

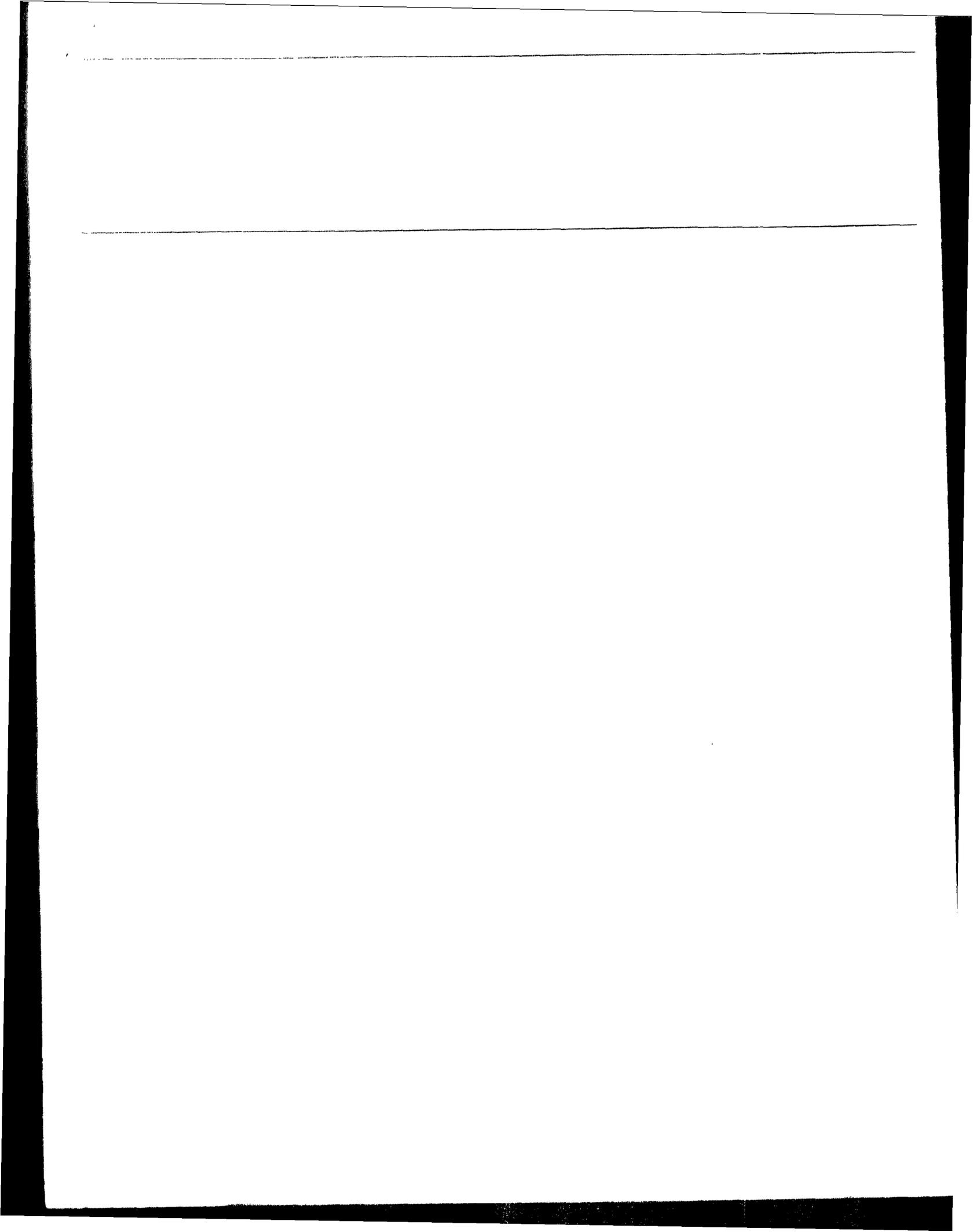
GAO

March 1991

ASSISTED HOUSING

Utility Allowances Often Fall Short of Actual Utility Expenses (Vol. I)







United States
General Accounting Office
Washington, D.C. 20548

**Resources, Community, and
Economic Development Division**

B-232897

March 26, 1991

The Honorable Donald W. Riegle, Jr.
Chairman, Committee on Banking,
Housing and Urban Affairs
United States Senate

The Honorable Henry B. Gonzalez
Chairman, Committee on Banking,
Finance and Urban Affairs
House of Representatives

As required by section 102(b) of the Housing and Community Development Act of 1987, we are reporting on utility allowances in the public housing and section 8 certificate housing programs. This report is in two volumes. Volume I discusses how utility allowances are provided to assisted households and the extent to which the allowances cover utility costs. In chapters 3 and 4 we make several recommendations to the Secretary of Housing and Urban Development to improve the utility allowance framework.

Volume I also discusses benefits and drawbacks of two alternatives for ensuring that a greater proportion of assisted households pay 30 percent of their adjusted income for rent and utilities. Chapter 5 contains a matter for congressional consideration on this issue.

Volume II presents detailed results on utility allowance practices from a nationwide survey of public housing agencies. It also contains results of our review of household rent payments, utility allowances, and utility costs for an estimated 9,500 households at 6 housing agencies.

Copies of this report are being sent to congressional committees and subcommittees interested in housing matters; the Secretary of Housing and Urban Development; the Director, Office of Management and Budget; and other interested parties. It will be made available to others upon request.

This work was performed under the general direction of John M. Ols, Jr., Director of Housing and Community Development Issues. He may be contacted at (202) 275-5525. Other major contributors are listed in appendix III.



J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

Over 3 million lower-income households receive rental housing assistance through the Department of Housing and Urban Development's (HUD) public housing and section 8 certificate programs. This report resulted from congressional concern that many of these households were not receiving adequate allowances to pay their utility expenses. Among other things, the Housing and Community Development Act of 1987 directed GAO to determine (1) how many households receive allowances, (2) the proportion of income that assisted households spent for rent and utilities, and (3) options for changes.

Background

HUD's public housing and section 8 certificate programs are the two largest federal programs for assisting lower-income households in obtaining affordable rental housing. These programs are administered by about 4,100 public housing agencies. Public housing is owned and operated by these agencies. Section 8 housing is private rental housing whose owners agree to rent to lower-income households.

Federal housing law requires that assisted households pay 30 percent of their adjusted income for rent. In implementing this requirement, HUD has interpreted rent to include costs for reasonable utility consumption. This 30-percent share is referred to as a household's rent burden. When a public housing agency or a private owner pays for utilities (e.g., gas, electricity, and trash pickup) directly, the assisted household pays the 30-percent amount. However, when the household pays a utility company directly, the household receives a reduction in rent (the utility allowance) to cover the expected cost of consuming a reasonable amount of those utilities. If the household's utility expenses equal the allowance, then the household has a 30-percent rent burden. However, if the allowance is less than (or more than) the household's utility expense, then the household pays the balance out of pocket (or keeps the difference). This situation leads to a rent burden of greater than 30 percent in the first case and less than 30 percent in the second case.

Public housing agencies set allowances. GAO collected data on allowances through a nationwide questionnaire and visits to 10 housing agencies. At 6 agencies, GAO collected detailed rent burden data.

Results in Brief

About 61 percent of public housing households and 79 percent of section 8 certificate households receive utility allowances, according to GAO's questionnaire results. For an estimated 9,500 households at 6 public

housing agencies, an estimated 33 percent of the public housing households and 7 percent of the section 8 households paid 30 percent of their adjusted income for rent and utilities, according to GAO's calculations. The rest paid more or less, some substantially. Although public housing agencies are required to review allowances annually, more than half of them do not, according to GAO's questionnaire results.

Through greater management attention, HUD and public housing agencies could increase the number of assisted households with rent burdens close to or equal to 30 percent. However, for reasons such as differences in housing construction that cannot be incorporated into different allowances, it is impractical to expect that most households will receive allowances that equal their consumption of utilities. Each household can have a 30-percent rent burden only if utility allowances are discontinued and housing agencies pay all utility bills. This alternative, however, is likely to increase federal subsidies and decrease energy conservation incentives.

GAO's Analysis

According to GAO's questionnaire results, the overwhelming majority of public housing agencies provide allowances: about 2,124 of 2,610 agencies (81 percent) provide allowances to public housing households, and about 1,636 of 1,717 agencies (95 percent) provide allowances to section 8 certificate households. GAO estimates that over 1.3 million households receive allowances—about 61 percent of the public housing households and 79 percent of the section 8 households covered by the questionnaire.

Allowances averaged \$55 and \$64 per month for public housing and section 8 households, respectively, at the six agencies reviewed. Public housing and section 8 households had disposable monthly incomes (after paying rent and utilities) averaging \$340 and \$380, respectively. Thus, even moderate differences between households' utility costs and allowances can significantly affect their budgets.

Rent Burdens Typically Vary From 30 Percent

The annual rent burden for an estimated 4,471 public housing households at 6 agencies averaged 30.5 percent, and 36 percent for an estimated 5,015 section 8 certificate households. However, rent burdens varied widely. About 33 percent of public housing households and 7 percent of the section 8 households paid 30 percent of their adjusted income for rent and utilities. About 45 percent of the public housing households and 70 percent of the section 8 households had annual rent burdens exceeding 30 percent. Of these, about 15 percent of the public housing

households had rent burdens greater than 33 percent and 32 percent of the section 8 households had rent burdens exceeding 40 percent of adjusted income. Individual examples were more extreme. For example, the average rent burden was 12 percent of adjusted income for the 20 public housing households with the lowest rent burdens in GAO's review, and 74 percent for the 20 cases with the highest rent burdens.

These differences occurred, in part, because allowances are generalized estimates of units' energy consumption characteristics that can vary markedly because of differences in unit construction and location. Differences also occurred because of unseasonable weather and different household consumption practices. Because of the multitude of factors that can influence energy consumption, it is administratively impossible to tailor allowances to each household's needs.

Allowance Monitoring Is Limited

HUD requires that housing agencies review their allowances annually and update them if required. Typically, fewer than half of the agencies reviewed their allowances in any 1 year for the 4 years covered by GAO's questionnaire (1985-88). Also, several of the 10 agencies GAO reviewed limited their reviews to determining whether utility rates had changed but did not reassess the overall reasonableness of their allowances. In addition, HUD requires that its staff review agencies' allowances. GAO found that while HUD's reviews at the 10 agencies disclosed a number of problems, they did not identify others.

Increasing Households' Opportunities to Realize 30-Percent Rent Burdens

HUD can act to ensure that a greater proportion of assisted households pay 30 percent of their income for rent and utilities, or close to it. First, HUD must better define what it means by reasonable consumption of utilities so that housing agencies can measure their performance in setting allowances. An improved definition could include the expectation that a larger proportion of households will have rent burdens closer to 30 percent. One approach might be to require that public housing agencies set allowances so that 90 percent of the households receiving allowances have rent burdens between 25 and 35 percent. HUD also needs to assure itself that housing agencies are reviewing their allowances annually and that its oversight is sufficient. Chapters 3 and 4 of this report discuss these and other steps for better ensuring that allowances meet reasonable household energy needs.

Alternatively, if housing agencies paid all utility bills directly, each household would be assured of paying 30 percent of adjusted income for

rent and utilities. However, because many households currently have utility expenses that are greater than allowances, financial responsibility for this excess consumption would be shifted to the housing agency. This action would probably lead to increased federal costs. GAO was unable to quantify these costs because there is an absence of financial data on assisted households' energy use. Additionally, this approach provides no incentives for assisted households to conserve energy.

Recommendations to the Secretary of HUD

GAO makes a number of recommendations to the Secretary of HUD, including (1) better defining HUD's "reasonable consumption" standard so that housing agencies will know what goals they are expected to achieve and (2) ensuring that housing agencies review allowances annually and that HUD monitor allowances sufficiently.

Matter for Congressional Consideration

Because utility allowances are inherently imprecise and households consume energy differently, rent burdens will not always be at 30 percent. However, if HUD acts on GAO's recommendations the rent burdens will be closer to 30 percent for a larger proportion of households than is currently the case. If the Congress decides to ensure that each assisted household pay exactly 30 percent of income for rent and utilities, it may wish to revise federal housing law accordingly. This action would require housing agencies to pay all utility bills on behalf of assisted households and may result in (1) increased federal subsidies and (2) decreased incentives for assisted households to conserve energy.

Agency Comments

GAO sent its draft report to HUD and to the 10 public housing agencies whose activities are discussed for their review and comment. HUD and two housing agencies provided comments; however, the comments were received too late for GAO to present them in their entirety without delaying this report's issuance. In essence, HUD did not believe that it had to better define its reasonable consumption standard and promised to reemphasize to public housing agencies and its field offices the importance of fulfilling HUD's review and monitoring requirements. GAO continues to believe that the reasonable consumption standard should be better defined so that housing agencies are provided with clear goals. The housing agencies' comments primarily dealt with technical matters in the draft report and GAO made changes where appropriate.

Contents

Executive Summary		2
Chapter 1		10
Introduction	Rental Assistance to Lower-Income Households	10
	Utility Allowances Provided to Meet Reasonable Consumption	11
	Objectives, Scope, and Methodology	13
Chapter 2		18
Few Households' Rent Burdens Meet the 30-Percent Standard	Most Assisted Households Receive Utility Allowances	18
	Rent Burdens Usually Differ From the 30-Percent Amount	22
	Summary	32
Chapter 3		33
Why Household Expenses Frequently Differ From Utility Allowances	Setting Allowances Is an Inherently Imprecise Task	34
	Monthly Variations in Expenses Affect Households	39
	Definition of Reasonableness Differs Between PHAs	40
	Some PHAs Report They Intentionally Keep Allowances Too Low	43
	PHA Check-Metering Practices Result in Different Treatment for Some Households	45
	Administrative Errors Can Raise or Lower Rent Burdens	48
	Conclusions	49
	Recommendations to the Secretary of HUD	51
Chapter 4		53
PHA and HUD Monitoring Provide Little Assurance That Allowances Are Reasonable	PHAs' Reviews Vary in Frequency and Depth	53
	HUD's Reviews at 10 PHAs Found Some Problems but Missed Others	57
	Conclusions	60
	Recommendations to the Secretary of HUD	61

<hr/>		
Chapter 5		62
Alternative Approaches for Providing Utility Allowances	Alternative Approaches for Providing Allowances	62
	Conclusions	67
	Matter for Consideration by the Congress	67
<hr/>		
Appendixes	Appendix I: HUD Policies on Utility Allowances and Allowances for Air-Conditioning Costs	70
	Appendix II: Effect of Treating Check-Metered Units as If They Were Individually Metered	77
	Appendix III: Major Contributors to This Report	80
<hr/>		
Related GAO Products		84
<hr/>		
Tables	Table 2.1: PHAs Providing Utility Allowances for Metered Services in Public Housing	19
	Table 2.2: PHAs Providing Utility Allowances for Metered Services in Section 8 Housing	19
	Table 2.3: PHAs' Estimates of Household Utility Allowance-Expense Relationship During an Average Month	26
	Table 2.4: Differences in Average Rent Burdens for Section 8 Households at Six PHAs	26
	Table 3.1: Distribution of PHA Size for Public Housing and Section 8 Certificate Units	35
	Table 4.1: Percent of PHAs Reviewing Allowances in Any Year	54
	Table 4.2: Reasons Cited by PHAs for Not Revising Allowances During 1988-89	57
	Table I.1: Approaches Used to Develop Utility Allowance Schedules at PHAs Nationwide	74
	Table II.1: How Public Housing Households Are Affected by Different Meter Types	77
<hr/>		
Figures	Figure 2.1: Monthly Dollar Amount of Allowances for Public Housing Households at Six PHAs	21
	Figure 2.2: Monthly Dollar Amount of Allowances for Section 8 Households at Six PHAs	22

Introduction

The Department of Housing and Urban Development (HUD) administers rental assistance programs to provide decent and affordable housing for lower-income households. These programs are designed to limit assisted households' rent and utility payments to 30 percent of their adjusted income, thus making assisted housing more affordable than housing in the private market generally.

Congressional concern that households in federally assisted public housing and section 8 rental assistance programs are paying more than 30 percent of income for rent and utilities (called "rent burden") led to this study. This report examines (1) the number of households that receive allowances to meet expected utility costs, (2) the proportion of income that certain assisted households pay for rent and utilities, (3) how utility allowances are derived, (4) how these allowances are monitored to ensure they are reasonable, and (5) possible changes to the utility allowance framework to ensure that allowances cover reasonable consumption while also promoting energy conservation.

Rental Assistance to Lower-Income Households

HUD's public housing and section 8 certificate programs are the two largest federal rental assistance programs. Together they provide housing to over 3 million lower-income households. To keep this housing affordable, federal housing law requires that assisted households pay 30 percent of their adjusted monthly income for rent.¹ For the topics in this report, the programs are carried out through about 4,100 local government agencies, called public housing agencies (PHAs), under contracts with HUD. Some PHAs administer both programs; others administer one or the other.

Public housing and section 8 programs differ in the housing assistance that they provide. In public housing, PHAs own and operate the housing. For section 8 housing, PHAs enter into contracts with landlords of private rental units to house lower-income households in return for an agreed-upon monthly rent. The two programs have the same eligibility requirements. Generally, eligible households are those whose incomes do not exceed 50 percent, and sometimes 80 percent, of the median income for the area in which they live.

¹The U.S. Housing Act of 1937, as amended, requires that the rent be the highest of (1) 30 percent of a household's adjusted monthly income, (2) 10 percent of a household's total monthly income, or (3) the portion of any welfare payment designated for housing expense. "Adjustments," or reductions to total income for calculating rent, include certain dollar amounts for elderly households, for each dependent, and for medical and child care expenses, as well as reductions if a household member is disabled or handicapped. Housing literature often uses the 30-percent definition as the required rental contribution and we follow that convention.

