PUBLIC HOUSING IN A COMPETITIVE MARKET:

An Example of How It Would Fare

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FOREWORD

During the last several years, a bipartisan consensus has emerged around the twin goals of significantly reducing the Federal deficit and substantially deregulating the Nation's public housing system. Together, these changes in the Federal policy environment require public housing authorities to dramatically rethink their operating and management practices. With operating and capital dollars shrinking, optimizing the use of these resources will become increasingly important. This report, originally conceived to inform the Administrations' proposal to replace the present system of public housing subsidies with portable, tenant-based assistance, provides housing authorities with a solid framework for making more strategic asset management and operating decisions.

The report examines the local and Federal impacts of changing public housing in a major city -- Baltimore, Maryland -- to a tenant-assisted, market-based system. It attempts to model program outcomes in an environment in which most Federal regulations would be eliminated and operating subsidies terminated. It assumes current public housing residents in Baltimore would receive a fully-funded housing certificate/voucher that would enable them to remain in their current apartment, rent another available public housing unit or, if they prefer, use the portable subsidy to rent housing in the private market. The local housing authority would become a supplier of affordable housing in the larger Baltimore metropolitan housing market, competing for both residents and rental revenues.

The report's genesis was to ground HUD's 1995 public housing reinvention proposal to infuse a greater degree of consumer choice, market competition, and operating discipline in the public housing system. The report is not, however, just about "vouchering out" public housing. By assessing conditions of supply and demand in Baltimore's affordable rental market, estimating the market rent potential of every public housing development in the City -- both before and after planned modernization -- and analyzing the resulting net cash flow on a development-by-development basis, the analysis reported here presents a compelling case for more disciplined approaches to asset management.

Housing authorities would do well to consider how they might replicate this analysis to help them develop the local information base they will need to maximize the housing quality impacts of their diminishing Federal resources.

I want to thank Marty Abravanel, Director of PD&R's Policy Studies Division, and his staff for designing and implementing this innovative study, and extend my appreciation to Daniel Henson, Executive Director of Baltimore's Housing Authority, and his staff for their close cooperation in this effort.

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EXECUTIVE SUMMARY

There is no question that changes of potentially historic proportion are coming to the Nation's public housing program. Although the precise form of these changes is not entirely known at this time, some things seem clear: for most Housing Agencies (HAs), there will be less Federal regulation as well as fewer Federal subsidy dollars than in the past, and there will be more local discretion, responsibility, and license to decide whom to serve and how best to serve them. As the program changes, local conditions would likely eclipse Federal regulations as the basis for HA decisions. Then, HAs will need to be more responsive to, and knowledgeable about the state of their local housing markets. They will need to analyze their housing stock, organizational practices, and markets to know what is viable to do, and what is not, if subsidies are reduced.

In many communities such knowledge may be difficult to obtain since public housing was generally neither built to private market standards nor guided in its operation by private market forces. Lack of information has led to considerable speculation as to how HAs will fare with fewer subsidy dollars -- whether they would fail or succeed; this report provides some empirical evidence on this subject for one city, and shows the kinds of information and methods needed to do so for other cities. The more policy options local HAs have as to how to proceed, the more they will need to do something similar to that reported here. This will allow them to maximize both the funds they will have available to perform their mission and the affordable housing opportunities they will be able to provide to their communities.

Baltimore, Maryland is the city for which both the local and Federal impacts of changing public housing policy are assessed. It was chosen because it: managed a large and varied portfolio of developments, distributed over many neighborhoods and types of submarkets; had good accounting and other data systems; was in a location easily accessible to research analysts from HUD and its contractors; and was interested in the research effort and anxious to cooperate. Baltimore is in many ways like other older, industrial cities with respect to population decline and concentrations of poverty. It has a relatively soft housing market and a public housing stock that is aging and in need of repairs, upgrading, and capital improvements.

