional management. Exhibit 27 shows the average ratings on a scale of 1-5 for urban and rural sites. The only notable point about these ratings is the great similarity of the ratings at sites under contract and conventional management.

Exhibit 27

Visual Assessments of Buildings and Grounds

	Buildings		Grounds	
Site Type:	Conventional	Contract	Conventional	Contract
Rural	1.5	1.7	1.3	1.3
Urban	2.1	2.3	2.4	2.3
Combined	1.9	2.1	2.1	2.0

The tenant interviews provided additional information on unit conditions, how strictly management controlled the sites, and maintenance and custodial performance, as summarized below.

Condition of Individual Units. Each tenant was asked whether different parts of his/her apartment were in good or poor condition. The elements discussed were: stove, water faucets, walls and ceilings, floors, locks on doors, electrical wall outlets and switches, doors and door frames, and drains in bathrooms and kitchens. As Exhibit 28 clearly indicates, tenants' opinions of the condition of their units were the same under conventional and contract management.

Tenants also were asked whether they got enough hot water and got enough heat in winter. Satisfaction with these dimensions did not differ significantly for sites under contract and conventional management. The relevant data are presented in Exhibit 29.

EXHIBIT 28

PERCENT OF TENANTS SAYING ELEMENTS OF
THEIR UNITS ARE IN GOOD CONDITION
(Averaged Across Projects By Type)

Element	Contract %	Conventional %
Stove	84	85
Water faucets	87	86
Walls/ceilings	83	85
Floors	92	90
Locks	84	82
Outlets/switches	93	92
Doors	80	81
Drains	89	85

EXHIBIT 29

PERCENT OF TENANTS SATISFIED WITH AMOUNT
OF HOT WATER AND HEAT
(Averaged Across Projects by Type)

Service	Contract %	Conventional %)
Hot Water	86	87
Heat in Winter[a]	88	88

[a]Excludes Hawaii

Management Strictness. Exhibit 30 summarizes tenant responses to six questions concerning whether management was strict about controlling noise from records or parties, how many

EXHIBIT 30

PERCENT OF TENANTS WHO SAY MANAGEMENT IS STRICT

(Averaged Across Projects by Type)

Strict About	Contract %	Conventional %
Apartment noise	73	69
No. people/apt.	81	72
Handling of trash	73	71
Condition of apts.	74	65
Paying rent when due	80	75
Littering	74	74

people could live in an apartment, how tenants handled garbage and trash, the condition in which tenants kept their apartments, rent being paid on the day it was due, and tenants keeping the project clean and free of litter. Most tenants said management was strict, and there was no difference related to type of management. Looking at the trend across issues, it appears that **contract managers were perceived as slightly more strict than conventional managers.**

Maintenance and Custodial Performance. A series of questions gauged tenants' opinions of maintenance at their projects. The first two asked whether or not they were satisfied with the way things were once a repairman finished working on them, and with the maintenance and repair of their building and apartment. The next two examined whether management kept the outside of the building painted and in good condition and whether burned out lightbulbs were a problem in the parking area or on

the grounds. Exhibit 31 shows that none of these questions yielded significant differences between treatment and control groups.

EXHIBIT 31

PERCENT OF TENANTS EXPRESSING SATISFACTION WITH MAINTENANCE

(Averaged Across Projects by Type)

Tenants Satisfied with	Contract %	Conventional %
Outcome of repairs	86	86
Repair of building and apartment	83	81
Outside painting and building condition	73	82
Lightbulb replacement outdoors	72	77

When tenants were asked whether maintenance at the project was better or worse than the previous year, however, significant differences did emerge. More tenants in control projects thought maintenance was better, and more tenants in treatment projects said that maintenance was worse or the same. Exhibit 32 summarizes these responses.

EXHIBIT 32

PERCENT OF TENANTS SAYING MAINTENANCE IS BETTER OR WORSE THAN LAST YEAR

(Averaged Across Projects by Type)

Maintenance	Contract %	Conventional %
Better	12*	24*
Same	72	64
Worse	16	12

Tenants at control projects also indicated that custodial functions were significantly better than at treatment sites. Tenants were asked if grounds were kept clean at their project and if the area around the garbage and trash cans was kept clean. Exhibit 33 indicates that more residents of control projects responded "yes" to each of these questions than did their treatment counterparts. For groundskeeping, the difference was statistically significant at the 95 percent confidence level ($t = 2.38$), with the difference attributable to the urban sites, where an average of 87 percent of tenants under conventional management and 75 percent under contract management were satisfied with the groundskeeping. At two urban projects, less than 40 percent of the tenants felt the grounds were kept clean and less than 10 percent felt the trash areas were kept clean. Nevertheless, our visual assessments of the projects, which specifically included groundskeeping, were relatively equal in conventional and contract sites, so the differences were not overly noticeable. Indeed, they might have been differences more of expectations than of reality.

*Differs significantly at the 95 percent confidence level.

EXHIBIT 33

PERCENT OF TENANTS SAYING GROUNDS AND GARBAGE AREAS ARE KEPT CLEAN

(Averaged Across Projects by Type)

Custodial Area	Contract %	Conventional %
Grounds	81**	91
Garbage and trash	73	81

In conclusion, **maintenance was performed equally satisfactorily at contract and conventional sites, as measured by both performance indicators and tenant perceptions. At rural sites, groundskeeping performance also was equal. Groundskeeping at urban sites under contract management, however, was acceptable to about 12 percent fewer tenants than contract sites, although our own visual assessment detected no significant differences. Overall, contract managers appeared to be slightly more strict in controlling tenant behavior.**

Crime and Social Problems

The number of robberies and burglaries per 100 units at the site, the number of abandoned cars per 100 units, and the vandalism cost per unit were used as performance indicators related to control of crime and social problems, as shown in Exhibit 21. Tenant viewpoints also were considered important indicators of success in this functional area.

As a first step in the quantitative analysis, we noted that no abandoned cars were observed during our site visits at elderly sites and no vandalism and only one crime (at a family project under contract management) had been reported at any of the rural PHAs that kept records for the year which our per-

---

**Significantly different at the 95 percent confidence level.

formance appraisal examined. Therefore, the analysis of abandoned cars was restricted to family sites, while the analysis of crime and vandalism was restricted to urban sites.