Figure 2.3: Annual Rent Burden Distribution of Public Housing Households at Six PHAs	24
Figure 2.4: Annual Rent Burden Distribution of Section 8 Households at Six PHAs	25
Figure 2.5: Rent Burden Distribution for Individually Metered Public Housing Households at Cuyahoga	27
Figure 2.6: Monthly Rent Burden Distribution for a Dakota County Section 8 Household	29
Figure 2.7: Number of Months in Which Households' Rent Burdens Equaled 30 Percent	31

Abbreviations

FMR	fair market rent
HUD	Department of Housing and Urban Development
PHA	public housing agency

Utility Allowances Provided to Meet Reasonable Consumption

While housing law requires that households assisted through public housing and section 8 programs pay 30 percent of their adjusted income for rent, it does not define "rent." HUD's long-standing policy is to define rent as including both shelter costs and a reasonable amount for the utilities that would be consumed by an energy-conserving household of modest circumstances. This interpretation, if implemented correctly, provides for more equitable treatment between those households whose utilities are included in the rent and those households that pay utility costs directly to utility companies. Further, if the allowance provided is reasonable, then legal requirements regarding the rent burden are satisfied, even if utility costs when combined with shelter costs exceed 30 percent of adjusted income.

The amount that PHAs determine is necessary to cover reasonable utility costs is called the utility allowance. The allowance can be small or large (from less than \$10 to over \$200 per month) depending on the number of utilities provided for (e.g., gas, electricity, trash pickup, water and sewer, and even wood and coal) and their use (e.g., heating, cooking, water heating, and general appliance use). Households may also receive allowances for tenant-supplied appliances where these appliances, such as a range or refrigerator, are not supplied with the rental unit.

Allowances are estimates of costs associated with the types of utilities consumed and the utility uses. Because assisted households live in different types and sizes of units, the allowances are further provided on the basis of the number of bedrooms and structure type (e.g., high-rise or garden apartment, single-family dwelling). The allowances are derived as estimates of reasonable utility consumption for classes of units but are not tailored to the energy usage characteristics of each unit.

Whether a household receives an allowance and how that allowance is provided depends on the way utilities are metered. Three types of metering exist: master meters, individual meters, and check meters. A master meter measures consumption for the building as a whole, rather than for individual dwelling units. In this case, the building owner pays utility costs and assisted households do not receive utility allowances. All utility costs are included in the rent. However, PHAs may impose surcharges on households that do not receive utility allowances (in public housing only) for consumption associated with tenant-owned major appliances not considered essential, such as food freezers or air conditioners.

Utilities are individually metered when utility consumption is measured for each housing unit and the assisted household pays its bill directly to the utility company. Here, a utility allowance is provided as a reduction in the amount that the household would pay to equal 30 percent of adjusted income. For example, if 30 percent of a household's income is \$250 per month and the allowance for reasonable utility costs is \$100 per month, then the household pays the PHA or the section 8 landlord \$150 per month for shelter cost and retains the \$100 to pay utility costs.

Allowances are provided differently when a PHA pays the utility company directly for utility consumption for the building as a whole, but installs "check meters" to monitor consumption of individual units. Households with check meters receive an allowance in the form of a maximum number of consumption units (e.g., kilowatt-hours per month for electricity) that they may consume without a surcharge. If the unit's consumption exceeds the established maximum, the PHA surcharges the household at an established rate per energy unit consumed. In some cases, if the household consumes less than its allowance, the household may receive a credit or rebate against future months when its consumption may exceed the allowance. However, in other cases, the household is treated as if it consumed the entire allowance amount and does not receive a credit or rebate for any of the unconsumed allowance.

A unit may have one metering system for all utilities (e.g., all utilities are individually metered) or it could have a mix of metering configurations ("mixed metering"). For example, gas-fired steam heat could be provided through a master meter, electricity could be metered through an individual meter, and water consumption could be measured by a check meter. In addition, households may receive allowances for nonmetered utilities, such as trash pickup.

For both public housing and section 8 certificates, HUD requires that PHAs review allowances at least annually and revise them as needed so they provide for reasonable consumption amounts. HUD also requires that allowances be revised if current utility rates differ from the rates on which the allowances were based (1) by 10 percent or more for public housing or (2) "substantially" for section 8 housing.

Concern Over Allowances and Reasonable Consumption Standard

Tenant advocacy groups have questioned the adequacy of allowances provided by some PHAs. In addition, these groups and PHAs contended that the "reasonable consumption" standard on which the allowances are based is not an objective standard and leads PHAs to set allowances

too low, particularly in public housing. Congressional concern over utility allowances surfaced during consideration of the Housing and Community Development Act of 1987. The conference report expressed a concern that a large number of households that were not substantially wasteful of utilities were being unfairly penalized by low allowances and therefore incurred rent burdens exceeding 30 percent.²

The Congress considered specific legislative changes but, before acting, it required that the General Accounting Office report on (1) how allowances are provided to assisted households, (2) rent burdens incurred, and (3) alternatives to better provide these allowances.³

Objectives, Scope, and Methodology

Consistent with the requirements of the Housing and Community Development Act of 1987, our objectives were to determine (1) the number of households that receive allowances to meet expected utility costs, (2) the proportion of income that certain assisted households pay for rent and utilities, (3) how utility allowances are derived, (4) how these allowances are monitored to ensure they are reasonable, and (5) possible changes to the utility allowance framework to ensure that it covers reasonable consumption while also promoting energy conservation. We did not determine whether PHAs' allowances were reasonable.

Our work centered on allowances that were administered by PHAs, since this was the focus of concern expressed in the legislative reports. We concentrated our efforts on public housing and section 8 certificate programs administered by these agencies. In response to interest by congressional committees, we also gathered information on whether HUD's policies varied between programs for (1) setting and revising allowances and (2) including air-conditioning costs in allowances.⁴ The two latter topics are discussed in appendix I.

²House of Representatives, Conference Report, Housing and Community Development Act of 1987, (H.R. Conf. Rep. No. 100-426, Nov. 6, 1987), pp. 163-4. For a discussion of the reasonable consumption standard, see House of Representatives, Report, Housing, Community Development, and Homelessness Prevention Act of 1987, (H.R. Rep. No. 100-122, June 2, 1987), pp. 13-14.

³Section 102(b) of the Housing and Community Development Act of 1987 (P.L. 100-242, Feb. 5, 1988).

⁴Allowances are also provided for (1) public housing operated by Indian housing agencies; (2) section 8 programs that are administered by other agencies than PHAs (such as state housing finance agencies); (3) section 8 programs in which others, such as developers and HUD, are responsible for developing allowances; and (4) the section 8 voucher program. In the voucher program the household has the option of renting housing that would cause it to exceed or be below the 30-percent rent burden standard.

HUD does not compile the kind of information needed to address the study objectives. That is, HUD does not know how many or which PHAS provide allowances. We also found that PHAS often neither maintain central records on allowances that they provide nor collect data on the actual utility expenses incurred by assisted households. As a result, we had to collect the primary data for the material included in this report.

Nationwide Questionnaire Results

In order to determine (1) how many PHAS provide allowances, (2) how many households receive allowances, (3) how allowances are derived and reviewed, and (4) other topics, we mailed a questionnaire to stratified random samples of 1,594 PHAS for both the public housing and section 8 programs on the basis of program size and type. We obtained an overall 83-percent response rate. From these responses we were able to provide the results of utility allowance practices for an estimated 2,610 (+90) of the 3,217 PHAS identified by HUD as providing public housing and 1,717 (+46) of the 2,205 PHAS identified by HUD as providing section 8 certificate housing assistance.⁵

Additional information on our sample design, pretesting, and verification efforts are contained in volume II of this report (GAO/RCED-91-40B). The questionnaire and our results are reproduced there.

As with all sample surveys, this survey is subject to sampling error. Sampling errors define the upper and lower bounds of the estimates made from the survey. Sampling errors for the estimates in this report were calculated at the 95-percent confidence level. That is, 19 out of 20 times the sample survey procedure used would produce an interval capturing the true value. Sampling errors are included in the text where they aid the reader in interpreting our results and are contained in volume II.

Work at 10 PHAs

Because gathering detailed utility allowance, utility expense, income, and related information was extremely time-consuming, it was not feasible to collect it from more than a few PHAs and associated utility companies. Therefore, we limited this portion of our work to 10 PHAs judgmentally selected on the basis of size, geographic dispersion, provision of allowances for both public housing and section 8 programs, existence of check metering at several locations, and the willingness of each

⁵Many PHAs administer both programs, which accounts for the difference between the sum of these two figures and the 4,087 distinct PHAs identified by HUD.

utility company serving assisted units to provide us with utility expense information.

We determined how the 10 PHAs derived, monitored, and revised their allowances. To do this, we met with PHA officials and reviewed agency records. The 10 agencies included in our review are listed below. While we originally planned to acquire detailed financial records on household income, allowances, and utility expenses at each of the 10 PHAs, the effort was more time-consuming and difficult than anticipated. Therefore, we limited this segment of our work to the first 6 PHAs listed.

- City of Chandler, Housing Division (Arizona)
- City of Phoenix Neighborhood Improvement and Housing Department (Arizona)
- Cuyahoga Metropolitan Housing Authority (Ohio)
- Dakota County Housing and Redevelopment Authority (Minnesota)
- East Detroit Housing Commission (Michigan)
- West Memphis Housing Authority (Arkansas)
- Boston Housing Authority (Massachusetts)
- Housing Authority of the County of Los Angeles (California)
- Philadelphia Housing Authority (Pennsylvania)
- Public Housing Agency of the City of St. Paul (Minnesota)

At the 6 PHAs, we collected 12 months of income and utility allowance information from PHA files for simple random samples of 1,907 public housing and section 8 certificate households. We collected utility cost information for these households from utility companies and PHAs. Our samples allowed us to make estimates for each of the locations as well as estimates for the aggregated 4,471 (+155) public housing and 5,015 (+331) section 8 households.

We performed extensive file verification of income calculations, allowance amounts, and rent calculations performed by the PHAs. Where errors occurred, we corrected them and we report on these corrected values. We did not obtain independent information, such as verifying income with employers, since this would have been too time-consuming and costly. In developing this information, we were faced with many data problems, such as missing data. Our methods for handling these problems and gathering these data are discussed in volume II.

The rent burden results are also subject to sampling error. All sampling errors derived from the rent burden results were calculated at the 95-percent confidence level. Additionally, since the number of households

that we report on is derived from a judgmental sample of six PHAS, these results are not statistically representative of the entire public housing and section 8 certificate populations.

Work at HUD

HUD is responsible for the proper expenditure of federal funds and for ensuring that all statutory, regulatory, and administrative requirements for its programs are met. HUD does this through its staff at headquarters, regional, and area offices and its Office of Inspector General. We obtained laws, regulations, and HUD handbooks to determine the standards that have been set and the guidance provided for deriving, monitoring, and revising utility allowances for both public housing and section 8 programs. We contacted officials from HUD's public housing and section 8 program offices and Office of General Counsel in Washington, D.C., to discuss information pertaining to our work.

For the 10 PHAS covered by our review, we contacted the HUD area offices that service them. We interviewed officials and reviewed documents on the area offices' role and activities relating to the utility allowances provided by the 10 PHAS. We also contacted HUD's Office of Inspector General to discuss utility allowance issues and obtain any reports pertinent to our efforts.

Others Contacted and Literature Reviewed

We contacted officials from organizations that we determined had an interest in utility allowances or that were likely to provide insight into the study issues. These organizations included the Department of Energy's Energy Information Administration, the Office of Technology Assessment, the National Association of Housing and Redevelopment Officials, the Public Housing Authorities Directors Association, the National Housing Law Project, the Neighborhood Legal Services Program for the District of Columbia, the Edison Electric Institute, and the American Gas Association. We also searched technical and legal data bases for studies or cases pertinent to our work, which we obtained and reviewed.

Use of a Consultant

We contracted with Steven E. Ferrey to provide expert advice on various aspects of job design, execution, and reporting. Mr. Ferrey has had extensive experience in the area of utility allowances and is the author of several articles on utility allowances and energy-related topics.

Rent Burden by Meter
Type and Cost Estimates
Not Performed

The Housing and Community Development Act of 1987 required that we estimate the number of public housing and section 8 households nationwide paying more than 30 percent of monthly adjusted income for rent and utilities and that we provide a separate estimate for each meter category. Through our questionnaire we developed an estimate of those paying more than 30 percent of adjusted income for rent and utilities during an average month. However, gathering this information by meter type through a mail survey or file reviews would not have been feasible.

The act also required that we estimate costs associated with any recommendations made that entail revising how allowances are provided. No overall data exist on which to base cost estimates, such as the dollar value of different kinds of allowances and expenses. Therefore, we could not develop these cost estimates.

Agency Comments

We sent our draft report to HUD and to the 10 PHAs for their review and comment. Only HUD, Los Angeles County, and Phoenix provided comments and these were received after the 30 calendar-day comment period specified by law. The comments were received too late for us to present in full without delaying the report's issuance; therefore, they have not been reproduced in this report. However, copies of these comments will be provided to the Senate and House committees to whom this report is addressed. We made several clarifying changes to the report on the basis of HUD's comments. Also, in its comments, HUD indicated that it will act on some of our recommendations. HUD's proposed actions are outlined in chapters 3 and 4. The housing agencies' comments primarily dealt with technical matters contained in the draft report and we made changes where appropriate.

Period of Our Review

We performed our field work between July 1988 and April 1990, with updates through October 1990. We performed our work in accordance with generally accepted government auditing standards.

Few Households' Rent Burdens Meet the 30-Percent Standard

About three-fifths of public housing households and four-fifths of section 8 certificate households receive utility allowances, according to our nationwide questionnaire results. Our more detailed review at six PHAs showed that only about a third of the public housing and 7 percent of the section 8 households at six PHAs had rent burdens of 30 percent of adjusted income.¹

About 45 percent of public housing households and approximately 70 percent of section 8 households at the six PHAs had utility expenses that were higher than their allowances. This results in rent burdens exceeding 30 percent of adjusted income. Because the deviations were so great for some households, paying utility bills can pose financial hardships. Conversely, about 22 percent of the public housing and 23 percent of the section 8 households at the six PHAs had rent burdens that were less than 30 percent of adjusted income. In cases where the allowances are substantially higher than utility expenses, the government may be oversubsidizing households. Finally, because allowances are typically the same each month while utility expenses vary, month-to-month rent burden fluctuations can create cash flow problems for lower-income households despite an overall 30-percent rent burden.

Most Assisted Households Receive Utility Allowances

Our nationwide questionnaire results show that 628,960 of 1,033,179 (61 percent) public housing households receive allowances.² Of the section 8 certificate housing units, 680,896 of 857,192 (79 percent) receive allowances.³ These allowances are provided by an overwhelming majority of PHAs: 2,124 of the 2,610 PHAs (81 percent) administering public housing and 1,636 of the 1,717 PHAs (95 percent) administering section 8 certificates provide allowances to assisted households.

¹We considered households with rent burdens of between 29.5 percent and 30.5 percent to have rent burdens of 30 percent. As discussed in ch. 1, the rent burdens we estimated for six PHAs are not statistically representative of the nationwide populations of public housing and section 8 certificate households.

²For sampling errors associated with our questionnaire estimates, see sec. 2 of vol. II.

³The number of section 8 households receiving allowances is somewhat understated since 5 percent of the respondents said that they could not provide this information.

Allowances for Electricity and Natural Gas Are Most Prevalent

Metered utilities are the most prevalent services for which allowances are provided. Tables 2.1 and 2.2 show the variety of metered utilities covered by allowances for public housing and section 8 households, respectively. For most PHAs, allowances are most often provided for electricity and natural gas.

Table 2.1: PHAs Providing Utility Allowances for Metered Services in Public Housing

Utility	Number of PHAs providing allowances	Number of units		
		Individually metered	Check-metered	Total
Electricity	2,096	401,537	176,651	578,188
Natural gas	1,557	206,944	142,355	349,299
Water/sewer (combined)	868	82,199	30,593	112,792
Water only	210	10,734	6,111	16,845
Propane	99	4,446	1,623	6,069
Fuel oil	78	2,134	^a	2,134
Other	10	^a	^a	^a

Note: Results based on an estimated 2,124 (± 108) PHAs providing allowances to 628,960 (± 21,413) public housing households.

^aWe did not observe a sufficient number of responses to make reliable estimates.

Table 2.2: PHAs Providing Utility Allowances for Metered Services in Section 8 Housing

Utility	Number of PHAs providing allowances	Number of units ^a
Electricity	1,619	503,119
Natural gas	1,499	325,863
Water/sewer (combined)	924	154,708
Water only	880	112,466
Propane	968	34,064
Fuel oil	928	55,829
Other	214	10,481

Note: Results based on an estimated 1,636 (± 48) PHAs providing allowances to 680,896 (± 112,891) section 8 households. Figures represent individually metered households. We did not observe a sufficient number of check-metered utility responses to make reliable estimates. We believe the number of units with check-metered utilities is small.

^aAbout 5 percent of the PHAs could tell us what allowances they provided but could not estimate the number of units receiving them. Therefore, the number of units receiving allowances is understated.

Assisted households also receive allowances for nonmetered utilities. According to our survey, about 19 percent of PHAs administering public housing units and approximately 74 percent of PHAs administering section 8 units provide allowances for nonmetered utilities such as trash pickup and occasionally wood and coal. Also, about 40 percent of the

PHAS administering public housing and 84 percent of the PHAS administering section 8 programs provide allowances to households that furnish their own appliances, such as a range or refrigerator. (See responses to questions 8, 34, and 39 in sec. 2 of vol. II.)

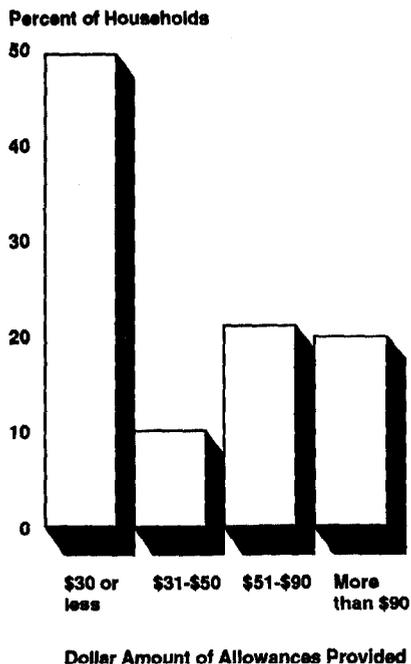
Allowance Amounts Vary
Widely

Depending on the type of utility and its use, such as natural gas for heating and/or cooking, the allowance a household receives varies. For the six PHAS in our detailed review, allowances for metered utilities ranged from \$8 to \$218 per month. Allowances for nonmetered utilities included monthly amounts of \$10 for sewer, and \$9 to \$12 for trash pickup. Credits for tenant-owned or leased appliances ranged from \$2 to \$7 a month.