To test the viability of Baltimore's public housing portfolio absent past rules and subsidies, the study assumes that public housing is changed to a tenant-assisted, market-based program in which most Federal regulations are eliminated and operating subsidies terminated -- where HAs have to compete in the marketplace for residents and revenues. It also assumes that current residents of public housing are provided with a portable subsidy, allowing them to stay in or leave public housing, as they choose. If so, the data show the following:

- Notwithstanding considerable property-by-property variations, Baltimore's public housing units would generally rent at below the private-market average;

- There would not likely be a massive tenant movement out of public housing developments in the period immediately following a change to a tenant-assisted, market-based system;

- Even at high rates of occupancy, the HA's operating costs would likely exceed the rent revenues that could be generated if their units were rented in as-is condition; and,

- The modernization work currently contemplated by the HA, when completed, would likely generate only small increases in rent revenues, not enough to exceed the HA's operating costs.

Under these conditions, the HA could not achieve a break-even position without either receiving operating subsidies or making changes to its organization, business practices, or housing stock.

In a simulated strategic planning exercise, Baltimore HA senior officials took the data generated for this study as a starting point and reviewed their portfolio and operations with an eye toward considering changes that might reduce their projected deficit. They identified several possible stock changes and management improvements that, if done, could move the HA to a surplus (profit) position in the near term. The conditions for doing so, however, include:

- The need for a substantial infusion of capital improvement funds over time, from sources outside of the HA;

- A basing of future modernization decisions on their anticipated pay-back with respect to the cost reductions and revenue increases that would result;

- A reduction of about one-tenth of the HA's inventory;

- A shift to a smaller and more decentralized HA organization; and,

- A change to serving more of a mixed-income clientele.

From the Federal government's perspective, subsidies given to tenants instead of HAs appear to be a more cost-effective way of providing affordable housing in Baltimore -- especially if many current public housing residents, when given certificates, opt to remain in the City and, even more so, if they remain in public housing. This is because private housing rents in Baltimore are relatively modest in comparison to area-wide Fair Market Rents, and estimated public housing rents are often even more modest. A cost comparison between the public housing program, as it exists today, and an entirely tenant-based system does not, however, take into consideration any counseling costs that may be used in support of a tenant-based subsidy. Nor does it consider other consequences of deregulating public housing -- such as any costs or policy impacts of dismantling Federal preferences for admission to public housing, or of continuing to maintain large numbers of very low-income households in concentrated neighborhoods of the central city.

Finally, the types and methods of market, rent potential, and financial analyses employed in this study to anticipate the impacts of a proposal to transform public housing to a tenant-based system clearly have value beyond that specific assessment. The analyses provide both perspective and benchmarks that can be useful to HAs operating under many different program environments -- particularly as they review their asset management options in a period of diminishing Federal regulations and resources.

PUBLIC HOUSING IN A COMPETITIVE MARKET:

An Example of How It Would Fare

This is a policy study[1] of the probable consequences of dramatically changing the Nation's public housing program by:

- Eliminating most Federal regulation of the program;[2]

- Ending Federal operating subsidies to local Housing Agencies (HAs);

- Allowing those agencies to compete in the marketplace for residents and revenues; and,

- Providing current public housing residents with a portable subsidy, permitting them to choose whether to stay in, or leave public housing.

For policy analysis purposes, the study models the likely local and Federal impacts of implementing such changes, which are among those that have been proposed for public housing. Beyond that, the study's broader purpose is to consider the value of applying housing market information to enable a more market-disciplined approach to operating public housing -- based on strategic planning and grounded in basic principles of asset management -- regardless of what specific changes emerge.

Research for the study was done in three interrelated phases. The first estimated the bottom-line financial position of a HA competing in the marketplace, assuming it operated its properties either in as-is condition or after completion of all of the modernization work proposed in its current five-year comprehensive modernization plan and other programs. The second phase considered housing stock and management decisions the agency could make to improve its financial position beyond that determined in the first phase. The final phase assessed the implications of this information for Federal costs and policy.