Data on vehicle abandonment were not available for many sites. Enough data were collected on vehicles abandoned, however, to indicate that **significantly more abandoned cars were present at urban family sites managed by contractors than at comparable conventionally managed sites** at the time of our site visits. An average of 3.2 abandoned cars per 100 units was noted at the projects managed by contractors, compared with 0.9 abandoned cars per 100 units at the conventionally managed projects. When the analysis was restricted to data on matched pairs of sites, the differential was 3.2 versus 1.5, which we consider the more meaningful estimate of differential in magnitude. As the first table in Exhibit 34 indicates, the method of Planned Variations indicated that the overall difference was significant at the 95 percent confidence level. Conversely, both the method of Planned Variations and a visual examination of the data indicate that the observed differential in vehicle abandonment at rural sites definitely was not significant.

Data on robberies and burglaries also were not available at many sites. Enough data were collected, however, to support a determination that **robberies and burglaries at urban sites managed by contractors were significantly more common than at comparable sites with conventional management.** The ANOVA results contained in the second table in Exhibit 34 indicate that the 11.7 incidents per 100 units at contract sites was significantly greater at the 99 percent confidence level than the 5.4 incidents per 100 units at conventional sites. When the analysis was restricted to matched pairs, the differential became 11.7 versus 7.0 incidents per 100 units, which we consider the more meaningful estimate of the differential.

Data on vandalism costs were available for almost all sites. Analysis of these data revealed that **vandalism costs per unit per year were an average of $16 more at urban sites managed**

EXHIBIT 34

ANALYSIS OF VARIANCE RESULTS:
CRIME AND SOCIAL PROBLEMS

Abandoned Cars Per 100 Units at Family Projects
(N = 16)

Locus:	Rural	Urban	Total
Management Mode			
Conventional	0.0	0.9	0.6
Contract	0.7	3.2	1.65
Combined	0.45	1.8	--

Significance Tests (F)

Rural-Urban @ 7.3 Conventional-Contract *5.8 Interaction @ 1.6

Planned Variations (F) Testing Significance of Contracting Out

Rural 0.64 Urban *6.70

Robberies and Burglaries Per 100 Units at Urban Projects
(N = 14)

Tenancy:	Elderly	Family	Total
Management Mode			
Conventional	2.0	5.4	3.9
Contract	1.5	11.7	7.6
Combined	1.8	7.75	--

Significance Tests (F)

Elderly-Family **15.8 Conventional-Contract *5.3 Interaction @4.9

Planned Variations (F) Testing Significance of Contracting Out

Elderly 0.06 Family **10.19

EXHIBIT 34 (continued)

Vandalism Costs Per Unit in the Past Year at Urban Projects
(N = 25)

Tenancy:	Elderly	Family	Total
Management Mode			
Conventional	$1.71	$8.18	$5.19
Contract	$15.84	$26.09	$20.96
Combined	$8.77	$16.45	--

Significance Tests (F)

Elderly-Family 1.1 Contract-Conventional @ 4.0 Interaction @ 0.6

* Significant at the 95 percent confidence level
** Significant at the 99 percent confidence level
@ Significant at the 90 percent confidence level

by contractors than at comparable conventionally managed sites. At urban elderly sites, vandalism costs per year were $15.84 for contract sites versus $1.71 for conventional sites, while at urban family sites, vandalism costs were $26.09 per unit under contract management versus $8.18 per unit under conventional management. The third table in Exhibit 34, which reports the relevant ANOVA results, indicates that these differentials were only marginally significant (94 percent confidence level).

The tenant interviews also probed issues of crime and social problems. Surprisingly, tenants under contract management expressed attitudes that did not differ significantly from those expressed by residents of conventionally managed projects. Tenants were asked whether they felt safe on the project grounds, whether they felt safe in their building, if people who drank too much were a problem at the project, if people who took drugs were a problem at the project, if unsupervised children and teenagers were a problem at the project, and if abandoned cars were a problem at the project. The average percentage of tenants who perceived crime and social problems did not differ noticeably, as the data in Exhibit 35 illustrate. This finding contrasts markedly with our measurement of performance in this area. This finding persisted when the results were examined for project subset (e.g., urban family).

Apparently, although vandalism, crime, and vehicle abandonment were objectively worse at the urban family sites managed by contractors, and although vandalism also was worse at the urban elderly sites managed by contractors, they were not sufficiently different at the time of our site visits to affect tenant satisfaction. One possible reason for this would be a decrease in the level of crime and social problems at the contract sites during the October, 1981 to September, 1982 time period that the performance data covered. Indeed when tenants were asked, "Compared to a year ago do you think your project is more safe, or less safe, in regards to the amount of crime," as Exhibit 36 shows, significantly more residents of the contract

EXHIBIT 35

PERCENT OF TENANTS RESPONDING AFFIRMATIVELY TO QUESTIONS ABOUT CRIME AND SOCIAL PROBLEMS

(Averaged Across Projects by Type)

Question	Contract %	Conventional %
Safe on Grounds	75	80
Safe in Buildings	89	90
Drinking a problem	21	21
Drugs a problem	16	13
Children a problem	21	20
Abandoned cars a problem	14	13

EXHIBIT 36

PERCENT OF TENANTS BY WHETHER PROJECT IS MORE OR LESS SAFE THAN A YEAR AGO

(Averaged Across Projects by Type)

Project Is	Contract %	Conventional %
More Safe	19*	9*
Same	69	81
Less Safe	12	10

*Significantly different at the 95 percent confidence level.

management projects than of the conventional management projects perceived an increase in safety.

Thus, we conclude that urban projects under contract management experienced vandalism costs that exceeded those at comparable sites with conventional management by an average of $16.00 per unit per year. At urban family projects under contract management, vehicle abandonment and robbery and burglary rates also were roughly twice those at conventional projects, although project safety had improved recently at contract sites, as reported by tenants.

Tenant Relations

Tenant relations with management and other tenants was assessed primarily through the tenant interviews. Other than in the tenant interviews, the only items collected that dealt with tenant relations were the percent of families that the property manager knew personally and the information about tenant's organizations that was reported in Chapter III. We also attempted to collect data on the percent of tenants referred to social service agencies, but these data were only available at one PHA.