Public housing households we reviewed tended to have lower utility allowances than section 8 households because public housing units generally do not have appliances that are more often found in section 8 units, such as air conditioners. For the six PHAS we reviewed, public housing households received an average monthly utility allowance of about \$55 (+\$3), whereas section 8 households received an average monthly allowance of approximately \$64 (+\$2). Although the average public housing allowance was \$55 per month, figure 2.1 shows that almost half of the allowances were \$30 or less per month and about 40 percent exceeded \$50.

Chapter 2
Few Households' Rent Burdens Meet the
30-Percent Standard

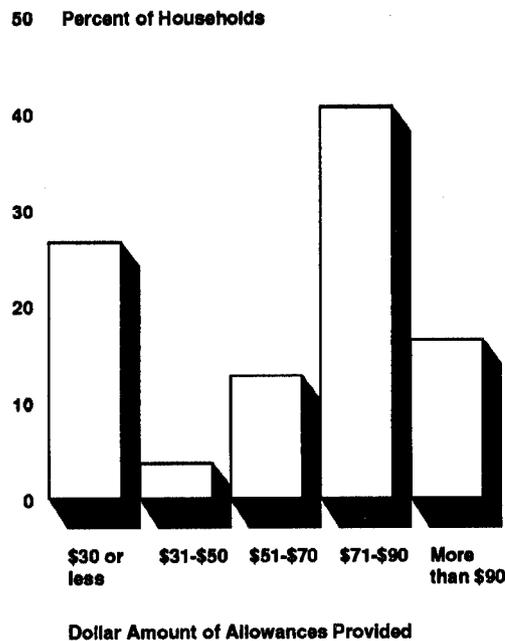
Figure 2.1: Monthly Dollar Amount of Allowances for Public Housing Households at Six PHAs



Note: Distribution based on an estimated 2,614 (± 108) households receiving allowances. Phoenix check-metered units not included. (See sec. 3 of vol. II.)

For section 8 households receiving allowances, the distribution was somewhat different. A much smaller proportion (about 27 percent) received allowances of \$30 or less and about 57 percent of the households received allowances of more than \$70 (see fig. 2.2).

Figure 2.2: Monthly Dollar Amount of Allowances for Section 8 Households at Six PHAs



Note: Distribution based on an estimated 5,015 households receiving allowances.

Moreover, our questionnaire results showed that an estimated 65 percent (+1.7 percent) of public housing and 52 percent (+9.0 percent) of section 8 households nationwide received allowances that cover the cost of heating and/or cooling.⁴ Although we did not ask PHAs to quantify these allowance amounts, heating and cooling costs are typically of consequence for any household. This result, coupled with the results of our work at six PHAs, strongly suggests that allowances are important to a large block of assisted households.

Rent Burdens Usually Differ From the 30-Percent Amount

The rent burdens for many public housing and section 8 certificate households differ from the 30-percent amount. The majority of the 9,500 households at 6 PHAs did not pay 30 percent of adjusted income for rent and utilities, according to our rent burden estimates. We obtained somewhat similar results from our questionnaire. These findings pose three problems. First, when actual utility expenses exceed allowances, rent burdens exceed the 30-percent amount. The extent of financial hardship a household experiences depends on the dollar size of

⁴Results based on an estimated 1,781 of 2,124 PHAs (84 percent) responding to this question for public housing and 857 of 1,636 PHAs (52 percent) for section 8. See questions 5 and 36 in sec. 2 of vol. II for sampling errors.

the difference and on the income of the assisted household. Those with the lowest incomes and the largest disparity between the allowance and their utility expenses experienced the highest rent burdens.

The second problem arises from the opposite situation. In cases where assisted households' utility costs are less than the allowances provided (thereby reducing rent burdens below the 30-percent amount), the assisted household benefits by having more disposable income than contemplated under the 30-percent rent burden amount. In cases where the allowance is set too high, the government may be oversubsidizing households. Reasons why allowances frequently differ from the 30-percent amount are discussed in chapter 3.

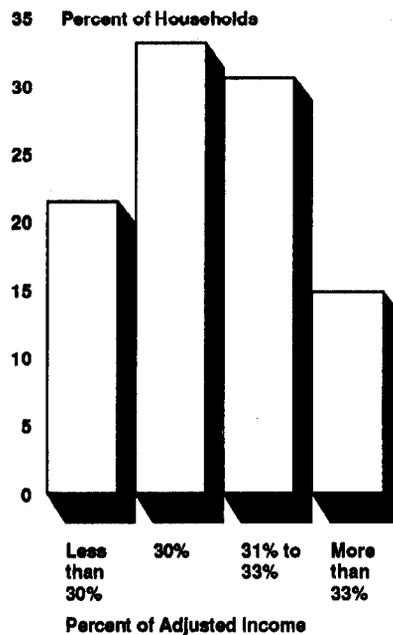
Third, even when the 30-percent rent burden amount is met over the course of a year, households may experience several months in which expenses exceed allowances. This occurrence is particularly troublesome for assisted households since they are at the low end of the income range. Unless they are on a budget payment arrangement with a utility company, they will likely find it more difficult to pay utility bills in the months when expenses exceed their allowance by a large amount.

Deviation From the 30-Percent Amount Affects Many Households

The annual rent burden for the estimated 4,471 public housing households at 6 PHAs averaged 30.5 percent of adjusted income (+0.3 percent). For section 8 households, the average annual rent burden for an estimated 5,015 households was 36 percent (+0.8 percent). However, these averages can mask large differences in rent burdens between PHAs and also among households within a PHA. About 33 percent (+3.3 percent) of the public housing and 7.4 percent (+1.9 percent) of the section 8 households had annual rent burdens of 30 percent.

Figure 2.3 summarizes the annual rent burdens of the public housing households at the six PHAs we reviewed. While the overall average rent burden was 30.5 percent, rent burdens for some households were substantially larger or smaller. For example, the average rent burden was 12 percent of adjusted income for the 20 public housing households with the lowest rent burdens in our review and 74 percent for the 20 cases with the highest rent burdens. Around 15 percent of the public housing households experienced rent burdens greater than 33 percent of adjusted income. On a monthly average, the households that exceeded the 30-percent amount paid around \$11 more in utility expenses than the allowance received.

**Figure 2.3: Annual Rent Burden
 Distribution of Public Housing
 Households at Six PHAs**



Note: Distribution based on an estimated 4,471 households receiving allowances.

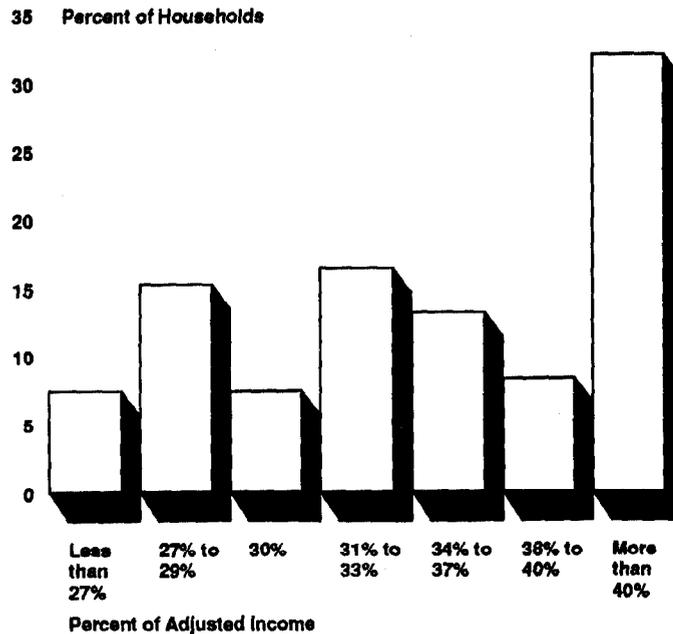
While we did not look at the disposable income of these households per se, the average monthly total income of public housing households at the six PHAs was \$454 (\pm \$17). After paying 30 percent of adjusted income for rent and utilities, public housing households typically had only about \$340 per month remaining to cover the costs of other necessities, such as food, clothing, and medical care.⁵ Thus, households with utility expenses exceeding allowances by a large amount may have difficulty meeting their financial obligations.⁶

For section 8 households, rent burdens averaged about 36 percent of adjusted monthly income—notably different than the statutory amount. As shown in figure 2.4, about 70 percent of the section 8 households paid more than 30 percent of their adjusted income for rent and utilities. Even more striking, 32 percent of the section 8 households had rent burdens exceeding 40 percent of adjusted income.

⁵The average monthly adjusted income was \$379 (\pm \$16). Thirty percent of this amount is \$114. While PHAs compute household rental contributions on an adjusted income basis, the household has its gross income from which to make spending choices.

⁶It should be noted that utility expenses in excess of the allowance do not constitute a de facto finding that allowances were unreasonably low (see ch. 3).

**Figure 2.4: Annual Rent Burden
 Distribution of Section 8 Households at
 Six PHAs**



Note: Distribution based on an estimated 5,015 households receiving allowances.

On average, those section 8 households that exceeded 30 percent of adjusted income paid about \$43 more in utility expenses than they received in allowances. The total monthly income of the section 8 households in our review averaged \$544 (+\$24).⁷ After paying \$165 per month (36 percent of adjusted income for rent and utility expenses—the average result we obtained), section 8 households in our review, on average, had about \$379 in disposable income remaining each month to cover other living expenses. Thus, \$43 each month for additional utility expenses represents a sizable portion of the households' disposable income.

Although gathering detailed rent burden information through a mail survey would have been impractical, our questionnaire asked PHAs to estimate the number of housing units in which allowances were about equal to, less than, or greater than utility expenses (in an average month). The results are presented in table 2.3. Notably, the PHAs' estimates of section 8 rent burdens at or about 30 percent are markedly

⁷ Monthly adjusted income averaged \$458 (±\$23).

Chapter 2
Few Households' Rent Burdens Meet the
30-Percent Standard

higher than the results we obtained from reviewing actual tenant files and utility bills.

Table 2.3: PHAs' Estimates of Household Utility Allowance-Expense Relationship During an Average Month

Program	Percent of units in which utility expense is			Total
	Less than allowance	About equal to allowance	More than allowance	
Public housing	30.7 (± 2.3) ^a	42.9 (± 2.9)	26.4 (± 2.2)	100
Section 8	12.0 (± 3.6)	55.8 (± 6.1)	32.2 (± 5.9)	100

Note: Based on 252,983 public housing and 136,204 section 8 units. The number of units reported is less than the total number of units receiving allowances because many PHAs had not performed this analysis. See responses to questions 14 and 40 in section 2 of volume II.

^aSampling error estimates in parentheses.

Average Rent Burden Results Can Mask Large Differences Between PHAs and Households

While average rent burdens measure overall results, the use of this single figure can mask differences between PHAs and between households within PHAs. That is what occurred at the six PHAs we reviewed. For example, the overall rent burden for the section 8 households at six PHAs averaged 36 percent. Yet only one of the six PHAs had a rent burden that nearly matched this amount. As shown in table 2.4, Chandler rent burdens averaged 37 percent. At the extreme, Dakota County and East Detroit rent burdens averaged 31 percent, and those in West Memphis averaged 40 percent. Households, on average, paid \$3 per month in excess of their allowance at East Detroit and \$42 per month in excess of their allowance at West Memphis. These amounts represent 6-percent and 60-percent deviations from the allowances provided, respectively.

Table 2.4: Differences in Average Rent Burdens for Section 8 Households at Six PHAs

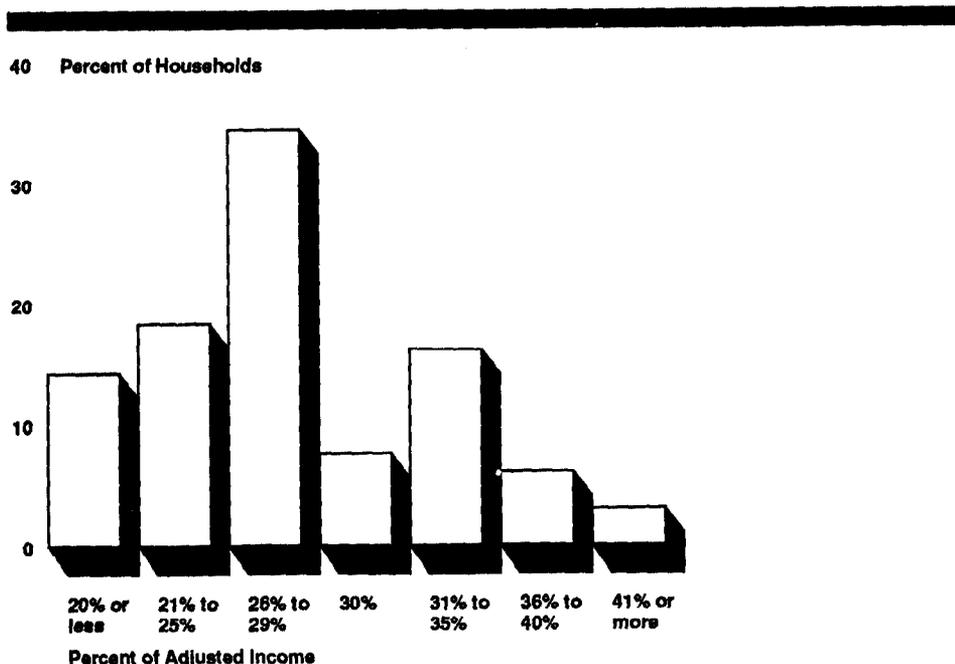
PHA	Average rent burden (percent)	Average utility allowance	Average utility expense	Allowance-expense difference
Chandler	37	\$66	\$93	\$27
Cuyahoga	39	63	100	37
Dakota County	31	32	38	6
East Detroit	31	53	56	3
Phoenix	34	86	103	17
West Memphis	40	70	112	42

Note: See section 4 of volume II for sampling error estimates.

Even when rent burdens at a PHA average about 30 percent, many households will pay less or more. Figure 2.5 shows the distribution of public housing rent burdens at Cuyahoga (for individually metered households). As figure 2.5 indicates, the average rent burden was 28

percent, yet 32 percent of the households had rent burdens of 25 percent or less, and 9 percent of the households had rent burdens of 36 percent or more. Of these, we observed five households with annual rent burdens of 10 percent or less and eight households with rent burdens of between 40 and 70 percent.

Figure 2.5: Rent Burden Distribution for Individually Metered Public Housing Households at Cuyahoga



Note: The average annual rent burden is estimated at 27.9 percent (± 0.7) for 1,265 households (± 93). This estimate is based on usable data from 197 out of 293 households. Sampling errors ranged from 2.2 percent for the "41% or more" category to 6.1 percent for the "26% to 29%" category.

Invariably, households with very low incomes and high utility allowances risk incurring greater rent burdens than households with high incomes and low allowances when expenses exceed allowances. Therefore, a household's allowance takes on a greater or lesser importance in achieving the 30-percent rent burden amount depending on its income and utility expenses.

For example, a hypothetical household has an adjusted monthly income of \$250, a \$10 utility allowance, and a resulting monthly rent (including the utility allowance) of \$75 ($\$250 \times 0.3 = \75). If the household's utility expenses were 50 percent more than the allowance, the rent burden would be 32 percent. However, if this same household received a \$75 allowance and again consumed 50 percent more than the allowance,

the rent burden would rise to 45 percent. On the other hand, if the hypothetical household's adjusted monthly income were \$750, with the same allowance and consumption factors as cited above, the rent burden would be 31 percent with a \$10 allowance and 35 percent with a \$75 allowance.

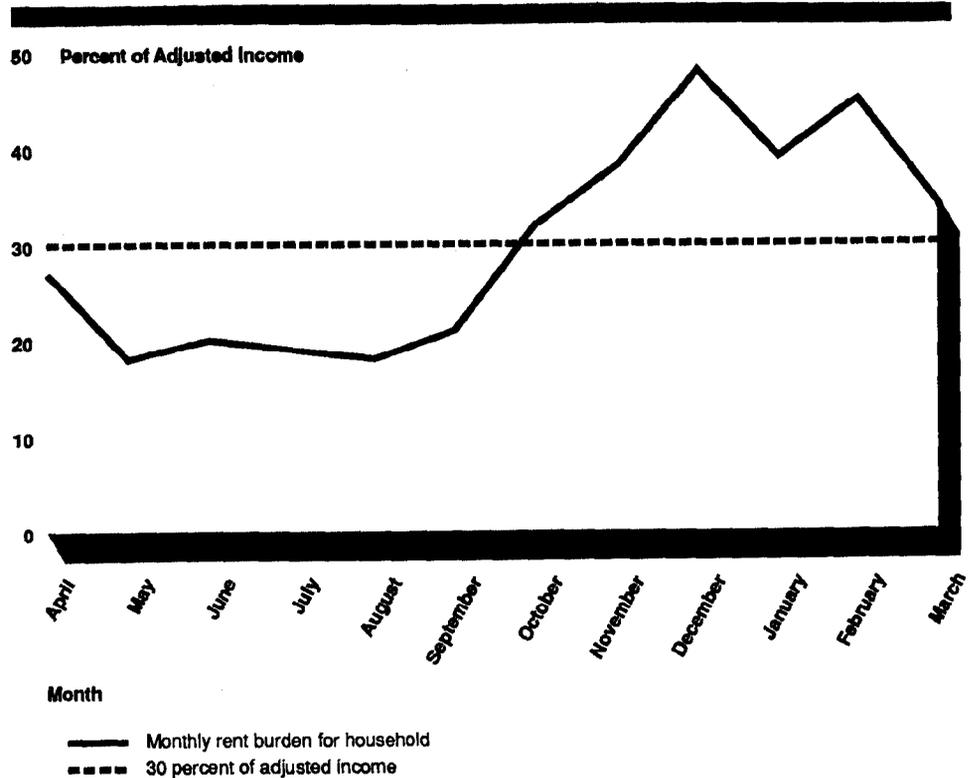
Monthly Variations in Expenses Can Adversely Affect Households

Month-to-month fluctuations in utility bills can also create payment problems for assisted households, particularly when utilities are individually metered. This difficulty arises because allowances remain the same each month, while utility bills vary. As a result, households have to budget so that they will have sufficient funds to pay utility bills in high consumption months when utility expenses exceed allowance amounts. This budgeting may be difficult for lower-income households because, by definition, they have less income to pay for living expenses than higher-income households. None of the utility records that we reviewed indicated that households were on a level-payment plan with utility companies.⁸

Figure 2.6 provides an example of this variation in monthly rent burdens for a one-person elderly household receiving section 8 assistance from Dakota County. The household had a total income of \$468 in some months and \$488 in others (monthly adjusted income was either \$357 or \$391). Allowances ranged between \$64 and \$70 each month for electricity, gas, and tenant-supplied range and refrigerator.

⁸HUD regulations for the public housing program allow allowances to vary over the year to reflect seasonal variations in utility requirements. None of the six PHAs varied allowances over the year.

Figure 2.6: Monthly Rent Burden
 Distribution for a Dakota County
 Section 8 Household



Note: The average rent burden for this household was 30 percent. Monthly rent burdens varied from 18 percent to 48 percent.

The rent burden for this household was 30 percent over the entire year. However, this household did not have a 30-percent rent burden in any one month. The month in which rent burden was closest to 30 percent was October (32 percent). For the months of November through February, the rent burden was 38 percent or more, rising as high as 48 percent in December and 45 percent in February. In those months the household paid utility expenses of \$71 and \$58 more than the allowance received, respectively. On the other hand, the rent burden for the months of May through September was 21 percent or less, with the lowest being 18 percent in August. During that month, the household paid \$43 less than the allowance. Over the course of the year, the household paid \$16 more than the allowance. In reaching the \$16 amount, the household spent \$108 more than the allowance for gas, and \$27 less than the allowance for electricity. Additionally, the household received \$65 over the year for tenant-supplied appliances, which we assumed the household did not spend since we had no way of knowing whether the

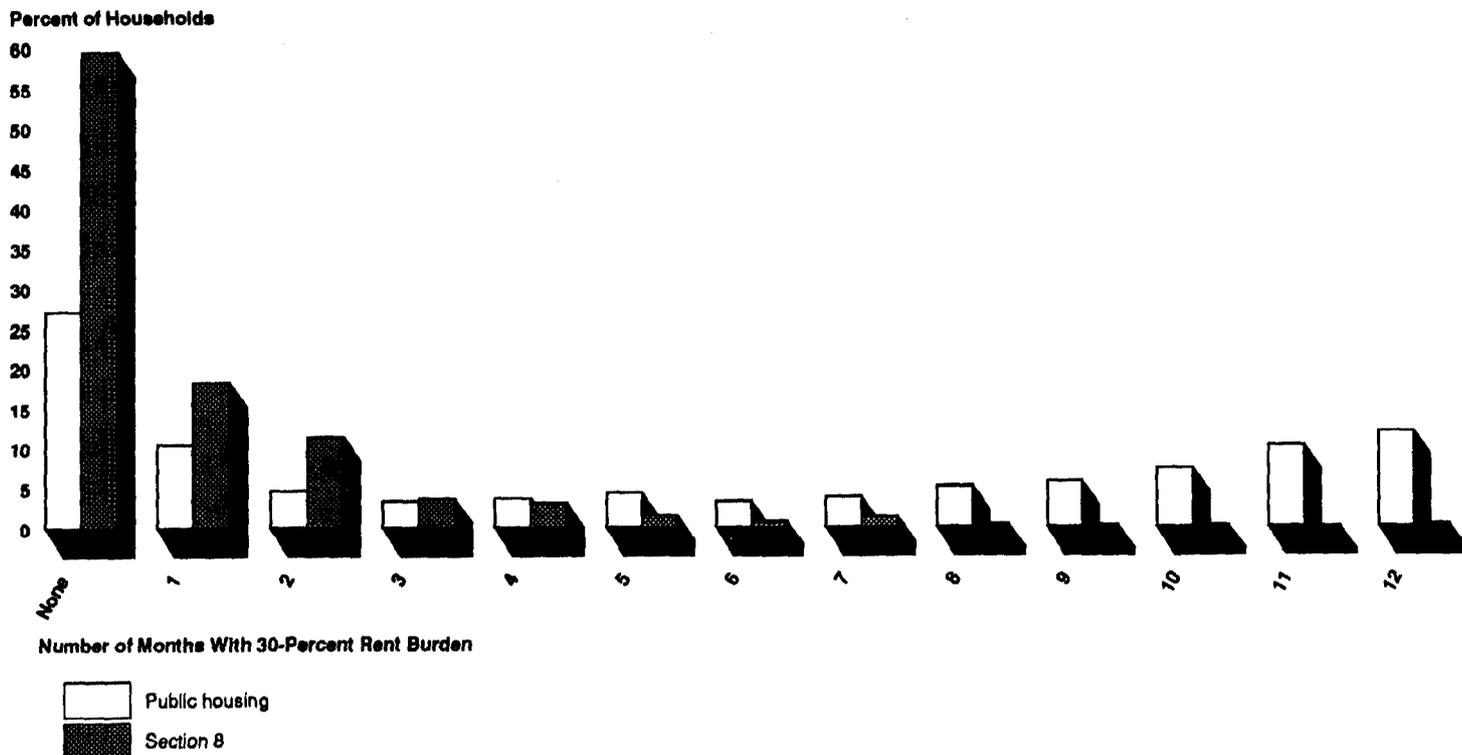
household purchased, rented, or already owned one or both appliances when the tenant rented the unit.⁹

Figure 2.7 shows that, in most cases, monthly rent burdens for all households at the six PHAs we reviewed differed from 30 percent. About 27 percent of public housing households did not have 1 month in which the rent burden equaled 30 percent of adjusted income and 45 percent of the households had 3 or fewer months in which rent burden equaled 30 percent. At the other end of the spectrum, 29 percent of the public housing households had rent burdens of 30 percent for 10 or more months during the year.

For section 8 households, the results are quite different. Approximately 60 percent of these households never met the 30-percent amount for any 1 month during our 12-month review period, and fully 93 percent of the households had 3 or fewer months in which the burden equaled 30 percent. Finally, less than 1 percent of the section 8 households had rent burdens of 30 percent for 10 or more months of the year.

⁹This was the most conservative assumption we could make and it reduced the overall rent burden somewhat.

Figure 2.7: Number of Months in Which Households' Rent Burdens Equaled 30 Percent



Note: Based on estimated distributions of 4,471 public housing and 5,015 section 8 households.

HUD and PHA Views on Our Rent Burden Results

We obtained PHA and HUD area office officials' reactions to our results for each of the programs at the six PHAs. Both PHA and HUD officials told us that the deviations from 30 percent were expected. Several explained that rent burden variances between public housing and section 8 households may occur, in part, because some agencies' allowances do not allow for the expected cost of certain appliances such as dishwashers and air-conditioning units. Further, these appliances are not normally found in public housing units but are more prevalent in section 8 units. For example, many section 8 households in West Memphis have air-conditioning; however, the agency does not include this energy consumption in a household's allowance. HUD area office and West Memphis officials told us that private rental units in the price range of section 8 households typically do not have air-conditioning.

Further, several PHA officials generally told us that utility expenses in excess of the allowance are attributable to wasteful household consumption habits rather than inappropriately established utility allowances. Since it would have been impractical to observe the energy consumption behavior of households at six PHAs over the course of a year, we could not corroborate or refute the officials' observations on household energy consumption.

Summary

Most assisted households receive utility allowances—about 61 percent of public housing households and 79 percent of section 8 certificate households. The importance of the allowance varies. In some cases, the allowance is small (reflecting minimal utility use) or small relative to household income, so that those households' rent burdens should be close to 30 percent of adjusted income. However, our results at six PHAs showed that allowances averaged in the \$50 to \$60 range per month, not an insubstantial amount for households with typical total monthly incomes in the \$450 to \$540 range. Therefore, an average public housing household in our review had about \$340 per month to cover living expenses after paying 30 percent of adjusted income for rent and expected utility costs. The parallel amount for section 8 households was \$407 per month. As a result, large or even moderate differences between households' utility costs and allowances can create financial hardships.

Moreover, our questionnaire results showed that an estimated 65 percent of public housing and 52 percent of section 8 households nationwide receive allowances that are intended to cover the cost of heating and/or cooling. Since these costs are not inconsequential, this result, coupled with the results of our work at six PHAs, strongly suggests that allowances are important to a large block of assisted households.

The average rent burden was 30.5 percent for public housing households and 36 percent for section 8 households at the six PHAs we reviewed. However, more than 2,000 PHAs offer allowances. The results may be different for this larger population. Moreover, many public housing and most section 8 households covered by our review were paying more than 30 percent of their adjusted incomes for rent and utilities, some substantially more. Others were paying less—some substantially so. Additionally, households are likely to find their utility expenses difficult to pay when month-to-month variations between allowances and expenses are large.

Why Household Expenses Frequently Differ From Utility Allowances

There are several reasons common to many PHAs for the differences between utility allowances provided and most households' utility expenses. First, establishing utility allowances to meet reasonable consumption needs is an inherently imprecise task. Given the diversity of units within a PHA and even within a project or building, it is clearly impractical to expect that allowances could be set to account for all critical structural, appliance, and household energy use characteristics of each unit. Even for those units whose allowances do represent reasonable consumption, frequent variations will still arise from factors that can neither be predicted nor controlled, such as unseasonable weather. Second, HUD has compounded these problems by not providing PHAs with adequate guidance defining reasonable consumption so that a greater proportion of households could be expected to have rent burdens closer to 30 percent of adjusted income.

Third, some PHAs may intentionally act to keep allowances lower than amounts representing reasonable consumption. For public housing, these actions are motivated by the desire to minimize potential revenue loss to PHAs resulting from higher allowances. For section 8 households, raising utility allowances may make assisted housing less available if landlords believe that the maximum rent they can charge after allowing for utility allowances is too low.

Fourth, each of the six PHAs for which we collected rent burden information made errors in allocating allowances and in computing households' rental contributions. About one-quarter of all the cases we reviewed had one or more errors. Most were relatively insignificant, but several resulted in a substantial under- or overpayment by the household. Finally, other factors, such as monthly variations in utility expenses and PHA practices that treat some check-metered households differently from individually metered households, also contribute to allowance-expense mismatches.

While correcting administrative errors is relatively easy, the other problems cited are more difficult to resolve. Consequently, expenses that differ from the allowances for many assisted households are likely to be the norm and not the exception.¹

¹For the most part, we did not develop estimates for differences in rent burdens because of these factors. Among other things, to do so would have required us to make multiple observations on household life-styles, which would have been impractical.

Setting Allowances Is an Inherently Imprecise Task

Many differences exist in the rental housing stock. Seemingly similar units in different buildings—or within the same building—have different energy usage characteristics. Also, households in similar units differ in their energy-consumption patterns because of different household sizes and propensities to conserve energy, and other factors. Given the diversity of unit and occupant energy-consumption characteristics, PHAS cannot practically differentiate allowance amounts to account for individual unit and household characteristics. HUD guidance does not require that allowances be tailored to each individual unit. While this policy makes sense, it virtually guarantees that allowances will differ from expenses for many households.

HUD Requirements for Setting Utility Allowances

HUD has imposed several requirements that PHAS must follow in setting public housing and section 8 utility allowances. For both programs, allowances are to be set at a level approximating reasonable consumption of utilities by an energy-conservative household of modest circumstances, consistent with the requirements of a healthful living environment. For both programs, too, the allowances are to be based on (1) the utility service used (e.g., gas and electricity) and how it is used (e.g., heating and cooking); (2) the number of bedrooms in a unit; and (3) the structure type (e.g., high-rise, garden apartment, or single-family dwelling).²

For public housing, allowances must take into account a number of factors affecting consumption requirements, such as the local climate, a project's physical condition and design, the unit size and expected number of occupants, the energy efficiency of PHA-supplied appliances and equipment, and the energy consumption requirements of tenant-supplied appliances (whose reasonable consumption is to be included in the allowances). HUD instructions for section 8 are less specific: allowances must be sufficient to cover most households' utility expenses over a 12-month period. Allowances for each program are not required to be tailored to the energy usage characteristics of each individual unit.

For public housing, HUD allows PHAS to select any method that uses available data and local experience in setting allowances. For section 8, PHAS must use data approximating the average costs of utilities and services paid by occupants of housing of similar size and type for the community, if available. If such data are not locally available for all sizes

²For an example of a utility allowance schedule, see pp. 29-30 of *Assisted Housing: Rent Burdens in Public Housing and Section 8 Programs* (GAO/RCED-90-129, June 19, 1990).

and types of units in the program, costs based on an average size unit may be used and extrapolated to other units with a different number of bedrooms.

For public housing, PHAs may grant individual relief to households for expenses in excess of the allowances. The relief can be granted on "reasonable grounds," such as for special needs of households with elderly, ill, or handicapped members, or special factors affecting utility usage not within the control of the tenant (as determined by the PHA). The section 8 program does not have individual relief provisions.

Allowance Determinations Pose Different Challenges for PHAs of Different Size

PHAs differ markedly in size. As shown in table 3.1, most PHAs are small: about 51 percent of the PHAs administer 100 or fewer units of public housing, and 38 percent of the PHAs administer 100 or fewer units of section 8 housing. The second largest grouping is the mid-sized PHAs, with 49 percent and 62 percent of the PHAs administering public housing and section 8 programs of 101 to 10,000 units, respectively. A handful of PHAs operate programs with 10,000 or more units, but the proportion of assisted households constitutes 29 percent of all public housing units and 12 percent of all section 8 units.

Table 3.1: Distribution of PHA Size for Public Housing and Section 8 Certificate Units

PHA size in number of units	Public housing				Section 8			
	Number of PHAs (percent)		Number of units (percent)		Number of PHAs (percent)		Number of units (percent)	
1-25	328	(10)	6,227	(^a)	168	(8)	3,119	(^a)
26-50	624	(19)	24,401	(2)	302	(14)	11,961	(1)
51-100	697	(22)	53,277	(4)	361	(16)	27,311	(3)
101-500	1,189	(37)	268,967	(21)	956	(43)	224,659	(24)
501-1,000	196	(6)	137,262	(11)	229	(10)	156,847	(16)
1,001-5,000	154	(5)	310,003	(24)	170	(8)	335,721	(35)
5,001-10,000	17	(1)	119,291	(9)	13	(1)	89,660	(9)
10,001-20,000	8	(^a)	104,990	(8)	5	(^a)	72,665	(8)
20,001-60,000	3	(^a)	118,913	(9)	1	(^a)	33,402	(4)
60,001 or more	1	(^a)	153,148	(12)	0	(0)	0	(0)
Total	3,217		1,296,892		2,205		955,345	

^aLess than 1 percent.
Source: GAO analysis of HUD data bases.

Clearly then, PHAs of different sizes face different problems when trying to develop allowances, given the identical HUD requirements. A small

PHA, operated by perhaps one or two employees, must meet the same standards as larger PHAs. However, the housing stock for a small PHA may be more uniform and the number of units to be assessed is certainly more manageable. The largest PHAs, with tens of thousands of units in many projects (including one-of-a-kind scattered site buildings), face different problems in trying to develop reasonable allowances for buildings and projects that may vary markedly in structural and appliance characteristics.³

The problem is accentuated for the section 8 program since there is more variation in the size and characteristics of section 8 housing than in public housing. Also, as households move in and out of section 8 housing, the composition of the stock can change over time. As a result, PHAs face the difficulty of developing allowances for a housing stock that is both diverse and somewhat fluid.⁴

Seemingly Similar Units May Differ

Even within a building, units of a similar size and design may differ markedly in energy consumption requirements. A unit's placement in a building—whether it is exposed to heat, cold, and wind, or sheltered from extremes—significantly affects energy use. Similarly, in a multi-story building, different heat requirements can be expected in otherwise similar units on different floors. Finally, even within similar units, appliances, such as ranges, refrigerators, and hot water heaters, may be different. An older, unrenovated unit may have older, energy-inefficient appliances, while a similar unit in the same building may have been modernized, and have newer, more energy-efficient appliances. A PHA noted on our questionnaire that, in its area, private market units vary widely in age (1900-1980), size, condition, and weatherization. The agency added that there is no such thing as an “average” unit.

Temperature Variations Affect Amount Consumed

Seasonal temperature differences affect energy consumption. A warmer (or colder) than average winter would be expected to result in lower (or higher) heating costs than for an average temperature year, all else being equal. For the 10 PHAs we reviewed, none of the agencies made

³Scattered site units are single-family or small multifamily buildings (e.g., duplexes) operated by PHAs as opposed to larger, concentrated public housing projects.

⁴HUD guidance recognizes this difficulty by requiring that PHAs develop allowances based on units of similar size and type in the community. PHAs may request HUD area office assistance in adapting local data to determine allowances.

adjustments for warmer- or cooler-than-normal seasons. This is not surprising because these variations cannot be predicted in advance, and, over the longer term, the differences in costs because of warmer or cooler seasons could be expected to average out (for a household that receives assistance over a long period).

Measurements of how far warmer and cooler periods vary from the norm are expressed in “heating degree-days” and “cooling degree-days.” A heating degree-day is the number of degrees per day the average daily temperature is below 65 degrees Fahrenheit.⁵ The more heating or cooling degree-days there are in a certain period, the more energy it will take to heat or cool a given space. For example, if a month contains 10 percent more heating degree-days than a normal month, heating requirements could be expected to be 10 percent greater than in a normal month, all else being equal.

In the six PHA locations we reviewed, the winters and summers were warmer than normal. The variations from normal in heating degree-days ranged from a 4 percent difference in Cuyahoga County, Ohio, to a 34 percent difference in Phoenix and Chandler, Arizona. A similar relationship exists for cooling degree-days: the six locations had 8 percent to 74 percent more cooling degree-days than normal. We did not isolate the effect of warmer-than-average winters and summers on the households we reviewed. However, any 1-year study, such as ours, would likely pick up some differences over the period in household heating and cooling costs (to the extent that heating and/or cooling costs were included in the households’ allowances).