As will be discussed subsequently, an overwhelming conclusion of the tenant interviews was that tenants differed little in their relations with managers at contract and conventional sites. One area of difference for the urban sites was that conventional managers generally knew a far smaller percentage of the project residents personally. Exhibit 37 presents an ANOVA confirming this finding. Whereas rural property managers generally knew at least 95 percent of their residents, conventional urban managers knew an average of only 44 percent of their tenants. By contrast, on average urban contract managers knew 81 percent of their tenants. At urban family projects, the differential was 76 versus 52 percent. At urban elderly projects,

EXHIBIT 37

ANALYSIS OF VARIANCE RESULTS: PERCENT
OF TENANTS WHO THE MANAGER KNOWS PERSONALLY

Management	Rural	Urban	Total
Conventional	99.2	43.6	61.2
Contract	97.5	80.7	84.6
Combined	98.5	62.2	72.3

Significance Tests (F)

Rural-Urban **17.0 Conventional-Contract **9.8
Interaction @ 4.1

**Significant at the 99 percent confidence level
@ Significant at the 90 percent confidence level

it was even wider--86 versus 34 percent. This finding is consistent with the finding in Chapter III that urban contract managers devoted more time than conventional managers to the projects under study. The likely reasons for these differentials also appear to be similar.

The primary reason for the difference in tenant familiarity of conventional and contract managers probably was that two large, urban PHAs split their projects into areas, with property managers at the area office rather than the project level, while two other urban PHAs gave managers of smaller projects responsibility for several projects. The property manager then assumed more of an administrative role and delegated much day-to-day responsibility for tenant interaction. Also, since the property manager was responsible for several properties under these systems, (s)he naturally would know less tenants at any individual project and especially at projects not located at the same site as the manager. Conversely, urban contract managers rarely

had any responsibility for more than one other site. To the extent that a contract manager performed functions like rent collection and tenant selection that normally would be handled by a central PHA administration, tenant interactions with the manager were increased further. Turnover probably was not an important cause of differentials in tenant familiarity. At both contract and conventional sites, we encountered both newly installed managers and managers with many years of experience managing the study site.

Attitudes Toward Management. Overall, as Exhibit 38 indicates, tenants at conventionally managed sites said that tenant-management relations were the same as they were a year ago, while tenants at contract sites were somewhat more likely to say that their relations had changed, with some becoming better and some worse.

EXHIBIT 38

PERCENT OF TENANTS SAYING TENANT-MANAGEMENT RELATIONS ARE BETTER OR WORSE THAN LAST YEAR

(Averaged Across Projects by Type)

Relations	Contract %	Conventional %
Better	21	14
Same	69	82
Worse	20	4

Eight other questions related to tenant perceptions of management yielded no significant results. These questions included:

- Does the manager know a great deal about how to do his/her job?

- Is the manager fair to tenants?
- Is it hard to get hold of the manager?
- Does the manager know what's going on at this project?
- Does the manager treat you well?
- Are you satisfied with the way management handles resident problems?
- Are you satisfied with the way management runs things?
- Are you satisfied with this project as a place to live?

The responses to these questions are summarized in Exhibit 39.

EXHIBIT 39

PERCENT OF TENANTS ANSWERING YES TO QUESTIONS ON ATTITUDES TOWARD MANAGEMENT

(Averaged Across Projects by Type)

Is Tenant Satisfied/ Does Tenant Think	Contract %	Conventional %
Mgr. knows how to do job	88	85
Mgr. is fair	91	92
Mgr. is hard to contact	24	21
Mgr. know what's going on	86	82
Mgr. treats you well	96	94
How mgmt. handles resident problems	84	83
Way mgmt. runs things	83	84
Satisfied living in project	93	93

Attitudes Toward Other Tenants. A final area discussed in interviewing tenants was their attitudes toward their neighbors. We asked tenants if they agreed or disagreed with four statements

as follows: most of your neighbors here have the same beliefs about right and wrong as you; most of your neighbors have the same housekeeping standards as you; many people here help management to keep up the buildings and grounds; and, generally, you are satisfied with your neighbors in this project.

The results, which are presented in Exhibit 40, once again indicate that type of management had little impact on tenant attitudes. The only difference was that tenants in contract projects were 11 percent more likely to think their neighbors shared their concepts of right and wrong, a small difference which has little significance as an isolated finding in terms of the present study.

EXHIBIT 40

PERCENT OF TENANTS AGREEING WITH STATEMENTS ABOUT THEIR NEIGHBORS

(Averaged Across Projects by Type)

Statement	Contract %	Conventional %
Same beliefs-right & wrong	91*	82*
Same housekeeping standards	74	79
Tenants help mgmt keep up project	69	71
Satisfied with neighbors	93	91

*Significant at the 95 percent confidence level.

Overall, we conclude that **tenant relations with management and relations among tenants were not significantly different at sites under contract and conventional management, although contract managers did know a greater proportion of tenants personally.**

SUMMARY

The effects of contracting out for public housing property management were assessed by comparing cost and performance at contract sites and comparable sites under conventional management. Differential effects were observed on the six rural contract sites, the six urban elderly contract sites, and the seven urban family contract sites, as discussed in the subsections that follow. In terms of an aggregate overview, total routine expenses sensitive to management intervention were lower in rural than urban sites and performance generally was better in terms of rental and occupancy, maintenance and groundkeeping, and control of crime and social problems. Tenant relations in rural and urban sites were comparable. Comparisons of aggregate urban cost and performance between the conventional and contract management sites are not reported in this summary since the differences between urban family and elderly sites are so large that an aggregate treatment would be misleading.

Rural PHAs

Neither total routine expenses sensitive to management intervention nor major expense components differed significantly between rural contract and conventional sites when evaluated by t-tests and analysis of variance techniques. One minor differential, which was marginally significant, was that employee benefits were about $2.30 per unit month (pum) lower at contract sites.

Roughly 4.4 percent of the tenants were delinquent with 5.8 percent of the rent at rural family contract sites compared with a one percent delinquency at the comparable conventional sites, although the differential was not even marginally significant statistically. The reason for the higher delinquencies observed was not readily apparent. Rural contract managers sent more legal notices of rent delinquency per unit, evicted a higher percentage of tenants for non-payment of rent, and were perceived as strict about rent being paid on the day that it was due by 20

percent more of the tenants than at comparable rural PHAs under conventional management. All of these differences were at least marginally significant when evaluated by t-tests.

Maintenance and groundskeeping were equal at rural sites under contract management and comparable conventional sites. This conclusion resulted from analysis of tenant perceptions, our own visual assessment, and a comprehensive set of performance indicators on the volume of work handled, routine and emergency maintenance response times, vacant unit preparation time, performance of preventive maintenance, and the number of times per week that common areas, public spaces and grounds were cleaned.

The tenant interviews revealed that the contract managers were slightly more strict about tenant behavior than conventional managers. Crime and social problems were rare at the rural sites in general and did not differ noticeably by type of management. Tenant relations with management and each other also did not differ by management type at rural sites.