In a related vein, households may react to unseasonable weather changes by using appliances in a way not intended when allowances were established. For example, a household may have an allowance for cooking and household appliance use while the PHA or section 8 landlord pays for heating costs. During cold weather, when the centrally provided heat is either insufficient or is to be turned on later in the year, households may supplement the central heating source by using their ranges or space heaters. This practice increases households’ utility costs.

⁵For example, a day with an average temperature of 50 degrees has 15 heating degree-days. A cooling degree-day is the number of degrees per day the average temperature is above 65 degrees. The average daily temperature is the average of the maximum and minimum temperatures for a 24-hour day.

More Occupants in a Unit Leads to Greater Utility Consumption

The more people who live in a dwelling unit of a given size, the more energy is consumed. But allowances vary only by dwelling unit size and consider the expected but not the actual number of occupants of a unit. In this respect, officials at the Phoenix PHA told us that some of their public housing and section 8 units have more persons in the unit than the utility allowance is designed for, which contributes to excess consumption. Our review of six PHAs showed wide variance in the number of individuals in any unit of a given size. For example, the number of individuals in two-bedroom public housing units ranged from one to six household members, and the number of individuals in three-bedroom section 8 units ranged from two to eight.⁶

Different Life-Styles Result in Different Levels of Energy Consumption

Tenant life-styles can also influence consumption and cause utility use to vary from the allowance. Tenants who stay home much of the day can be expected to consume more of some utilities than those who are away from the unit during the day. Also, some households are more energy-conscious than others. Therefore, no matter how carefully a utility allowance system is designed to fit “reasonable consumption,” some households’ consumption will differ.

Officials at PHAs where we calculated rent burdens sometimes mentioned energy wasting as a reason households may exceed their allowances. Also, a PHA in Ohio responding to our questionnaire wrote: “Too many times during the middle of winter we will find open windows in an apartment with the heating thermostat set at 80 [degrees].” In contrast, a PHA in Indiana commented that tenants are well-briefed on their allowances and energy conservation.

Another factor that affects the allowance-consumption equation is the use of major appliances not included in the allowances because HUD considers them luxuries for households of modest means. These items include space heaters, food freezers, and air conditioners.⁷ For instance, West Memphis records showed that the majority of check-metered households had window air conditioners. PHA officials told us that the electricity allowances were not intended to cover the cost of running these units. Although we did not calculate the differential effect of

⁶Based on an average of the five households with the least or greatest number of occupants, rounded to the nearest whole number.

⁷See app. I for an explanation of why HUD generally does not believe that air-conditioning is necessary in public housing but generally does allow air-conditioning costs to be included in section 8 allowances.

excluding air-conditioning costs on rent burdens, we did note that except during the cooling season, electric utility allowances were close to actual consumption.

The issue of housing stock, appliance, and household consumption differences as they affect setting allowances is summed up by correspondence from a gas utility company that a New Mexico PHA enclosed with its completed questionnaire. Responding to the PHA's request for average amounts for utility consumption, the utility company wrote

Your request of average amounts for utilities for housing allowances is not an easy one. . . . How many people are living in the 2-bedroom unit? . . . The more individuals in a dwelling unit the greater the energy use, especially for cooling and water heating. What are the life styles of those living in the units? . . . All of this makes a difference. . . . For the purpose of your need, I think the figures we talked about over the phone are a fair average. For some people these may be [too] high, for others [too] low.

Monthly Variations in Expenses Affect Households

As discussed in chapter 2, month-to-month differences in utility bills can also result in allowance-expense mismatches during the course of a year, particularly when utilities are individually metered. This situation arises because allowances typically remain the same each month, while utility bills vary. As a result, households have to budget so that they will have sufficient funds to pay utility bills in high consumption months when utility expenses exceed allowances. This budgeting may be difficult for lower-income households because, by definition, they have less income to pay for living expenses than higher-income households.

Remedies are not easy to prescribe. To accommodate these fluctuations, allowances could be set at a different level each month to provide a better match for the expected expense for that month. However, this may not be practical since it requires that PHAs adjust each public housing household's rent each month as the allowance changes monthly. Private landlords in the section 8 program would probably also be unenthusiastic about this approach because it would involve additional record keeping.

Another possible approach is the use of budget plans. Utility companies sometimes offer budget plans that provide for level payments throughout the year with a year-end reconciling of the difference between estimated and actual consumption. A budget plan is advantageous if the estimated payments are close to the actual expenses for the

energy consumed over the course of a year. However, if the households' payments, based on the estimates, are substantially lower than the actual amount consumed, then these lower-income households could have difficulty making the year-end reconciliation payment. None of the utility records that we reviewed indicated that households were on budget plans.

Definition of Reasonableness Differs Between PHAs

Although HUD regulations require that allowances be set at a level approximating "reasonable consumption of utilities by an energy-conservative household of modest circumstances, consistent with the requirements of a healthful living environment," HUD guidance does not specifically define the concept. As a result, assisted households' expectations of having allowances cover "reasonable consumption" depends on the PHA's definition of that term. Our work at 10 PHAs showed no clear consensus of what constituted "reasonable consumption" for either program.

PHAs Used Different Definitions of Reasonable Consumption

Generally, the PHAs in our review that based their allowances on their surveys of assisted households' consumption of utilities believed their allowances were reasonable because the methods that they used to determine allowances took into account consumption of those whom they believed to be excess consumers and under-consumers. In these cases, the PHAs typically adjusted for high-and low-energy users or unusually cold or mild winters before computing consumption averages. Some PHAs tended to set "reasonable consumption" at a point below consumption for what they determined to be energy-wasting households and at or above the estimated consumption for energy-conserving households.

However, PHAs approached their task of setting allowances differently. For example, in setting public housing allowances, Philadelphia and Los Angeles County computed allowances on the mid-range of values after deleting the top and bottom 10 percent of energy users. Dakota County also eliminated the top and bottom 10 percent of energy users from its data base and then took the additional step of combining current-year consumption averages with prior-year averages to lessen the effect of unusually cold or mild winters. To establish its check-metered allowances, Cuyahoga County arrayed its consumption data from low to high and set the allowance at the seventy-fifth percentile. In contrast, Phoenix did not adjust its consumption determinations because it first

set a normative standard of what reasonable consumption should entail. (See app. I for additional detail on how PHAs set their allowances.)

**Further Guidance on
Reasonable Consumption
Needed**

For HUD's public housing program, the current standard that allows for reasonable consumption of an energy-conservative household of modest circumstances is not precise and measurable. "Reasonable consumption" is not defined operationally, and, as discussed above and in appendix I, PHA implementation varies. As such, PHAs have flexibility to define and provide allowances that meet their assisted populations' needs. However, the definition provides PHAs with little guidance by which to judge whether the allowances are reasonable and meet households' legitimate energy needs.

For the section 8 program, HUD has set a measurable goal in that it expects the majority of households to receive allowances that are sufficient to cover utility costs over a 12-month period. To accomplish this, PHAs are to compute allowances on the basis of average-size units under average conditions with average household consumption patterns. This approach has two drawbacks. First, households that consume more than the average amount may not be energy-wasters, for the reasons discussed earlier. Second, and for the same reason, households that consume less than their allowance may be oversubsidized.

To provide a better standard for determining reasonable consumption, HUD could establish a goal that defines acceptable results. The goal might be specified in terms of the proportion of households that are expected to meet a given rent burden. For example, HUD could state that 90 percent of the households receiving utility allowances should have average annual rent burdens within a given range, such as between 25 and 35 percent of adjusted income.⁸ Establishing such a goal recognizes that differences in the (1) energy-use characteristics of housing units and appliances and (2) household consumption characteristics (such as the number of family members in a unit and the amount of time these members spend at home, work, or elsewhere) all contribute to unique household energy needs that cannot be precisely set to ensure a 30-percent rent burden for each household.

⁸This range is used as an example only. The adopted range should consider financial consequences for a household. For example, using the average \$64 monthly allowance and \$454 monthly adjusted income we found for section 8 households, a 25-percent rent burden would allow an average household to spend \$272 less than the allowance annually. Conversely, a 35-percent rent burden would require annual out-of-pocket expenses of \$272.

Such an approach would set an expectation for PHAS to fulfill and provide a benchmark for them to evaluate the allowances they derive. As always, special situations would need to be included in assessing whether the goal had been met. For example, section 8 households served by a PHA may typically use air conditioners but the allowances may legitimately not include the expected cost of this use. The effect of added utility costs due to air-conditioning use should be considered in establishing goals and in evaluating whether the PHA met those goals. Implicitly, this approach would require PHAS to collect actual consumption data for samples of their assisted households and use these data in conjunction with other information that they might use in setting allowances (e.g., engineering studies and communitywide data).

Household Declarations Could Aid in Determining Reasonable Consumption

To complement PHAS' determinations of reasonable consumption amounts, PHAS could also require that households declare whether they believe their allowances are reasonable during the annual recertification process. At least annually, PHAS are required to reexamine household income and adjustments to income and recompute required rental contributions, if necessary. Under this approach, the annual income recertification process could be used to ask the household about the allowance's reasonableness. The household would provide supporting documentation in the form of utility bills. For those households that believe their allowances are unreasonable, the PHA would decide whether the allowances need to be revised or the households need to do a better job of conserving energy. In the latter case, counseling might be provided. Since it is likely that most households would have an allowance-expense mismatch, the PHA would have to develop tolerance levels, above or below which it would choose to investigate the appropriateness of the allowance for the household's circumstances. If the dollar difference were within the tolerance, than no assessment would be required.

Making such an inquiry of a household would, in and of itself, likely pose a minimal added administrative burden on the PHA. The burden becomes greater when the PHA has to assess the reasons for the household's belief that the allowance is unreasonable. Also, the larger the proportion of households that perceive their utility allowances to be low in relation to their expenses, the greater the burden. However, this latter result should provide the impetus for the PHA to reassess the allowances it provides and either reassure itself that allowances are reasonable or make appropriate revisions. On the other hand, if few objections are raised, PHAS might conclude that the allowances are reasonable (or may be too generous).

We recognize that any household's self-assessment of the allowance's reasonableness is likely to be in one direction. That is, it is in the household's self-interest to point out inadequacies in its allowance but not to point out oversubsidization. As noted above, the absence of complaints should signal PHAs that allowances may be too high and should be assessed.

Some PHAs Report They Intentionally Keep Allowances Too Low

To some extent PHAs may keep allowances low for reasons unrelated to their determination of what represents reasonable consumption. In this regard, PHAs may not raise allowances for public housing households if they believe that doing so will worsen their financial positions. For section 8, PHAs may keep allowances artificially low so that landlords will continue to participate. However, in both instances these actions create higher rent burdens for assisted households.

Allowances Reportedly Kept Low to Maintain PHA Income Stream

Most PHAs receive a subsidy from HUD for day-to-day operations of the public housing stock. The subsidy is an important source of income for these PHAs because income, primarily from household rental contributions, is insufficient to cover PHA operating costs. The operating subsidy is calculated according to a formula. The amount provided to the PHA is the difference between the estimated (formula-derived) expenses and the income that the PHA expects to receive (predominantly from rents). Since a household's contribution for shelter and utilities is set at 30 percent of adjusted income, each time the utility allowance is raised, the rental income the PHA receives decreases.

In theory, the operating subsidy would be increased by the amount of the expected decreases in income. However, PHAs fear that the full operating subsidy may not be appropriated in every year. For example, HUD's fiscal year 1990 budget submission to the Congress reported that in fiscal year 1989 the estimated operating subsidy was funded at 97 percent of the amount determined by the formula. Further, critics have asserted that the formula used does not accurately determine some PHAs' justifiable expenses. As a result, some PHAs may attempt to keep public housing allowances low in order to ensure more income. This results in higher rent burdens for public housing households, all else being equal.

While we did not directly determine whether PHAs were keeping allowances artificially low, we did ask PHAs about this practice in our questionnaire. For 24 percent of the PHAs that had not revised their allowances in 1988 or 1989, a desire not to decrease PHA income played

at least some role in their decision not to revise allowances (for 9 percent of the respondents, the concern played a major role). Alternatively, 76 percent of PHAs said that this concern played a minor or no role in their decision not to revise allowances. While we cannot determine the overall effect of the results we obtained, this concern apparently influences the actions of more than a few PHAs as they evaluate the reasonableness of their allowances.⁹

Allowances Reportedly Kept Low to Compensate for Inadequate Section 8 Fair Market Rents

PHAs face different concerns in deciding whether to revise their section 8 certificate allowances. In some instances, PHAs may keep allowances low to maintain landlord participation. This action, while retaining the stock of lower-income housing, increases the financial burden on section 8 households.

Rents that landlords can charge section 8 certificate holders are limited to the "fair market rent" (FMR). HUD sets FMRs to represent typical rents for modest rental units of various sizes. If landlords believe that FMRs are lower than what they should be, they will not want to rent to section 8 households since they can receive more in rent from unassisted renters. Therefore, in areas where FMRs are too low, assisted households may have difficulty finding section 8 housing.

PHAs can attempt to compensate for what they perceive as an inadequate FMR by keeping utility allowances lower than they otherwise would. As with the public housing example, the assisted household bears the financial burden. Suppose, for example, that a landlord may be willing to rent a unit for \$400, excluding utilities. If the FMR is \$450 and the PHA has estimated reasonable utility expenses to be \$100, then the landlord would only be entitled to \$350 (\$450 minus \$100). In this case, the landlord would not want to rent to the certificate holder since an unassisted renter would pay \$50 more, or \$400. To keep the section 8 units available, the PHA may keep the allowance low, say at \$50, so that the landlord will receive the desired \$400 and continue to rent to section 8 households. However, if the \$100 estimate for reasonable utility expenses is closer to reality than the \$50 allowance actually provided, then the assisted household will pay utility expenses in excess of the allowance and incur a rent burden exceeding 30 percent of adjusted income, all else being equal.

⁹Results are based on an estimated 799 responses. The number of responses is lower than the total number of respondents because this question was asked of those PHAs that did not revise their allowances in 1988 and 1989. For sampling error estimates, see question 11 in sec. 2 of vol. II.

Our questionnaire asked PHAs whether they were concerned that an upward revision in utility allowances may lead some landlords to stop renting to section 8 households. For the 39 percent of the PHAs that had not revised their allowances in 1988 or 1989, this concern played at least some role in their decision not to revise allowances (for 22 percent of the respondents, the concern played a major role). Alternatively, 61 percent of PHAs said that this concern played a minor or no role in their decision not to revise allowances.¹⁰ Several of the responding PHAs wrote on their questionnaires that, in their view, it is difficult to set allowances at a realistic level with inadequate FMRS and still obtain landlord participation in the section 8 program.

In this context, PHAs' limits on section 8 utility allowances are understandable. However, when fair market rents are too low, it would be better to adjust the fair market rents appropriately rather than adjust the utility allowances. Clearly, these problems are utility allowance problems, but their remedy is outside the utility allowance framework. In February 1989 we reported on the adequacy of FMRS.¹¹ We recommended to HUD that it identify where FMRS appear to be either too high or too low and make necessary and timely adjustments to those FMRS. As of October 1990, HUD had not responded to this recommendation.

PHA Check-Metering Practices Result in Different Treatment for Some Households

Rent burden variations may occur because some check-metered households are treated differently than individually metered households even when they exhibit the same consumption behavior. This occurs when check-metered households consume less than their allowance in a month and lose the difference because of PHA practices.¹²

For check-metered utilities, the PHA pays utility costs directly to the utility company but "checks" on unit consumption through PHA-owned check meters.¹³ If the household consumes more than the allowance, the PHA charges the household for the excess consumption. However, if the

¹⁰Results are based on an estimated 440 responses. For sampling error estimates, see question 43 in sec. 2 of vol. II. For similar results, see *Urban Systems Research and Engineering, Inc., Report on Section 8 Existing Fair Market Rents—Final Report*, (Cambridge, Mass.: June 1977).

¹¹*Rental Housing: Housing Vouchers Cost More Than Certificates but Offer Added Benefits* (GAO/RCED-89-20, Feb. 16, 1989).

¹²This topic was of specific interest to the Congress in requiring that we report on utility allowance topics (see ch. 1). See app. II for additional discussion of limiting the differences in treatment of units with check, individual, and master meters.

¹³Check metering seldom occurs in section 8 housing but is common in public housing (see ch. 2.).

household consumes less than the allowance, some PHAs treat the household as if it consumed exactly the allowance. In these cases, the household receives neither a credit nor a rebate for any unused portion of the allowance. In other cases, PHAs will provide a credit or a rebate for the unused portion of the allowance.

On the other hand, individually metered households always receive the full allowance each month since it is deducted from the rent. If utility expenses are more than the allowance, the individually metered household must pay the difference from its cash-on-hand. However, if the expenses are less than the allowance, the household keeps the difference, which theoretically can be used to offset costs in other months when household utility expenses exceed the allowance—a distinct advantage over the approach used for check-metered households. HUD regulations and handbooks do not address the issue of providing credits or rebates to check-metered households that consume less than their allowance.

Our questionnaire results showed that there are an estimated 177,000 or more check-metered public housing units at 1,186 PHAs.¹⁴ About 75 percent of those PHAs responding said that they provide the full allowance to the household, i.e., treat the household as if it were individually metered. Further, about 6 percent of the PHAs said that they provide a credit for the unused portion to be used against future months' shelter rent, utility costs, or unrelated tenant expenses (such as a damage deposit). However, about 21 percent of the PHAs said that the household "loses" that portion of the allowance it does not consume.¹⁵

Our questionnaire results suggest that a fairly large proportion of check-metered households (21 percent) are treated differently from other check-metered households and from individually metered households. While our questionnaire results do not show the effect of this difference on assisted households' rent burdens, our detailed rent burden work at PHAs suggests—not unexpectedly—that the difference in rent burdens depends on household circumstances.

¹⁴The size of the check-metered allowance varies because of the (1) number of check-metered utilities in a unit and (2) the cost of the expected use. Our questionnaire results could not provide this level of detail.

¹⁵Responses total more than 100 percent because PHAs could apply different practices for different portions of their assisted housing. For response distributions and error estimates, see questions 6 and 19 in sec. 2 of vol. II.