On balance, **contract and conventional management were approximately equal in cost and performance at the rural sites in this study.**

Urban Elderly Projects

Total routine expenses sensitive to management intervention were $21.00 pum (28 percent) higher at urban elderly sites under contract management than at comparable sites under conventional management. This differential was split somewhat equally between higher administrative expenses ($6.00 pum), higher maintenance and operations expenses ($8.50 pum), and higher expenses of other types including protective services and tenant relations ($8.50 pum). The management fee, which was allocated to the administrative expense line item, was a major cause of the higher value of this line item. Employee benefits again were $2.30 pum lower at contract than conventional sites.

Performance at urban elderly sites under contract and conventional management was similar. Rental delinquencies, maintenance, crime and social problems, and tenant relations all were

equivalent by most measures. A few significant differences were observed. At contract sites, vacant unit preparation time was higher (17.6 versus 7.4 hours), management was slightly more strict, and tenants reported that the grounds and trash areas were slightly less clean. Vandalism costs over the past year were roughly $16 per unit at contract sites, but only $2 per unit at conventional sites. And contract managers knew 86 percent of their tenants personally, while conventional managers knew only 34 percent.

Thus, **the urban elderly projects under contract management in this study were $21.00 pum more expensive to operate than comparable projects under conventional management, although performance at the contract and conventional sites was largely comparable.**

Urban Family Projects

Total routine expenses sensitive to management intervention did not differ significantly between comparable urban family projects under contract and conventional management. Administrative expenses at the contract sites were $5.00 pum higher than at the conventional sites, primarily due to inclusion of the management fee in this expense category. Conversely, employee benefits were $2.30 pum lower and other expenses were slightly lower at contract sites.

Performance at urban family projects managed by contractors generally was worse than at comparable conventional sites. Rental and occupancy differences were particularly noticeable. Rent delinquencies were 27 percent in terms of both tenants and dollars at contract sites, 12 percent higher than at conventional sites. Without exception, delinquencies at each urban family site under contract management were equal to or higher than at its comparison site under conventional management. Urban contract managers also sent fewer delinquency notices and initiated fewer evictions.

Maintenance performance at urban family sites under contract and conventional management was not significantly different according to the tenants interviewed and as measured by most performance indicators. The only differences observed were that vacant unit preparation time was significantly higher (17.6 versus 7.4 hours) and management was a bit more strict about tenant behavior. Tenants also reported that the grounds and trash were slightly less clean at sites under contract management.

Crime and social problems were worse at urban family sites managed by contractors than at comparable sites under conventional management. On average, there were twice as many abandoned car per 100 units at contract sites (3.2 versus 1.5), the vandalism cost of $26 per unit per year was more than three times the cost at conventional sites, and robberies and burglaries were more than a third higher (11.7 versus 7.0 per 100 units). Safety at the contract sites, however, had increased over the past year according to the tenants, and the percentage of tenants who felt safe on the grounds and in the buildings at sites managed by contractors did not differ significantly from the percentage at conventional sites.

Tenant relations with management and other tenants were similar at the contract and conventional sites, although contract managers at urban family sites knew 76 percent of their tenants personally compared to 52 percent at comparable conventional sites.

Thus, **expenses at the urban family sites managed by contractors in this study were not significantly different from expenses at comparable sites under conventional management. Tenant relations and performance on maintenance and operations functions also were comparable for the two types of management. Urban family sites with contract managers, however, had 12 percent higher rent delinquencies and roughly twice the incidence of crime and social problems as comparable sites with conventional managers.**

APPENDICES

APPENDIX A

PROFILES OF TREATMENT SITES

St. Louis Housing Authority

Six of the urban treatment projects are in the St. Louis Housing Authority (SLHA). SLHA has 6778 units of public housing in 32 projects, and it uses a variety of management mechanisms in running this system. In addition to private, for-profit management exemplified by the projects described here, SLHA makes wide use of non-profit management entities and tenant management councils. Only a few small projects are managed by in-house staff. Seeking new management techniques after a long and costly rent strike in 1969-70, SLHA pioneered such practices as project-based budgeting in addition to private management and tenant management. SLHA has continued with its management practices since their initiation, and there is no support now for a return to conventional management.

Blumeyer. Blumeyer is a large project, providing 574 apartments for families. Constructed in 1968, Blumeyer is made up of two hi-rises (286 units) and two-story townhouses (288). On the same site is another public housing project, a 588 unit hi-rise for the elderly, which is managed by a non-profit organization. In its early years, Blumeyer was under tenant management, but since 1975 it has been managed by one property management firm. This firm is well established in the area of assisted housing, providing management services to PHAs in some 4 states. One of the principals of this firm served for seven years as executive director of SLHA. The current manager of Blumeyer had spent several years in tenant management for SLHA before joining this firm. Blumeyer is the only SLHA project that this group currently manages.

Parkview. Parkview, a hi-rise for the elderly, contains 397 units in one large building. It was built in 1973, and has been managed by one private, for-profit firm since shortly after it opened. This firm is a provider of care for the elderly;

their principal focus is in operating a group of nursing homes. In addition to Parkview this firm also manages University House and two other elderly hi-rises for SLHA.

University House. Located on the campus of St. Louis University, University House is a 12 story hi-rise for the elderly containing 201 efficiency units. This project was built in 1974 and, like Parkview, has been under private management almost since it opened.

Kingsbury Terrace. Another hi-rise for the elderly, Kingsbury comprises 147 apartments. It was opened in 1971, and for the last 10 years has been continuously managed by one firm. That company is a large and well established St. Louis property management firm. In addition to Kingsbury, they also manage Town XV and some Section 8 property for SLHA.

Town XV. Town XV is a small project that provides housing for families. Of its 36 units, some 28 are in a townhouse development; the rest are scattered throughout the nearby neighborhood. Town XV has been managed by the same firm since shortly after it opened in 1971. Kingsbury and Town XV are in the same section of St. Louis, and they form a management package. Thus, in exchange for managing Kingsbury, a fairly large (and profitable) elderly project, SLHA has induced the contractor also to manage Town XV, a small project that is more difficult to operate profitably.

McMillan Manor. Another small project, McMillan houses families in 34 townhouse units. It was opened in 1972 and has been managed continually by a St. Louis realtor since 1975. This management firm is small, but has had considerable experience in operating small projects for SLHA and in other assisted housing. At the present time, McMillan Manor is the only project that this firm manages for SLHA.

Cheyenne Housing Authority

Of the urban sites in this study, Cheyenne is the only one that contracts for the management of the entire PHA, rather than for specific projects. Cheyenne has 98 units of public housing in two projects: one a scattered site project for families, the other a hi-rise for the elderly. It is the latter project that is included in this analysis. Unlike most other treatment sites where the PHA sought management services from existing firms, in Cheyenne a private management company was created, in effect, by incorporating the administrative staff of the PHA. Thus, this firm has the same staff that were previously with the PHA, and it is headed by the former executive director.

Burke Hi-Rise. As its name reveals, Burke is a nine story structure, housing the elderly in 75 apartments. It is located on the fringe of downtown Cheyenne. Opened early in 1975, Burke has been managed privately since the management company was created in 1978.

National Capital Housing Authority

The National Capital Housing Authority (NCHA) in Washington, D.C. is a very large PHA; it has 53 projects that provide some 11,184 units of public housing. NCHA has experimented with private management since the late 1960's but most of its housing still is managed by PHA staff. Currently, one project is under private management.

Edgewood Terrace. Edgewood Terrace has been managed by private companies since it opened in 1973. It is a low-rise project that provides 334 units of public housing. Most of these apartments are occupied by elderly persons, but a few contain small families. It is adjacent to another project for families.

Edgewood's current contractor is a relatively young property management firm. Half of the 10 developments this firm manages include subsidized housing, so it is experienced with assisted housing. NCHA will engage a different contract manager

when the current contract expires; a principal of the management firm recently has assumed an elective office with the D.C. city government and conflict of interest laws preclude contract renewal.

Boston Housing Authority

Boston is another very large PHA with some 12,757 dwelling units in 50 public housing projects. As in the District of Columbia, Boston's experience with private management is long, but limited; they have engaged private managers since 1973, but currently they have only two projects that are operated by for-profit entities (three other projects are managed by non-profits).

Torre-Unidad. Since it opened in 1975, Torre-Unidad has been managed by one contractor. This project houses the elderly in 201 hi-rise units. The contractor is a property management firm that grew out of a community-based organization in Boston's Hispanic community. The PHA is ending its affiliation with this firm and will assume management of Torre-Unidad when the current contract expires.

West Newton. West Newton has been managed by the same group that runs Torre-Unidad since it opened in 1973. West Newton is a project for families; it includes 136 townhouse apartments. The Boston Housing Authority soon will bring West Newton into conventional management, as the contract with the management firm will not be renewed.

Hawaii Housing Authority

The PHA for Hawaii is another reasonably large urban site, having some 4400 housing units in 44 projects. Hawaii makes limited use of the private management technique. Since 1974, two projects have been managed by private companies, and, in 1981 the management of one additional development was contracted out.

Kuhio Park Terrace. Kuhio Park Terrace is the largest public housing project currently managed by a private, for profit firm. Since it was opened in 1966, its several hi-rise buildings have provided housing for 614 families. This is a project with a very bad reputation, and the PHA engaged a contract manager as a means of addressing problems here. That contractor, a very large and well-established property management firm, has operated Kuhio Park Terrace since 1977. Another contractor managed the project from 1974 to 1977. This same firm also manages Kuhio Park Homes.

Kuhio Park Homes. Located on the same site as Kuhio Park Terrace, Kuhio Park Homes also provides housing for families. It is an older and smaller development, however, having 134 units in low-rise buildings that were opened in 1954. This project is managed by the same firm that runs Kuhio Park Terrace; their proximity makes it possible to treat them as if they were one project. Kuhio Park Homes also has been under contract management since 1974.

Waimaha/Sunflower. A conversion from low income assisted housing, Waimaha/Sunflower has been managed by a private company since it opened in 1981. It is a low-rise development and, like the other treatment projects in Hawaii, families live in its 130 apartments. The contractor is a small property management firm that has been in operation for less than 2 years.

Mercer County (North Dakota) Housing Authority

Mercer County has 40 units of public housing. These all are scattered-site dwellings and are evenly divided betwen 2 projects, one in Beulah and one in Hazen. 28 apartments are for the elderly; the rest are for families. Units were constructed between 1970 and 1972. Since 1977 the authority has been managed by one contractor. The contract management firm is composed of individuals with experience in assisted housing; the person responsible for Mercer formerly was assistant executive director at another authority, and he currently manages another authority with Section 8 housing.

Cass County (North Dakota) Housing Authority

Cass County includes 196 units of public housing in 6 projects in 3 towns. West Fargo has 3 projects: a 24 unit high rise for the elderly and 2 scattered site projects for 120 families. In Casselton there are two scattered site projects of 20 units each. Units are evenly divided between families and elderly persons. In Kindred there are 12 scattered site units that house the elderly. The oldest building, the high rise, was built in 1968. All of the scattered site structures date from the mid-1970's.

The PHA in Cass County was first run by a contractor in 1976. This was a sole source contract. In 1979 the contract was awarded competitively to a local real estate agent.

Pennington County (South Dakota) Housing Authority

Pennington County, which includes the city of Rapid City, has 476 units of public housing in 9 separate projects. There are 287 apartments for the elderly, including 203 in a hi-rise. For families, 189 low-rise units are provided. All of these projects were constructed between 1974 and 1978.

The contract management firm for Pennington was formed in 1975, when the executive director, in effect, incorporated himself and contracted to do for the PHA what he had previously done as their employee. The contract has been renewed every year on a sole source basis; it will be bid this year for the first time. The management firm also manages the Meade County (South Dakota) Housing Authority.

Meade County (South Dakota) Housing Authority

Meade County has one public housing project, an 80 unit hi-rise for the elderly. It was opened in 1976. The same firm that manages the PHA in Pennington County also has managed the project in Meade County for several years.

Tishomingo (Oklahoma) Housing Authority

Tishomingo has 36 units of public housing in a project that was built in 1972. These apartments are in one-story duplexes and triplexes. About two-thirds of the units are for families, and elderly people live in the other one-third. For the past two years the PHA has contracted with a local firm to manage its properties, which also include a Section 8 development. This firm is principally a fee accounting enterprise with considerable experience in assisted and Indian housing. Recently, they have been expanding into public housing management and now manage Wynnewood in addition to Tishomingo.

Wynnewood (Oklahoma) Housing Authority

Wynnewood is very similar to Tishomingo: both are in south central Oklahoma, they each have one public housing project and one Section 8 development, their public housing is of the same architectural design, and they are managed by the same firm.