We used our sample of 150 mixed-metered households at the Chandler PHA to determine how rent burdens would have changed if the allowances for the check-metered utilities had been treated like individually metered utilities. Chandler households received check-metered gas service for heating and individually metered electric service for lighting, small appliances, cooking, refrigeration, and evaporative coolers. Chandler does not provide mixed-metered households with a credit or rebate for unused portions of the check-metered allowance. On average, the annual rent burden for mixed-metered households that consumed less than their allowance in at least 1 month would have decreased from 31.5 percent to 31.2 percent of adjusted income if these households had received credits or rebates for consuming under the allowance in some months for the check-metered utility. This would have resulted in average annual savings of \$30 per household.¹⁶

On average, Chandler households received \$510 annually in individually metered allowances for electricity, and \$268 annually in check-metered allowances for natural gas. This suggests that the opportunity for lowering the rent burden for these households was not large at Chandler. While the overall rent burden results at Chandler shifted little, individual situations showed somewhat greater variation. For example, 12 households would have saved \$100 to \$137 annually if they had received a check-meter allowance credit or rebate.

Giving credits or refunds to check-metered households that consume less than their allowances would help eliminate some of the difference in treatment that exists between check-metered and individually metered households. Providing credits to check-metered households that use less than their allowances should also give them additional incentive to conserve. However, this would also require providing administrative support to allocate credits or issue refunds. Such costs would have to be weighed against the benefit received, especially since HUD's formula-derived operating subsidy would not provide extra funds for this activity.

An alternative practiced by some PHAs is to decrease the allowance in months with low energy consumption and raise it in months with higher

¹⁶Conversely, PHA income would have decreased by \$3,150. Of the 150 mixed-metered units, 105 households would have had lower rent burdens if permitted to carry forward those unused portions of check-metered utilities. The remaining 45 households would have little or no change in their rent burden. For simplicity, we assumed that assisted households would not change their consumption behavior if they received a credit or rebate. In reality, households may be expected to decrease their consumption somewhat in response to these price signals.

consumption (such as lower allowances for heat in summer than in winter). Assuming allowances are reasonable, this practice might provide fewer months of “underconsumption” of the allowance. Our review did not determine the prevalence of this practice.

Administrative Errors Can Raise or Lower Rent Burdens

Each of the six PHAS at which we collected rent burden information erred in calculating monthly adjusted income, rent, utility allowances, and/or, for check-metered households, excess utility consumption charges. These errors occurred in the public housing and section 8 samples that we drew, and contributed to households’ rent burdens differing from 30 percent of adjusted income.¹⁷

Of the 1,907 sampled cases, 423 had 1 or more errors (22 percent). Over 60 percent of these errors were small, resulting in \$3 a month or less overcharge or undercharge for rent. In 67 of the cases, the error was \$5 a month or more, and only 22 households were subject to overcharges or undercharges of \$10 a month or more. The largest overpayment was \$881 over 1 year (\$73 per month on average) and the largest underpayment was \$1,080 over 1 year (\$90 per month on average). In the aggregate, these errors had a minimal impact on the overall average rent burdens for both programs—causing the average rent burden to differ by one-tenth or two-tenths of a percentage point.

The scope of our work did not include a detailed review of the supervisory checks and internal controls to forestall such errors. However, we did ask PHAS if they had established control procedures. All PHAS told us that their policy directed supervisors or others to make spot checks or review all tenant rent determination files. Each PHA agreed to review the errors that we found and, if the household was still being assisted by the PHA, to repay any tenant overpayment.

Commenting on a draft of this report, HUD said that it will direct its field offices to study the errors we cited for the public housing programs we reviewed and require that PHAS make the appropriate adjustments. For its section 8 program, HUD did not comment on this aspect of our draft report.

¹⁷Extensive data checks for the Dakota County public housing and West Memphis section 8 samples showed few or no errors. See sec. 3 of vol. II.

Conclusions

Inherent in providing utility allowances is the reality that households with different—but reasonable—consumption requirements will receive the same allowances. As a result, and despite the best efforts of many PHAS, households will have utility expenses that differ from their allowances through no fault of their own. While allowance-expense mismatches will continue for many, there are several improvements to the current framework that would provide for a closer match of allowances with HUD's reasonable consumption standard. The first improvement involves the reasonable consumption standard itself. The current HUD standard that allows for reasonable consumption of an energy-conservative household of modest circumstances has not been defined in any meaningful way for the public housing program. As a result, PHAS have little guidance by which to judge whether the allowances are reasonable to meet households' legitimate energy needs. For the section 8 program, the reasonable consumption definition may reward or penalize some households unfairly. To provide a better definition for determining reasonable consumption, HUD could establish a goal that sets acceptable results, such as the one presented earlier in this chapter.

The second improvement is tied to the first. It provides for checks on the PHAS' determinations of reasonable consumption through household experience. In this respect, PHAS could require that households declare whether they believe their allowances are reasonable. As outlined earlier in this chapter, PHAS could use the annual income recertification process to ask each household about the allowance's reasonableness. For those households that believe their allowance is unreasonable, the PHA could decide whether the allowance needs to be revised or the household needs to do a better job of conserving energy. This approach would add to PHAS' administrative work load, and the work load would grow as the number of households that believed that their allowances were unreasonable grew. However, it does provide a check on allowances provided and opportunity to provide some redress if allowances are too low.

Related to the declarations of allowances' reasonableness is the problem of monthly allowance-expense mismatch discussed in this chapter and in chapter 2. Even those households with an annual rent burden of 30 percent are likely to have months in which allowances do not equal expenses. This problem is not easy to remedy. One possible approach is using budget plans offered by utility companies. Another approach more suited to check-metered utilities is varying the allowance each month to more closely approximate expected consumption during the month. We believe that it would be worthwhile for PHAS to investigate the possibility of smoothing out monthly fluctuations between allowances and

expenses. PHAS could use the household utility expense data collected during the annual recertification to (1) evaluate how vulnerable assisted households are to seasonal fluctuations and (2) act to minimize the impact of the fluctuations on these households through advocating budget plans or other approaches open to them, if practical.

Third, errors made by PHAS in determining adjusted income, rent, allowances, and/or surcharges for excess check-metered utility consumption also contributed to significant rent burden differences for several of the households we reviewed. However, because most errors were minor, the overall effect was small. The errors we found need to be corrected to ensure accurate future rental contributions. Compensating those who overpaid contributions (by more than a nominal amount) would provide an adequate remedy. However, because these are low-income households, collecting substantial underpayments resulting from PHA errors may not be feasible.

A different problem arises when households are treated differently depending on how their units are metered. The financial effects depend on the size of the allowances, whether the allowances accurately reflect households' legitimate energy needs, household consumption patterns, and factors, such as weather and the condition of the housing stock, that are beyond the household's control. Check-metering practices could be changed to better align the treatment of these households with households in individually metered units. We could not quantify these relationships; however, our limited work suggested that any increased benefit to the assisted household might be small. As a result, these results are too limited to suggest that a problem requiring action exists.

Finally, PHAS may keep allowances low intentionally if they perceive that their financial position will be harmed by raising them (public housing) or if they believe that households will have a more difficult time finding assisted housing (section 8). In both instances, the assisted household incurs a higher rent burden than if the allowance were set correctly, all else being equal. A substantial proportion of PHAS volunteered that they have kept allowances low for these reasons. To the extent that this problem occurs, the most obvious remedies would be for HUD to direct PHAS to set allowances that meet the reasonable consumption standard, fully fund the operating subsidy each year, and ensure that FMRS reflect market conditions as much as possible. While these problems appear to be fairly widespread, our work in this area was too limited to corroborate our questionnaire results or determine the

severity of the problem. Therefore, we are not making any recommendations. We do note, however, that HUD has not responded to our February 1989 report's recommendations that call for improved FMR-setting.

Recommendations to the Secretary of HUD

We are making several recommendations to the Secretary of HUD to improve how utility allowances are provided to public housing and section 8 households. Although taking these actions will not result in allowances being substantially the same as reasonable expenses for all assisted households, we believe that these actions will result in more households with rent burdens at, or close to, the desired 30 percent of adjusted income.

First, we recommend that the Secretary of HUD set performance expectations for PHAS by better defining its reasonable consumption utility allowance standard. This action will provide PHAS with a clear understanding of the results that they are expected to achieve and will minimize rewarding or penalizing households unfairly. Because setting utility allowances is not an exact exercise, HUD may wish to specify (1) an acceptable range for the rent burdens of households receiving utility allowances and (2) the proportion of households that are expected to fall within that range. In doing so, however, it may also want to reaffirm that PHAS should strive for average rent burdens of 30 percent. This affirmation would serve to preclude the possibility of rent burdens gravitating to the higher end of the range.

Second, we believe that the Secretary of HUD should encourage PHAS to use assisted households' experiences with the allowances as a mechanism for ensuring that allowances are reasonable. In this respect, we recommend that the Secretary require PHAS to determine whether households believe that their allowances are reasonable. If households respond negatively, then PHAS should investigate the reasons, and, if appropriate, adjust allowances. We also recommend that the Secretary of HUD encourage PHAS to investigate the possibility of smoothing out monthly fluctuations between allowances and expenses. This could require PHAS to (1) evaluate the vulnerability of their assisted households to seasonal fluctuations and (2) take actions, if practical, to minimize the impact of these fluctuations on assisted households (such as using budget plans and adjusting check-metered allowances monthly).

Third, we recommend that HUD direct the six PHAS in our review to correct the income, allowance, and rent determination errors that we found. Finally, HUD should also direct those PHAS to reimburse those households

whose rental contributions were too high (by more than a small amount) because of PHA errors.

PHA and HUD Monitoring Provide Little Assurance That Allowances Are Reasonable

To help ensure that allowances are appropriate, HUD requires PHAs to review their utility allowances annually and revise them if housing stock conditions and/or utility rates change. Similarly, HUD guidance requires its field staff to review PHAs' allowances periodically to determine whether the allowances meet all HUD requirements. These reviews of allowances, if performed, could be useful in better ensuring that allowances provide for reasonable consumption amounts.

Our questionnaire results showed that typically fewer than half of all PHAs review allowances annually. While most of the 10 PHAs we visited reviewed their allowances annually, the reviews varied in thoroughness and were not always documented. Similarly, HUD's periodic reviews of these 10 PHAs' allowances typically found several problems at PHAs, but did not find other problems that we found. Accordingly, we believe that PHAs' and HUD's monitoring efforts require management attention.

PHAs' Reviews Vary in Frequency and Depth

Although PHAs are required to review their allowances annually, our questionnaire showed that fewer than half of the PHAs nationwide do so in any one year. While the 10 PHAs we visited generally reviewed allowances annually, the reviews varied in depth and, in some cases, were not well documented. Where allowances were revised, the revisions were more often due to changes in utility rates than to changes in household consumption patterns.

HUD Requirements for Reviewing and Revising Allowances

HUD regulations require that PHAs review the bases for their public housing and section 8 allowances annually. When reviewing public housing allowances, PHAs must consider all changes in circumstances that may significantly affect reasonable consumption requirements (such as modernization of structures), as well as changes in utility rates. PHAs must revise their public housing allowances when utility rates change by 10 percent or more, even if the change occurs between annual reviews.

When reviewing section 8 allowances, PHAs must determine whether a substantial change in utility rates has occurred. If so, or if errors are found in the original determinations, the PHA must then decide whether allowances should be revised. However, the threshold for a "substantial" change in rates for section 8 is not defined. In addition, HUD requires PHAs to obtain household consumption and utility company rate data in order to evaluate their allowance schedules.

Many PHAs Do Not Review Allowances Annually

PHAs often do not review their allowances annually. As our questionnaire results show, in no single year did more than two-thirds of the PHAs surveyed review allowance schedules for either program (see table 4.1). More typically, only about 30 to 40 percent of the PHAs reported that they reviewed allowances in any one year, although the frequency seems to be increasing somewhat.

Table 4.1: Percent of PHAs Reviewing Allowances in Any Year

Calendar year	Public housing	Section 8
1985	32.6 (4.0) ^a	38.0 (2.9)
1986	33.0 (4.0)	40.3 (3.0)
1987	40.9 (4.2)	48.2 (3.0)
1988	55.3 (4.3)	65.0 (2.9)
1989 ^b	32.4 (4.0)	40.6 (3.0)
Don't know	3.4 (1.6)	4.1 (1.2)

Note: Responses based on an estimated 2,112 (± 108) PHAs for public housing and 1,608 (± 49) PHAs for section 8. See questions 9 and 41 in section 2 of volume II.

^aSampling error estimates in parentheses.

^bOur survey was conducted during mid-1989. The results for a full year may be greater.

The frequency of annual reviews was higher at the 10 PHAs we studied in detail than for PHAs nationally. Seven of those PHAs said they reviewed their public housing allowances annually. For the three PHAs that did not, different explanations were offered. A program specialist at Cuyahoga County attributed a lack of annual reviews over the previous 2 years to a central office reorganization in early 1988 that essentially disbanded the entity responsible for setting and monitoring public housing allowances. In Boston, the administrative assistant for fiscal affairs cited financial difficulties and a reduction in force as factors preventing an annual review of allowances over the previous 5 years. At Chandler, the housing agency supervisor stated that public housing allowances are only reviewed every 3 years because she believed that triennial reviews were consistent with HUD policy.

Eight PHAs indicated they reviewed their section 8 allowances annually. Of the two PHAs that did not, the section 8 program administrator in West Memphis said allowances had not been reviewed since 1987 because the PHA believed the allowances were sufficient. In Boston, the assistant administrator for leased housing said annual reviews were not done before 1987 because that PHA, too, believed the allowances were reasonable. In 1987, new allowances were established and an official told us that allowances have since been reviewed annually.

PHA Reviews Varied in Depth

The annual reviews varied in scope, according to PHA officials who told us how they conducted their annual reviews. Further, not all of the PHAs we visited were able to document their annual reviews, and therefore we were not always able to corroborate what PHAs told us.

Of the seven PHAs that performed annual reviews of public housing allowances, four collected consumption and rate data and three PHAs collected rate data only:

- East Detroit, Dakota County, and St. Paul collected cost or consumption data in conjunction with rate data from utility companies for all or a sample of their assisted households. After obtaining these data, the PHAs determined allowance amounts. (See app. I for a description of the general approaches employed.) Where computed allowances for specific utilities and/or uses differed from the previous allowance for the same structure type and unit size, the allowances were usually revised.
- Phoenix, which has only check-metered utilities, reviewed allowances by tabulating the number of tenants surcharged each month. If the number was higher or lower than what was considered normal, the allowances and/or consumption patterns could be reviewed. In addition, the PHA monitored utility rates and appliance consumption characteristics for change. It also considered the effects of landscaping improvements (e.g., increased shading of buildings) on utility consumption.
- Philadelphia, Los Angeles County, and West Memphis examined utility rate changes only in their annual reviews. Philadelphia told us that utility companies will not supply consumption data. Los Angeles and West Memphis told us that since allowances were already based on average consumption, further gathering of such data was unnecessary. Neither Los Angeles County nor West Memphis, however, could document their last annual review.

For the eight PHAs that annually reviewed their section 8 allowances, two (Dakota County and St. Paul) collected cost and/or consumption data in conjunction with rate data on samples of their assisted households to determine whether allowances should change. The other six PHAs told us that they collected data on utility rates only. Of this group, neither Los Angeles nor Chandler could document their efforts.

Reasons Cited That Would Trigger Allowance Revisions

Except for East Detroit, Dakota County, and St. Paul (which revised public housing and/or section 8 allowances in keeping with changes in costs, consumption amounts, and utility rates), PHAs revised allowances in both programs more in response to changes in utility rates than to

changes in consumption. Further, in revising section 8 allowances, PHAS tended to differ in what they considered to be a "substantial" change. While half of the PHAS said they would revise section 8 allowances if rates changed by 10 percent or more, PHA officials at Los Angeles County used 5 percent as their benchmark. On the other hand, PHA officials in Philadelphia said they would revise section 8 allowances to reflect any rate change regardless of size. A PHA official in Boston said revisions would occur if utility rate changes caused section 8 allowances to change by \$1 or more.

These results are similar to those we obtained from our questionnaire. Of those PHAS that had not revised allowances in 1988 or 1989, 61 percent cited little change in consumption as a "moderate" or "major" reason for not revising public housing allowances in 1988 or 1989, and the same percentage also cited little change in utility rates as a moderate or major reason. For section 8 households, 43 percent of the PHAS did not revise allowances because consumption had not changed substantially, and 64 percent did not revise them because rates had not changed substantially (citing moderate or major reasons). PHAS also cited their belief that allowances were fair as a moderate or major reason for not revising them (78 percent for public housing and 67 percent for section 8). (See table 4.2.)

**Chapter 4
PHA and HUD Monitoring Provide Little
Assurance That Allowances Are Reasonable**

Table 4.2: Reasons Cited by PHAs for Not Revising Allowances During 1988-89

Reason for not changing public housing allowances	Role each response played, in percent			
	None or minimal	Some	Moderate	Major
Utility rates have not changed by 10 percent	25	14	12	49
Household consumption has not changed substantially	25	14	14	47
Allowances are fair and adequate	14	8	11	67
Change would lower PHA income ^a	76	11	4	9
Other ^b	60	2	0	38
Reason for not changing section 8 allowances				
Utility rates have not changed substantially	24	13	11	53
Household consumption has not changed substantially	43	15	15	28
Allowances are fair and adequate	20	13	20	47
Change may lead to decreased landlord participation ^a	61	13	4	22
Other ^b	47	2	0	51

Note: Sum of responses may exceed 100 due to rounding. Results based on an estimated 840 public housing and 459 section 8 responses. For sampling error estimates, see questions 11 and 43 in section 2 of volume II.

^aSee chapter 3 for a discussion of the role of allowances on PHA rental income and landlord participation.

^b"Other" responses varied considerably, including difficulty in obtaining utility company information, competing PHA priorities, and difficulty in obtaining clear guidance from HUD.

A considerable portion of the PHAs that had not revised allowances recently also reported that they had not reviewed them. Of those PHAs that said that they had not revised allowances because utility rates or household consumption had changed little or because they believed the allowances were fair and adequate (with the response cited playing a moderate or major role), 19.3 percent (+3.4 percent) of the PHAs administering public housing and 11.8 percent (+2.4 percent) of the PHAs administering section 8 responded that they had not reviewed allowances in 1988 or 1989.

HUD's Reviews at 10 PHAs Found Some Problems but Missed Others

HUD's handbook guidance requires that it review both public housing and section 8 allowances. The reviews are intended to ensure that PHAs provide allowances that comply with the applicable regulations, including the requirement that allowances represent amounts for reasonable consumption of utilities. HUD's reviews at the 10 PHAs we visited disclosed a number of deficiencies in PHAs' methods for determining and administering allowances; we found other problems as well.

HUD Requirements for Its Reviews of PHA- Developed Utility Allowances

Except for initial section 8 allowances, HUD is not required to approve either public housing or section 8 allowances. For public housing, HUD generally schedules reviews every 4 years, but not less than every 8 years (although these reviews may be scheduled more frequently, if warranted). These reviews take place to determine whether utility allowances and surcharge schedules comply with HUD regulations. The reviews require HUD to determine whether allowances and surcharges have been revised in accordance with its regulations, including the requirement for adequate supporting documentation for allowance calculations.

HUD's reviews of section 8 allowances are to be accomplished by examining PHAs' revised allowance schedules and by conducting management reviews. In the reviews of revised schedules, HUD is to check PHAs' section 8 allowances for (1) consistency with other areas having approximately equal costs and (2) overall reasonableness, using the allowance schedules sent to them. The section 8 management reviews require HUD to determine whether the PHA is maintaining a sample of tenant billings or records on actual utility consumption to determine reasonableness. Generally scheduled every 2 years, these management reviews are to be performed on-site.

Problems Found During HUD's Reviews

HUD's field offices typically found several problems during their reviews. For public housing allowances, each of the 10 PHAs we visited had at least 1 review that included a utility allowance component during the 8 years ending in 1989. Of these, eight were conducted between 1985 and 1989. For these eight, only the 1988 review at Phoenix and the 1989 review at St. Paul had no findings concerning allowances. Reviews at Dakota County, Los Angeles County, Cuyahoga County, West Memphis, and Chandler had one or more findings. Generally, the deficiencies noted ranged from inadequate records to questionable procedures for computing allowances. For example, Cuyahoga County was cited for not having rate schedules or evidence of annual reviews. Dakota County was cited for (1) not adjusting consumption data for warm or cool seasons, (2) not having current rate schedules, and (3) applying an arbitrary 5-percent excess use figure to the utility data to compensate for excess use. In each case, HUD recommended that the PHA correct the problems identified.

Regarding section 8 allowances, HUD conducted 12 on-site section 8 management reviews between 1985 and 1989. While reviews at Phoenix, St. Paul, Dakota County, East Detroit, and Chandler had no findings,

reviews at Cuyahoga County, Philadelphia, West Memphis, and Boston had several. Only Los Angeles County had no section 8 management reviews during this period (although it was reviewed in 1984 and again in 1990).

Generally, the deficiencies noted in these reviews were similar to those found for public housing allowances. For example, Chandler was cited for providing revised allowances to some households but not to others, as required. Cuyahoga County was cited for not (1) having copies of current allowance schedules in tenant files, (2) establishing separate allowances for different structure types, (3) providing allowances for tenant-supplied appliances, and (4) providing appropriate allowances for the type of unit occupied by the family. Philadelphia was cited for neither annually reviewing its allowances nor revising them, despite a 40-percent increase in utility rates over a 2-year period.

Some Problems Not Found by HUD

We did not attempt to determine whether allowances were reasonable. However, when collecting the rent burden information reported in chapter 2, we found several problems not contained in HUD reviews as well as other problems with allowances at PHAs where HUD had not conducted a recent review. For example, although HUD regulations require PHAs to document how allowances are determined, Cuyahoga County and Boston could not replicate the calculations used to derive their current public housing allowances.

Further, at Cuyahoga County, 6 out of 9 check-metered projects representing nearly 2,600 units either had not had their check meters read or recorded by PHA staff or had faulty meters. As a result, the PHA did not determine whether households should be charged for consumption in excess of their allowances. We also found that the PHA used incorrect utility rates at two check-metered projects to surcharge tenants for excess consumption. The PHA surcharged households at half of the correct rate for excess electricity usage for over 2-1/2 years, until we told them. Similarly, at West Memphis, we found that the PHA was using the wrong rate during 2 out of the 12 months of our study period to surcharge check-metered tenants for excess electricity use.

Neither Cuyahoga County nor West Memphis had established separate section 8 allowances for several different structure types, even though HUD guidance requires it. Although a January 1988 HUD management review cited Cuyahoga County for not developing separate section 8 allowances, the PHA did not separate allowances by structure type when

it revised its section 8 allowances in April 1988. In West Memphis, this condition was not reported as a deficiency in HUD's May 1989 review of section 8 allowances.

HUD requires that PHAS collect a sample of tenant consumption or billing records and that HUD management reviews check to ensure that this requirement is met. Most of the 10 PHAS did not routinely collect these data. Further, none of the management reviews HUD completed between 1985 and 1989 at six PHAS where these data were not collected cited these omissions as findings. One review completed in 1990 did cite this omission.

We asked HUD officials why their reviews had detected other problems, but not the ones cited above. They responded, among other things, that their reviews focused on areas that they considered more important and that they did not have the time to perform detailed reviews.

Commenting on a draft of this report, HUD said that it will reemphasize to its field offices and to PHAS the importance of fulfilling the program review requirements of the section 8 program. For the public housing program, HUD said that it would (1) instruct its field offices to set up a system to ensure that annual PHA allowance reviews take place and (2) ensure that the quality of HUD's monitoring activities is checked in its review of regional office performance and that necessary action resulting from those reviews is taken. HUD did not provide further information on how it would improve monitoring of the section 8 program by PHAS and HUD field offices.

Conclusions

Although PHAS are required to review their allowances annually, a significant portion of the PHA population has not done so, according to our questionnaire results. Further, our limited review of 10 PHAS shows that the reviews often constitute a less than thorough reevaluation of the underlying premises on which the allowances are built. More typically, the reviews entail determining whether rate changes have occurred. Further, our work at 10 PHAS indicates that HUD's reviews have not effectively complemented PHA reviews because they are somewhat infrequent and sometimes lack depth.

Our work at 10 PHAS does not give us a sufficient basis to determine whether HUD's monitoring activities nationwide are adequate. However, according to our questionnaire results, less than half of the PHAS review their allowances annually. This finding, coupled with our work at 10

PHAS, suggests that HUD is not providing effective oversight. If HUD were overseeing allowances more vigorously, we would expect a larger proportion of PHAS to report that they conducted annual reviews. If HUD assessed the adequacy of its oversight of PHA utility allowance determinations on a nationwide basis, overall conclusions could be reached on the quality of this oversight.

Our work suggests that the current allowance framework results in spotty reevaluations of allowances. If allowances are adequate, then little harm may be done. If allowances are too small or too large, then the effect of relatively limited monitoring activities becomes more important. The wide variation of rent burdens we found in chapter 2, coupled with the findings presented in this chapter, suggests that PHAS and HUD need to renew their emphasis on review and oversight of allowance determinations.

Recommendations to the Secretary of HUD

In conjunction with the actions recommended in chapter 3, the Secretary of HUD should take several actions to ensure that the allowances developed by PHAS provide for reasonable consumption of energy-conserving households of modest circumstances. First, we recommend that the Secretary ensure that PHAS review the reasonableness of their allowances annually, as HUD requires. Second, we recommend that the Secretary determine whether HUD's oversight of PHA utility allowance determinations is consistent with HUD policy. If this oversight is determined to be insufficient, the Secretary should require corrective action.

Alternative Approaches for Providing Utility Allowances

In chapters 3 and 4, we recommended that HUD take certain administrative actions and direct PHAs to take other actions to improve the current allowance framework. If these actions are taken, a greater percentage of households should have rent burdens that come closer to 30 percent. We recognized earlier in this report, however, that PHAs face certain impediments in improving their utility allowances in order to achieve desired rent burden targets. Specifically, administrative costs associated with improving allowances could be substantial and, as discussed in chapter 3, raising utility allowances for public housing tenants could lower a housing agency's operating income. Also, raising allowances for section 8 households could result in lower rents for private owners, causing some landlords to end their participation in the certificate program. In addition, HUD will have to provide closer management attention to improve its oversight of how PHAs establish, monitor, and revise allowances.

We recommended these actions on the assumption that utility allowances will continue to be provided to assisted households under the existing framework. There are, however, at least two alternative approaches to the current allowance system, which is based on a "reasonable consumption" standard. One alternative is to eliminate utility allowances altogether and have PHAs pay assisted households' utility costs as is presently done in buildings with master meters. Under this approach, the Congress would be assured that all assisted households pay 30 percent of their adjusted incomes for rent and utilities. This option, however, is likely to raise federal subsidies and provides no incentive to conserve energy. The second option is to set allowances based on "average" need. This approach is similar to setting allowances based on "reasonable consumption" and would have similar results—a large proportion of households would have rent burdens outside 30 percent of adjusted income.

Alternative Approaches for Providing Allowances

Several issues should be addressed in deciding whether the current utility allowance framework needs to be fundamentally changed. The first issue is the importance of allowances to assisted households. This issue can be evaluated in terms of (1) the prevalence of utility allowances and (2) their effect on the rent burdens and disposable incomes of assisted households when utility costs differ from the allowances. The second issue is whether the current allowance framework for both public and section 8 housing could provide closer matches of allowances and expenses with some adjustments or closer adherence to existing HUD policies. The third issue arises from the responses to the

first and second issues. If allowances are important to many households and if administrative improvements to the framework probably will not result in the desired rent burden goals expressed by the Congress, more radical changes need to be proposed and assessed.

On the first issue, we found that allowances are important to many households. We base this conclusion on several findings:

- About 61 percent of public housing households and 79 percent of section 8 households receive allowances, according to our questionnaire results. Also, about 65 percent of public housing and 52 percent of section 8 households received allowances for heating and/or cooling. These allowances could, therefore, be expected to be substantial.¹
- For the estimated 9,500 households for which we developed detailed financial information, the average allowance was \$55 for public housing and \$64 per month for section 8 households. If all households paid 30 percent of adjusted income for rent and utilities, they would typically have about \$350 to \$400 per month remaining for all other living expenses. Consequently, situations where utility costs substantially exceed allowances can pose serious financial problems for assisted households.
- Of the 9,500 households, about 33 percent of those residing in public housing and only 7 percent of those in section 8 housing paid 30 percent of income for rent and utilities. Some paid less, but most paid more than 30 percent, some substantially.

On the second issue, chapters 3 and 4 cited a number of possible reasons for the allowance-expense mismatch, including the inherent imprecision of the process for setting allowances. This imprecision results from various factors influencing consumption, many of which are unique to a particular housing unit (i.e., efficiency of appliances or insulation) or family situation (i.e., number of family members). It is not reasonable to expect that all factors can be translated into separate allowances. Also, other consumption-related factors exist, such as weather, that PHAS cannot control or predict. On the other hand, certain allowance-expense mismatches occur for reasons that can be controlled to some degree. For example, PHAS could review their allowances more frequently and more thoroughly.

¹ Not all PHAs responded to the heating and/or cooling question. See ch. 2 for response rates.

Recognizing that other matters demand the attention of PHAS and HUD, it is somewhat understandable that both PHAS and HUD are not emphasizing utility allowances as HUD expects. However, the results of this review suggest that unless considerably more administrative attention is given to setting, monitoring, and revising utility allowances, rent burdens for many assisted households will deviate substantially from 30 percent of adjusted income. Making the changes suggested in chapters 3 and 4 could result in more assisted households having rent burdens between 25 and 35 percent. However, even under the most ideal utility allowance system, some households will be either overcompensated or not compensated sufficiently for their utility consumption. A key objective of any allowance system should be to keep the number of these households to a minimum.

On the third issue, the results cited above suggest that an alternative to HUD's current approach is worth examining. However, several considerations must be weighed. The first consideration is specifying the standard so that it is consistent with the desired rent burden goal of 30 percent for most, if not all, assisted households. The second consideration is whether PHAS can set allowances under the alternative standard and periodically reassess these allowances (including the question of whether quality HUD oversight is likely). The third consideration is how much an alternative standard will cost. And the final issue is recognizing the indirect results of changing the standard. In this case, the most obvious indirect result would be expected changes to households' incentives to conserve energy.

We present two alternatives. One is to discontinue utility allowances and treat all households as if they were master-metered. The second is to set the standard at a central measure, such as "average consumption" for assisted households. We discuss the first alternative because it addresses congressional concerns over excessive rent burdens, which led to this review. We present the second alternative because "average" represents a central measure, and, as opposed to a reasonable consumption standard, is mathematically defined.

Treating All Households as If They Are Master-Metered

In the master-meter approach, the PHA pays the utility bills for each assisted household. As a result, the household is treated as if the utilities were master-metered and therefore pays exactly 30 percent of its adjusted income for rent (including utilities). In contrast to the current situation, in which individually metered households pay out-of-pocket when they consume more than their allowance (or reap the benefit from

consuming less than their allowance), this approach (1) meets the 30-percent rent burden target set out in housing law and (2) promotes equity in that all households pay the same share of their income for housing, including utility costs, regardless of any differences in unit or metering configurations. This approach, therefore, provides the greatest financial security and equity for assisted households.

This approach would also be the easiest to administer (and assess for compliance) since there would be no need to develop sets of allowances and monitor the allowances' adequacy periodically. However, this approach lacks energy-conservation incentives. Consequently, PHAS would need to set up some form of monitoring to determine if households were wasting energy. In addition, PHAS may need to consider providing some sort of (1) monetary penalties for energy wasters and rewards for energy conservers, (2) nonmonetary incentives to encourage conservation and discourage waste, and/or (3) ongoing energy conservation counseling.

Such an approach may increase federal costs if households have no monetary or nonmonetary incentives for energy-conscious behavior. These increased costs would stem from (1) likely increased energy use because of the lack of monetary penalties (e.g., out-of-pocket expenditures) for wasteful consumption and (2) increased administrative costs to implement any of the three incentive activities outlined above. In addition, PHAS' administrative costs might increase if they acted to disapprove those section 8 units likely to have abnormally high utility usage. While data limitations precluded us from attempting to quantify these costs, they could be substantial, given the large number of assisted households that currently receive allowances and the large proportion of these whose utility expenses exceed their allowances (see ch. 2). It should be noted, however, that improving the present allowance framework as recommended in chapters 3 and 4 could also result in substantial additional costs if the underlying cause of higher rent burdens were found to be inadequate utility allowances rather than wasteful energy consumption. Improving the current system would also increase administrative costs.

Providing Allowances That Meet Average Needs

A second approach is to alter the current system by setting allowances at a level that approximates the need for an average assisted household in a given size unit and structure type. In setting standards, the

“average” is sometimes advocated because it provides a benchmark reference for the typical case.² However, as discussed in chapters 2 and 3, some households may consume more than the allowance even if they are not energy wasters. Also, some households will be oversubsidized because their units are more energy-efficient and consequently they consume less than the average amount. These outcomes are undesirable.

However, setting an allowance standard to reflect the “average” household would create a stronger incentive to conserve energy than the alternative of treating all units as if they were master-metered since households would have to pay out-of-pocket for any expense over their allowance. Also, direct federal costs would be lower than costs for master metering because the financial burden for excess consumption would be borne by the assisted households rather than the federal government. PHA and HUD compliance efforts would be greater than under the master-meter approach because allowances would have to be established and periodically reassessed. Each of these outcomes would be expected to be about the same as for the current framework.

An allowance standard could similarly be based on “actual consumption” rather than on average consumption. An actual consumption approach was considered but never adopted in debate on the Housing and Community Development Act of 1987.³ The adoption of an actual consumption standard implies that some sort of averaging technique will be employed unless a unique allowance is set for each household based on individual circumstance. As a result, this approach would be expected to produce results similar to those of the average consumption standard since they are conceptually similar.

As the allowance standard moves away from treating all households as if they were master metered, the financial risk is shifted from the federal government to the assisted household because an increasing percentage of households have consumption that differs from allowances received. Shifting the financial risk to the household may be desirable for providing an energy-conservation incentive and holding down federal costs since households may conserve energy if their costs are expected to rise and, as a result, save money. It is less desirable if the

²Another measure of central tendency, such as the median, could also be used.

³House of Representatives, Conference Report, Housing and Community Development Act of 1987, (H.R. Rep. No. 100-426, Nov. 6, 1987), pp. 163-4. House of Representatives, Report, Housing, Community Development, and Homelessness Prevention Act of 1987, (H.R. Rep. No. 100-122, June 2, 1987), pp. 13-14. H.R. 4, June 2, 1987.

allowance is set too low and energy-conscious households are inappropriately penalized. Similarly, if the allowances are generally too high, then the government oversubsidizes these households.

Conclusions

Federal housing policy calls for assisted housing rent burdens to be 30 percent of adjusted income. However, the rent burdens for the overwhelming majority of assisted households receiving utility allowances are not at this level. Except when errors are made, the deviation from 30 percent of adjusted income is due to a utility allowance-expense mismatch. Exact matches of allowances for individual unit and household energy-consumption characteristics cannot be achieved under any allowance system, no matter how the allowance is set. Thus, even for households whose consumption is “reasonable,” utility expenses are unlikely to match the allowances provided.

A decision about this situation raises both policy and management issues. Options include (1) leaving the present allowance framework intact, (2) improving this framework by implementing the recommendations made in this report, (3) altering the current framework by setting allowances based on averages, or (4) doing away with allowances. In each case, policymakers must weigh the benefits of the factors that they consider most important (e.g., achieving greater consistency with the 30-percent amount) and the possible indirect consequences of taking this action (e.g., the probability of increasing energy use as a result of decreased conservation incentives). Also, in considering whether to attempt to improve the present framework, it is necessary to weigh the imperfections of the current system against the costs and administrative difficulties of making the changes needed to address the problems we have documented. Because financial information was unavailable, we were not able to quantify the costs of the different alternatives.

Matter for Consideration by the Congress

Because of the inherent imprecision of the utility allowance framework and because households’ propensities to consume energy differ, many households will continue to have rent burdens that differ from 30 percent. If HUD takes the actions set out in chapters 3 and 4, rent burdens should approach 30 percent for a larger proportion of assisted households than is currently the case. However, even if these actions are taken, we would expect that many households’ reasonable utility expenses would not be substantially the same as the allowances they receive. Therefore, if the Congress wants to ensure a rent burden of exactly 30 percent for each assisted household, it will have to revise the

U.S. Housing Act of 1937, as amended, to require that assisted households pay 30 percent of adjusted income for rent and utilities.