Wynnewood's 28 units of public housing, which were opened in 1970, house both families (about one-third of the units) and the elderly. The PHA has been managed by the contractor for just over one year.

APPENDIX B

GENERAL INSTRUCTIONS
DEVELOPMENT OF PHA/PROJECT COST DATA

STEP 1 ADD MAJOR ITEMS OF EXPENSE, AS REQUIRED

Some sites incur housing-related expenses which are funded by grants or other agencies. These were identified on reconnaissance visits. These expenses need to be included IF AND ONLY IF THESE COSTS ARE UNDER THE DIRECT CONTROL OF PHA/PROJECT MANAGEMENT. For example, we would exclude any costs of staff who report to another agency, but include costs of housing staff funded by an outside grant. This would also apply if an employee is given unreported free residence on-site. Put these in the appropriate line on a new copy of HUD 52599, and mark the new copy "ADJUSTED" at the top. Show any calculations in workpapers, and retain copies of source documents to the extent possible. At a minimum, dollar amounts and source documents must be clearly identified in workpapers.

STEP 2 PERFORM ADJUSTMENTS ON LINE ITEMS OF EXPENSE WHICH ARE NOT STATED ON AN ACCRUAL BASIS

All line items should be stated on a full accrual basis. Where appropriate, make adjustments for both the beginning and end of the fiscal year reported on HUD 52599. If the difference is immaterial, make a notation in your workpapers to that effect and do not make any adjustment. Enter accrual-based amounts in the appropriate line of a new copy of HUD 52599 (or a new copy created in Step 1), and ensure that the new

copy is marked "ADJUSTED" at the top. Show any calculations in workpapers, and retain copies of source documents to the extent possible. At a minimum, dollar amounts and source documents must be clearly identified in workpapers.

STEP 3 ALLOCATE PHA EXPENSES TO THE PROJECT LEVEL, IF APPROPRIATE

This is necessary where our site is a project rather than an entire PHA, and where project-level reports are not customarily prepared. The end result should be a project-level adjusted HUD 52599 form. Where appropriate, allocate PHA-level expenses on a line-by-line basis, using designated site-specific allocation statistics. In many cases, statistics will not exist in the form needed, and efforts must be expended gathering statistics. Where project-level reports are available, ensure that any central overhead cost items are allocated based on a reasoned approach. For example, if the PHA periodically surveys its administrative staff to estimate how to allocate Administrative Salaries, this is acceptable. Conversely, if all centralized costs are arbitrarily allocated based on "ball-park" estimated percentages as a lumpsum, a decision would have to be made whether to re-allocate centralized costs. Enter all resultant project-level amounts in the appropriate line of a new (third) copy of HUD 52599, and mark the new copy "PROJECT-LEVEL ADJUSTED" at the top. Show all calculations in workpapers, and retain source documents to the extent possible. At a minimum, identify the source of all allocation statistics clearly in the workpapers.

SAMPLE COST CASE

The Public Housing Authority (PHA) of Hometowne consists of a central office and 4 small project sites spread throughout Hometowne. One of these sites, Harveyville Terrace, is included in our study. The PHA has a total of 200 bedrooms in its 100 units. Harveyville Terrace is the largest project, with 80 of those bedrooms in 40 units. Aside from central office staff, there are 2 people who serve as maintenance staff--a lead mechanic and a part-time helper.

The PHA prepared a HUD 52599 form (Statement of Operating Receipts and Expenditures) for FY81, which looked like this for expenditures:

Administration:

Administrative Salaries	$ 9,900
Sundry	4,900
Total, Administrative Expenses	$14,800
Utilities (total)	40,000
Ordinary Maintenance and Operations	19,000
General Expense:	
Insurance	300
TOTAL OPERATING EXPENDITURES	$74,100

From our reconnaissance visit to Hometowne, we know that the PHA keeps its accounting records on a cash basis, that is, they record the amount of any expenses paid within the fiscal year regardless of when the expense was actually incurred. This practice was reflected on the HUD 52599 which was filed for the fiscal year January 1 through December 31. We also found that: (1) the lead mechanic gets a free apartment along with his salary; (2) the administrative payroll is bi-weekly but maintenance personnel are paid on the 15th and last day of each

month, in each case for the period immediately completed; (3) all non-personnel maintenance and administrative expenses are paid as incurred; (4) the PHA received a $500 grant from the Clerical Foundation to offset the salary of the Executive Director's secretary; (5) the PHA paid its 3-year insurance policy back on January 2; and (6) while utility bills are paid centrally, they are recorded on separate journals for each site.

Our task is to come up with an adjusted HUD 52599 for Harveyville Terrace.

STEP 1 ADD MAJOR ITEMS OF EXPENSE, AS REQUIRED

In examining the facts, we find 2 expense items that are not reflected on the HUD 52599 for the PHA, but are clearly under the direct control of PHA management.

- the free apartment for the lead mechanic
- the $500 grant from the Clerical Foundation.

To determine the value of the free apartment, we look at the "rents" being paid by other tenants of similar sized units in Harveyville Terrace. Since rent is not a specific amount in public housing (tenants pay a percent of income instead), an equivalency must be calculated based on what other tenants paid in the appropriate fiscal year. We do some research and find that the average tenant contribution in similar units is $83.33 per month. This equates to $1,000 per year.

The end result is that we increase Ordinary Maintenance and Operations by $1,000 (to $20,000) and increase Administrative Salaries by $500 (to $10,400). These new amounts are documented in our workpapers, and entered onto a new HUD 52599 form marked "ADJUSTED" at the top.

STEP 2 PERFORM ADJUSTMENTS ON LINE ITEMS OF EXPENSES WHICH ARE NOT STATED ON AN ACCRUAL BASIS

Since the PHA uses cash basis accounting and reporting, we know that each line must be examined.

Administrative Salaries

These are paid every 14 days, as previously mentioned. The first payroll of the year was made on January 4, and amounted to $700. Since the cash basis was used to complete the HUD 52599, we would need to adjust the line item so that only 4 days of the paycheck are charged. To do this, we subtract out 10 days' worth of pay:

10/14 x $700 = $500

However, we also find that the last payday of the year was December 24. As a result, 7 days of pay for the year we are studying were included in the next year's pay. We have to adjust back in 7 days of pay. There was a big "RIF" at the PHA during the year, and the total payroll is $200 every other week now. To add back the 7 days' worth of pay:

7/14 x $200 = $100

Therefore, we would end up with a net reduction in the line item due to accruals of $400 ($500 less $100). The new amount of the line would be $10,000 ($10,400 less $400). We would show calculations and the source of all dollar amounts in our workpapers, and enter the new figure onto our adjusted HUD 52599 form.

Sundry

Since we found that non-personnel administrative expenses are paid as incurred, no adjustment is required. Transcribe the amount $4,900 onto the adjusted HUD 52599 intact.

Utilities

All utility meters are read on the 15th of each month, and bills are produced on the 20th and mailed to the PHA. Unless the PHA went out and read all its meters on December 31, they would not know what cost actually was incurred. Unlike salaries, the expenses fluctuate daily. On the other hand, some years are worse than others, or rates may increase dramatically from December to December. Therefore, it is necessary to adjust for any significant discrepancies; immaterial differences (e.g., 1% or less) can be ignored.

In this case, our research uncovers that a $350 adjustment would result (January bills had a $700 difference). This is less than 1% of $40,000 and thus the line should remain unchanged. Transcribe the $40,000 onto the adjusted HUD 52599 intact.

Ordinary Maintenance and Operations

Maintenance personnel are paid on the last day of each month for the 15 or 16 day period immediately completed. Non-personnel expenses are paid as incurred. Therefore, no adjustment is necessary. Transcribe the $20,000 onto the adjusted HUD 52599, if it was not transcribed already in Step 1.

Insurance

The $300 expense reflects a payment that will provide insurance coverage for 3 years. Two years are thus prepaid, and need to be adjusted out. To do this, we subtract out as follows:

2/3 x $300 = $200

Therefore, we would end up with a reduction in the line item of $200, and the new amount would be $100 ($300 less $200). We would show the calculations and the source of the $300 dollar amount in our work-papers, and enter the new figure onto our adjusted HUD 52599 form.

Consequently, the adjusted PHA-level HUD 52599 form would look like this:

Administration:	
Administrative Salaries	$10,000
Sundry	4,900
Total, Administrative Expense	$14,900
Utilities (total)	20,000
Ordinary Maintenance and Operations	
General Expense:	
Insurance	100
TOTAL OPERATING EXPENDITURES	$75,000

STEP 3 ALLOCATE PHA EXPENSES TO THE PROJECT LEVEL, IF APPROPRIATE

Only one site, Harveyville Terrace, is included in our study. Therefore, we must allocate Hometowne PHA costs down to the project level. The following statistics were decided upon following reconnaissance visits:

Line Item	Allocation Statistic to be Used
Administrative Salaries	Number of Bedrooms
Administrative, Other	Number of Bedrooms
Utilities	Actual Bills
Ordinary Maintenance	Sample Percent of Time (Est.)
General Expenses	Number of Dwelling Units

The calculations that follow, and the source of each statistic would be documented in our workpapers. The resultant dollar amounts would be entered onto another HUD 52599 form, marked "PROJECT-LEVEL ADJUSTED" at the top.

Administrative Salaries

From reconnaissance we know that Harveyville Terrace has 80 of the 200 bedrooms in the PHA. Therefore, the equation would be as follows:

$$\frac{80}{200} \times \$10,000 = \$4,000$$

Source for bedrooms: Joe Smith's computer records

Administrative, Other

The same statistic would be used. Therefore, the equation would be as follows:

$$\frac{80}{200} \times \$4,900 = \$1,960$$

Utilities

On reconnaissance we found that Hometown PHA maintained project-level utility costs. Harveyville Terrace had utility bills totaling $18,000 for the year.

Ordinary Maintenance and Operations

Since only two people are involved, we decided that a sample percent of time (estimated) would be feasible to collect. The lead mechanic, who worked a 40-hour week, estimated that Harveyville Terrace took on average 15 hours per week to service. The helper, who worked a 20-hour week, estimated that Harveyville Terrace took him on average 9 hours per week. Thus, of 60 hours available, 24 were spent on Harveyville Terrace, and the equation would be as follows:

$$\frac{24}{60} \times \$20,000 = \$8,000$$

Insurance

From reconnaissance we know that Harveyville Terrace has 40 of the 100 dwelling units in the PHA. Therefore, the equation would be as follows:

$$\frac{40}{100} \times \$100 = \$40$$

Consequently, the adjusted project-level HUD 52599 form would look like this:

Administration:	
Administrative Salaries	$ 4,000
Sundry	1,960
Total, Administrative Expense	$ 5,960
Utilities (total)	18,000
Ordinary Maintenance and Operations	8,000
General Expense:	
Insurance	40
TOTAL OPERATING EXPENDITURES	$32,000

APPENDIX C

DISCRETE FUNCTION SUBSTUDY

This appendix discusses four basic steps required to conduct a national-level study of contracting out other discrete PHA functions. The narrative is presented at a general level and is intended to provide a departure point for future discussion and study design. Further, the discussion assumes that a future study like the current one, would employ a research design requiring a control group selected on either a "matched-pair" or random stratified sampling basis. A "case-study approach" might prove more appropriate, however, if the study's primary objective is to contribute to a technical assistance document. A discrete function methodology for a study with a control group would consist of four steps, as follows:

- Targeting of service areas suitable for analysis
- Identification of critical cost and performance parameters for each targeted service
- Sample identification and selection
- Data collection and analysis.

These steps are discussed in the following subsections.

Targeting of Service Areas

An obvious first step in contemplating such a study would be to focus upon PHA operations and functions that would be beneficial for analysis. Candidate areas would include: security, data processing, vacant unit preparation, income recertification, accounting services, and all or various aspects of maintenance and custodial operations.

Since the range of services that can be contracted out is broad, criteria would need to be established and utilized to select appropriate services for study. Possible selection criteria include:

- Potential for cost savings
- Frequency of current usage
- Discreteness of the function/service
- Amenability of the service to contracting
- Potential receptivity of PHAs to considering alternatives.

These criteria are discussed in the following paragraphs.

Of essential importance in selecting services areas would be the potential for cost savings. Priority most effectively would be placed on services that present the largest cost savings on an absolute rather than relative basis. For example, the same 10 percent savings in two separate program areas could result in quite different "bottom line" savings if one were a large budget item and the other were not (e.g. "advertising" versus "maintenance and custodial").