The practical result of this action would be to require that PHAs pay all utility bills on behalf of assisted households. This requirement may result in (1) larger federal subsidies and (2) increased social costs to the extent that energy conservation is discouraged. Because the amount of these costs is unknown, at this time we are not recommending that the Congress take this action. Nevertheless, if achieving 30-percent rent burdens for all assisted households is of paramount concern to the Congress, then amending the U.S. Housing Act in this regard warrants its consideration.

HUD Policies on Utility Allowances and Allowances for Air-Conditioning Costs

Public housing assistance is provided through the low-rent public housing program and through Indian public housing. Section 8 housing assistance is provided through several different programs. Congressional housing committees were interested in knowing whether the requirements for setting and revising utility allowances differed from program to program. In addition, the statutory requirement for our study required that we determine public housing agency (PHA) practices in developing these allowances.

Treatment of air-conditioning expenses varies by program. In the section 8 program, the expected cost for air-conditioning may be included in the household's utility allowance if the unit has air-conditioning and air-conditioning is typically provided in the area's rental units. In public housing, the Department of Housing and Urban Development (HUD) generally considers air-conditioning a luxury and discourages PHAs from including it in allowances. Congressional committees asked us to determine the reason for the different policies.

HUD Policies for Public and Indian Housing

Public housing is composed of two major programs: low-rent public housing run by PHAs and Indian public housing operated by Indian housing agencies. Chapters 3 and 4 outlined HUD guidance and PHA responsibilities for establishing, reviewing, and revising allowances for the conventional public housing program. The same requirements also apply to Indian public housing.

HUD Policies for Section 8 Programs

Section 8 housing assistance is provided through five programs known as the existing housing, moderate rehabilitation, substantial rehabilitation, new construction, and voucher programs. In the existing housing and voucher programs, the household secures a unit of its choice anywhere in the area, provided the landlord participates in the section 8 program. In the other three programs, the section 8 certificate is designated for a specific unit in a rental project as a way to help make the unit affordable ("project-based certificates"). In the voucher program, the household can choose to rent a unit that will lead the household to pay more (or less) than 30 percent of adjusted income for rent and utilities and pay (or keep) the difference. Under the other programs, the rent burden is expected to be 30 percent of adjusted income.

For each of the five programs, the basic HUD standard for the utility allowance to be provided is the same; that is, the allowance should provide for reasonable consumption by an energy-conservative household

of modest circumstances. PHAs generally establish the allowances for the section 8 existing and voucher programs. Private owners, PHAs, or state housing finance agencies are generally responsible for establishing allowances for the remaining programs, depending on who owns the project.

Chapter 3 outlined HUD guidance and PHA responsibilities for establishing allowances for the section 8 existing housing program. HUD officials told us that PHAs are to use the existing housing allowances for voucher allowances. For project-based allowances, HUD officials told us the project owner, where possible, must compile consumption data for similar units from local utility companies.

For each of the five programs, HUD requires that the allowances be reviewed at least annually, and revisions are required when utility rates increase (1) "substantially" for the existing, moderate rehabilitation, and voucher programs; or (2) cumulatively by 10 percent for the substantial rehabilitation and new construction programs. Allowances must also be reviewed when a project's physical attributes change substantially. For the section 8 existing and voucher programs, HUD approves the allowances the first time they are developed. HUD reviews changes to allowances but is not required to approve them. For project-based section 8 programs, HUD reviews and approves the initial allowances, as well as any subsequent changes.

Approaches Used by PHAs in Developing Allowances

As discussed above and in chapter 3, HUD has given PHAs wide latitude in how they develop their public housing and section 8 utility allowances. Most of the 10 PHAs we visited established allowances (1) for public housing by averaging cost- or energy-consumption data for all or a sample of each unit type and (2) for section 8 housing by extrapolating consumption data developed for an average-size unit to other size units.¹ While the overall approaches within each program were similar, the factors the PHAs considered, the data base supporting each PHA's allowance calculations, and how the PHAs determined what constituted "reasonable consumption" varied considerably.

¹Several PHAs supplemented their predominant approach with other approaches when data were insufficient. This appendix describes the primary approaches used.

**Average Cost or
Consumption Often Used
in Establishing Public
Housing Allowances**

Eight of the 10 PHAs we visited averaged cost- or energy-consumption data for all or a sample of units to establish public housing allowances. Generally, this approach involved averaging actual monthly billing or consumption data for all or a sample of assisted households of the same size and for each structure type, and then computing a monthly average for the amount derived. (When consumption data were collected, the final averages were multiplied by utility rate data to convert the units of energy into dollars.) This process was repeated to establish separate allowances for units of other sizes in the structure type and for other structures.

This general approach required different levels of effort, depending on the makeup of the PHAs' housing stock. For example, East Detroit's task, in computing the electricity allowance for individually metered public housing units, was relatively straightforward because its units were all of a similar size and located within one structure. In contrast, Cuyahoga County units ranged from efficiency to 6-bedroom units and were located in about 30 different projects of several different structure types.

A different approach was used by the ninth PHA, Phoenix. This PHA based its public housing allowances on its assumptions of households' energy needs rather than on actual consumption experience. Using utility company data and recommendations from a consultant, the PHA determined consumption levels that were believed to be consistent with consumption for an energy-conservative household. Finally, PHA officials in Boston were not certain of the approaches they used for determining public housing allowances since the person in charge at the time the allowances were established was no longer at the agency and supporting documentation on how allowances were established was not available.

**Average Monthly
Consumption Data Often
Used in Setting Section 8
Allowances**

For the section 8 program, five PHAs used actual or estimated monthly consumption averages multiplied by utility rates to derive their allowances. Where actual consumption data were used, the data were collected by the PHA. Where estimated data were used, the data were supplied either by HUD or by utility companies. Generally, separate monthly consumption averages were calculated for each size unit and/or structure type. Where two utility companies (e.g., two electricity suppliers) supplied services to the assisted population and the rate differences were substantial, separate utility allowances were provided.

Two PHAs, West Memphis and Boston, extrapolated consumption data for one size unit to smaller and larger size units and then multiplied the averages by the prevailing utility rates to derive their allowance amounts. Boston also used the extrapolation technique to estimate allowances for different structure types. However, the PHAs differed in the sources of their consumption data and in the multipliers used. While West Memphis used HUD-supplied consumption averages and multipliers, Boston used city-supplied amounts.

An eighth PHA, Chandler, used energy consumption data for different appliances and structures contained in a HUD engineering study as the basis for consumption amounts for its section 8 allowances. The consumption data were then multiplied by utility company rate data to arrive at allowance amounts. A ninth PHA, St. Paul, computed allowances on average actual monthly costs where possible. The tenth PHA, East Detroit, used a neighboring community's section 8 allowance schedule.

Questionnaire Results Show Communitywide Data Used Most Often to Develop Allowances

Our questionnaire results were mixed, indicating that the PHAs were often using more than one approach to develop their allowances.² (See table I.1.) For example, for public housing allowances, about half of the PHAs used communitywide data supplied by utility companies and about two-thirds used actual consumption data from at least a sample of their public housing households. For section 8 allowances, 67 percent of the PHAs responded that they used communitywide data supplied by utility companies, and 43 percent sampled their section 8 households' utility consumption.

²The questionnaire results do not reveal whether PHAs used more than one approach for a single utility type, such as electricity, or used a different approach for different utilities.

**Appendix I
HUD Policies on Utility Allowances and
Allowances for Air-Conditioning Costs**

**Table I.1: Approaches Used to Develop
Utility Allowance Schedules at PHAs
Nationwide**

Approaches used	Public housing		Section 8	
	Number	Percent	Number	Percent
Utility company data for the community	1,023	49	1,091	67
Actual consumption of assisted households (all or sample)	1,416	67	700	43
In-house energy survey	673	32	^a	^a
Engineering study	511	24	^a	^a
HUD-suggested approach	460	22	452	28
Regional household consumption survey	238	11	302	19
Allowances provided by HUD	405	19	391	24
Discussions with tenant associations	44	2	42	3
Other	27	1	180	11

Note: Responses exceed 100 percent because more than one source of information could be used. Public housing and section 8 responses based on estimated distributions of 2,110 (± 108) and 1,621 (± 48) PHAs, respectively. For sampling error estimates, see questions 17 and 48 in section 2 of volume II.

^aNot included in questionnaire because the approach is not specifically contemplated in HUD guidance.

**Several PHAs Went
Beyond HUD
Requirements in
Accounting for Structural
Variations**

Several of the PHAs we visited included variables in addition to the ones set out by HUD (see ch. 3) in their allowance calculations. For example, St. Paul (for public housing) and Philadelphia (for section 8 housing) considered the number of exposed or outside walls for certain structure types and set separate allowances accordingly. Phoenix established separate allowances by floor for its two- and three-story senior citizen public housing apartments.

**Definition of
Reasonableness Differs
Among PHAs**

HUD regulations and handbook guidance do not specifically define “reasonable consumption.” Our work at 10 PHAs showed no clear consensus on what constituted “reasonable consumption” for either program. Generally, PHAs that based their allowances on actual consumption data for assisted households believed their allowances were reasonable because the methods that they used to determine allowances took into account consumption of those whom they believed to be excess consumers and under-consumers. This was particularly true if the PHAs adjusted for high- and low-energy users or unusually cold or mild winters before computing consumption averages. In this respect, some PHAs tended to set “reasonable consumption” at a point below consumption for what they determined to be energy-wasting households and at or above the estimated consumption for energy-conserving households.

For example, in setting public housing allowances, Philadelphia and Los Angeles County computed allowances on the mid-range of values after deleting the top and bottom 10 percent of energy users. Dakota County eliminated the top and bottom 10 percent of energy users from its data base and then combined current year consumption averages with prior year averages to lessen the effect of unusually cold or mild winters. To establish its check-metered allowances, Cuyahoga County arrayed its consumption data from low to high and set the allowance at the seventy-fifth percentile. In contrast, Phoenix did not adjust its consumption determinations because it first set a normative standard of what reasonable consumption should entail.

For section 8 allowances, PHAS typically relied on mathematical averages of 1 year's consumption to define reasonable consumption. However, St. Paul and Dakota County also combined current-year data with prior-year data to reach a "reasonable consumption amount."

While the PHAS we visited considered their allowances reasonable, only 3 of the 10 PHAS collected current utility expense data necessary to compare allowances to household consumption. The lack of current consumption data for comparison is common among PHAS: 45 percent of the PHAS responding to our questionnaire said that they had not compared allowances to household expenses for public housing units, and over 68 percent of the PHAS had not done so for their section 8 units. (See responses to questions 14 and 40 in sec. 2 of vol. II.) Finally, several PHAS told us that they believed the allowances were reasonable because HUD did not object to their allowance schedules or assisted households had not complained about them.

HUD Policies on Providing for Air- Conditioning Costs in Allowances

For the most part, HUD does not believe that allowances for air-conditioning are necessary in public housing. HUD officials told us that this policy has been in effect since the mid-1970s. HUD officials were unable to provide us with any historical documentation for the policy or further explain their rationale for it. However, we did note that the preface to the final rule-making for the current utility allowance regulations cited a 1972 Rand study of the impact of electricity price increases on income groups in the western United States and California (49 F.R. 31404). This study lists air-conditioning, among other appliances, as a luxury, but does not explain the basis for the determination.

On the other hand, HUD guidance for the section 8 program allows the expected cost for air-conditioning to be included in the allowances, if air-

conditioning is typically provided in the area. This is because section 8 rents are based on the fair market rent concept. Fair market rents are supposed to represent modest rental costs in the private market in a geographical area and many apartments in some areas of the country would typically include air-conditioning.

Effect of Treating Check-Metered Units as If They Were Individually Metered

In requiring that we report on utility allowance practices, the Congress was interested in ensuring that allowances do not differ solely because of the metering configuration. Measuring energy consumption by individual meters for some households and check meters for others results in allowances and utility expenses being treated somewhat differently, depending on housing agency practices. Consequently, some check-metered households incur greater rent burdens than households with similar consumption habits whose consumption is measured by an individual meter, all else being equal. However, from a limited number of cases, we found the overall differences were typically small. This issue pertains to public housing only, since our questionnaire results showed that check-metering is almost non-existent in section 8 housing.¹

As discussed here, equity refers to whether households under different metering configurations are treated similarly for similar consumption or conservation behavior. Metering affects equity because households in units with different metering configurations (1) have different expectations for paying exactly 30 percent of their adjusted income for rent and utilities, (2) are treated differently when utility rates change, and (3) vary in the incentive provided to conserve energy. Table II.1 shows these relationships.

Table II.1: How Public Housing Households Are Affected by Different Meter Types

Effect on household	Type of meter		
	Master	Check	Individual
Pays less than 30 percent of income	Never	Often, when consumption is less than the allowance ^a	Always, when consumption is less than the allowance
Pays exactly 30 percent of income	Always	Sometimes, when consumption is less than the allowance; always, if consumption equals it	Infrequently; only when consumption matches the allowance
Pays more than 30 percent of income	Never	When consumption exceeds the allowance	When consumption exceeds the allowance
Pays for utility rate increases ^b	Never	Only for the amount consumed above the allowance	On the entire amount consumed, until the allowance is adjusted
Saves if it conserves ^c	Never	Result depends on allowance and PHA rebate practice	Always

^aAccording to our questionnaire results, 21 percent of the PHAs did not provide credits or rebates when check-metered households consumed less than their allowance.

^bAlternatively, benefits from utility rate decreases.

^cAlternatively, pays for excess consumption.

¹See tables 2.1 and 2.2 in ch. 2.

**Appendix II
Effect of Treating Check-Metered Units as If
They Were Individually Metered**

In master-metered units, households are insulated from all concerns about the cost of utility service and rate increases since each pays exactly 30 percent of adjusted income for rent. They also generally do not risk termination of service for nonpayment of utility bills. However, households do not receive any financial benefit from conserving energy. In addition, master-metered households will not be charged the wrong amount as a result of an incorrect meter reading or a broken meter. On the other hand, master-metered households may have budgeting difficulties since the rent payment (inclusive of the master-metered utilities) is due at one time. Those who pay utility companies directly have more flexibility in paying rental payments and one or more utility bills separately; this flexibility can be important to lower-income households.

If check-metered households do not receive rebates or credits when they consume less than their allowances, they are treated the same as master-metered households as long as they consume less than their allowances. Any consumption over the allowance results in a surcharge for the excess. In contrast, individually metered households benefit dollar-for-dollar from any energy conservation steps they take, and if they consume less than their allowances, their rent burden decreases to less than 30 percent. On the other hand, both individually metered and check-metered households have rent burdens exceeding 30 percent if they waste energy and/or if the allowance is too low.

Even though households in both individually metered and check-metered units pay for consumption in excess of the allowance, check-metered households typically pay less for the same amount of excess consumption. This is because utility rates for individually metered households are generally higher than for check-metered households.² In this respect, check-metered households have a financial advantage over individually metered households. A master-metered unit pays nothing for excess consumption.

Also, when utility rates change, the individually metered households are always affected to the full extent of the change (positive or negative) since the rate change is applied to the household's total consumption amount. Check-metered households are affected only on that portion of consumption that exceeds the allowance, rather than on the total amount consumed. Also, since the per-unit charge for excess consumption for check-metered households is less than that for the individually

²For check-metered utilities, PIAs purchase large quantities of utility services at a lower rate than individually metered households. The savings are usually passed on to the check-metered household.

metered household, the check-metered household will pay less for the same consumption in excess of the allowance. Again, master-metered households are insulated from this concern.

**Approaches to Treat
Differently Metered Units
More Similarly**

The most extreme approaches for eliminating the differences discussed above would be to (1) re-meter all units (including privately owned section 8 housing) or (2) require PHAs to pay all household utility bills (and therefore charge each household the full 30 percent of adjusted income for rent, inclusive of utilities). The first approach is obviously not practical. For the second approach, cost and conservation incentives would have to be weighed against the benefits.

A more moderate approach to lessen the difference in treatment between check-metered and individually metered households would be to ensure that all households with check-metered utilities receive credits or rebates for periods when consumption falls below the allowance. Our work in this area was too limited to assess the administrative and program costs associated with this approach. Our limited work at one PHA suggested that financial benefits accruing from credits or rebates would not have been large for these households. At that PHA, allowing a credit or rebate would have produced an average annual savings of \$30 per household, and, accordingly would have reduced the annual rent burden marginally (by three-tenths of 1 percent). See chapter 3 for a more detailed discussion of these results.

Major Contributors to This Report

**Resources,
Community, and
Economic
Development Division,
Washington, D.C.**

Dennis W. Fricke, Assistant Director
James C. Ratzemberger, Assignment Manager
J. Michael Bollinger, Site Senior
Alice G. Feldesman, Senior Social Science Analyst
Mary P. Giovinazzo, Staff Evaluator
Carol Herrnstadt Shulman, Reports Analyst
Phyllis Turner, Writer-Editor

**New York Regional
Office**

David C. Dorpfeld, Evaluator-in-Charge
Frank Grossman, Site Senior
Sheila E. Murray, Site Senior

Detroit Regional Office

James S. Moore, Site Senior
Daniel J. Martin, Staff Evaluator
Timothy E. Hall, Staff Evaluator

Related GAO Products

Assisted Housing: Rent Burdens in Public Housing and Section 8 Housing Programs (GAO/RCED-90-129, June 19, 1990).

Utility Allowances Provided to Public Housing and Section 8 Households and Resulting Rent Burdens (GAO/T-RCED-90-41, Mar. 7, 1990).

Rental Housing: Housing Vouchers Cost More Than Certificates but Offer Added Benefits (GAO/RCED-89-20, Feb. 16, 1989).

Requests for copies of GAO reports should be sent to:

**U.S. General Accounting Office
Post Office Box 6015
Gaithersburg, Maryland 20877**

Telephone 202-275-6241

The first five copies of each report are free. Additional copies are \$2.00 each.

There is a 25% discount on orders for 100 or more copies mailed to a single address.

Orders must be prepaid by cash or by check or money order made out to the Superintendent of Documents.

United States
General Accounting Office
Washington, D.C. 20548

Official Business
Penalty for Private Use \$300

First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100