A second selection criterion would be how frequently the service or function currently is contracted. Clearly, a national study would be of low utility if the service already is contracted by most PHAs. If the service is contracted on a very limited basis, a study's utility also might be low, especially if the reasons for contracting out relate to skills availability (e.g., for refrigerator repair) rather than cost-effectiveness. The resulting small sample in a study of a function that only rarely is contracted out can lead to a study of low validity. In these situations detailed analysis probably should be conducted initially to determine why the function is so rarely performed under contract. Underutilization may be suggestive of inherent technical obstacles. If such obstacles are substantive, a study of the particular area probably should be given a low priority.

A third criterion for selecting study areas is the degree to which the service area constitutes a "discrete function" that can be readily isolated for analysis. For example, "trash collection" would be a better candidate than "financial management" with respect to this criterion, since it probably would be more difficult to reach a working consensus on the significant functions and tasks associated with financial management. On the other hand, the trash collection function can be defined fairly easily.

A fourth criterion is the amenability of the service to contracting out. Emphasis would not be placed on service areas that have limited degrees of transferability. Of course, a long list of factors could affect the transferability of any service/function. For example, high skill requirements may limit transferability into certain labor markets or on a geographic or rural/urban basis. Other factors affecting the amenability of service to contracting out include the potential for fraud and abuse and the potential for union/management relations problems.

A final criterion would be the potential receptivity of non-contracting PHAs to consider the alternative under study. Emphasis should be placed on target areas where PHAs would more readily accept change. Conversely, less emphasis should be placed on analysis of areas where they might be more resistant--such as policy sensitive areas (e.g., social service and counseling services).

Identification of Critical Cost and Performance Parameters

A second methodological step in future cost-effectiveness studies would be to identify and assess the critical factors within each selected service area that signficantly impact cost and performance. This step is necessary to provide a basis for subsequent comparison of costs and performance at treatment (contracted) and comparison sites. Most straightforwardly, this step provides the data collection framework needed to ensure that the data collected are not "apples and oranges." For example, a

potential study of income recertification would involve assessing the (cost) impact of factors such as: volume of recertifications to be performed, acceptable standards for verifying incomes, time standards for completion, whether the PHA or the contractor must provide office space, etc. These significant factors need to be identified so that total costs can be adjusted to account for inevitable differences in contractor/PHA agreements between sites.

Determining the parameters affecting cost and performance is a particulary critical step that "drives" the detailed design of the study. Various analytical techniques were identified in this study that might be used alone or in combination to isolate the critical cost and performance parameters. These analytic techniques included: literature reviews and review of other secondary sources available (actual contract documents are quite helpful); convening a panel of private sector and PHA "experts" to brainstorm; and conducting an in-depth cost and performance review site visit at a limited number of sites that contract out the service. Any future study probably should use these three techniques at its inception to help define the critical parameters of the service area(s) for analysis.

Sample Identification and Selection

As mentioned previously, this discussion presumes a treatment-control study design. With such a treatment and comparison group structure, substantial opportunities would exist to economically study multiple (discrete) functional areas by having treatment sites serve as control sites in other areas of analysis. Potential economies notwithstanding however, two issues need to be addressed in establishing a study sample.

A first issue is how the sites that contract out the service would be identified. Again, depending on the service, treatment sites could be identified through primary or secondary research efforts. The most rigorous method generally would be through a mail or telephone survey of PHAs. Alternatively, telephone

conversations with HUD Area Offices and such organizations as NAHRO and CLPHA might suffice. The Area Offices, for example, were able to identify the universe of privately managed sites for the current study. Another potential means of identifying the treatment sample is through analysis of HUD's records. For instance, PHAs often are required to identify the nature and amount of contractual agreements in their budget request justification and supporting schedules.

A second issue with regard to sample selection relates to the selection of a comparison group if a "matched pair" design is used. The selection of appropriate matching variables may be a difficult process, depending on the type of service being assessed. A procedure was sussessfully demonstrated in this study of private management, whereby candidate PHA's were identified from a PHA directory; additional matching variables then were obtained by telephone. However, preliminary reconnaissance visits to the comparison sites were still required to ensure the validity of the matches, and some sites were eliminated based on information obtained on-site. In sum, sample selection is a very "tricky" process with substantial cost implications for study budgets.

Data Collection

A final methodological step would be data collection. Certain insights regarding this segment resulted from the present study. First, field data collection activities often are necessary; however, significant amounts of data can be collected without such field visits. This may be particularly true in the collection of contracting costs. For example, a survey instrument (mailed to the site) may be adequate to collect cost data for a very discrete function such as trash collection. In these cases, the PHA is likely to have readily available records that would provide the basic cost of the service (e.g., face value of the contract). On the other hand, on-site data collection probably would be required to collect the comparable costs

at the control "non-contract" sites; the PHAs could not be expected to perform the necessary allocation, both because of the amount of effort required and the need for a uniform allocation method. A related point is that costs for on-site data collection activities would increase inordinately if complicated procedures are required to determine costs at both contracted sites and non-contracted sites. For this reason, it will be easier to study services that usually have legal contracts which provide a unit price for the service. In the absence of (or perhaps, in addition to) a contract, an audit trail of payments to the relevant vendors should be available to minimize expensive and time consuming cost finding procedures on site.

A second methodological point to be mentioned with regard to data collection activities is that procedures would need to be defined that would isolate and measure costs in the event that only certain project sites in the PHA receive the contracted out service. A general methodology has been developed as part of this study to determine operating costs (by major account) at a project level. This basic framework may be suitable for adoption to future study efforts, depending again on the service area being studied.

Finally, data collection procedures would need to address the significant costs associated with letting the contract and monitoring the contractor at treatment sites. Routine monitoring and administration of contracts often consume relatively small portions of several (PHA) employees' time. When considered in aggregate, however, these activities typically represent a significant cost factor that needs to be addressed in a comparative analysis framework.

Data collection problems become more extensive if not only cost but quality and timeliness of service delivery are to be measured and compared across the sampled sites, which the generally should be. Trash collection costs, for example, may be easy to isolate, but whether pick-ups are made when scheduled and accomplished tidily may be more important than the cost differentials involved.

Summary

The preceeding discussion has demonstrated the basic viability of discrete function analyses by outlining a logical flow of events which would need to be executed. Several issues were identified in the process that would need to be resolved. The most notable issues affect the early steps of the process and were: articulating and weighting the criteria for selection of study areas; defining the detailed functions related to the service area; identifying which aspects of the service can significantly affect cost; and the need to define and measure qualitative differences in service delivery. The discussion also pointed to potential ways to minimize the costs of future studies. These included use of mail and telephone surveys and limited use of field data collection. However, if services to tenants are being evaluated, personal interviews may well be necessary.