As will be shown, the evidence is that: a HA, such as that examined here, could remain as a provider of affordable housing without Federal operating subsidies for the near term, assuming that certain stock and management adaptations were made; and, that substituting tenant-based for project-based subsidies could reduce Federal costs. However, the longer-term survival of the HA is likely to be dependent on continuing, substantial Federal financial support in the form of capital funds for modernization.

Part I: Information Needed to Estimate The Stock and Fiscal Impacts of a Tenant-Assisted, Market-Based System

Assessing the effects of major policy changes to the public housing program, like those outlined above, requires a considerable amount of HA and community-level information, including:

- *A schedule of rents that each of a HA's developments and unit-types would be likely to command if they were competing in the marketplace,* to project what revenues could be expected and which market niche(s) an agency could occupy;

- *A property-by-property inventory of HA amenities, resident characteristics*

and their housing preferences, and local housing market and sub-market conditions, to project likely move-in, move-out, and overall occupancy rates if subsidized residents had a choice as to where to live;

- *Disaggregated accounting data detailing a HA's operations,* to assess the costs of operating each individual development and central office function;

- *Information about the physical conditions and problems of each of a HA's properties,* to determine the cost and level of improvement necessary to compete in the market; and,

- *Knowledge of a HA's organization and operations, its legal and self-stated mandate, its relationship to the community, alternative sources of funds and programs available to it, and other contextual information,* to fill out the picture.

For local management and operational purposes, having all of this information would also be especially valuable (see sidebar: "Public Housing Stock Assessments"). Some of it, however, is not generally available. Particularly scarce are project-specific accounting data and market revenue projections. This is because many HAs do not maintain true project-level accounts,[3] and hardly any have had a need for information about the rents their developments could command if they were competing in the private market.

For Federal policy analysis purposes, it would be prohibitively expensive and time

PUBLIC HOUSING STOCK ASSESSMENTS

It is good business practice for HAs periodically to review their inventory in a systematic fashion, on a development-by-development basis, to determine actions that can be taken to maximize the benefits of a public investment on which so many people depend. Such assessments can ensure that: the costs of each development are reasonable compared with those of alternative approaches to housing assistance and with other similar types of developments; and decisions to invest in the modernization of a property are based on prospects of its viability for use as public housing at a reasonable cost.

A full-scale, formal stock assessment is a major undertaking. It needs to be well planned and executed so as to assure: the availability of information necessary to evaluate each development's present and potential value; the soundness of the logic to be followed in deciding what actions can be taken with respect to each development; and the legal and practical feasibility of any proposed action. Also, the outcomes of implementing any action need to balance cost effectiveness with public purpose.

The HA officials involved in the present study had previously engaged in strategic planning sessions related to their portfolio, yet they expressed strong interest in cooperating in this venture so as to expand their information base beyond what was available through daily business. Much of the new data and analysis confirmed their previous understandings about their inventory, yet some of it was unanticipated. Moreover, the study provided the HA an opportunity to take a fresh, global look at their entire system -- an opportunity that is not often afforded in the course of normal operations.

consuming to have to generate such information for all, or even a sample of, HAs across the country. This reality suggested that this initial analysis of proposed changes to Federal public housing policy be limited to a single HA. Several criteria were thought to be appropriate to its selection, such as that the subject HA should: own and manage a relatively large and varied portfolio of developments, distributed over many neighborhoods and types of sub-markets; have good accounting and other data systems; be in a location easily accessible on a frequent basis to research analysts from the U.S. Department of Housing and Urban Development (HUD) and its contractors; and be interested in the research effort and willing to cooperate. The Housing Authority of Baltimore City (HABC) met all of these requirements and, therefore, this study focuses on that HA.[4]

Part II: Baltimore

The Nation's 14th largest city, Baltimore is in many ways like other older, industrial cities:

- Its economic base -- consisting primarily of manufacturing, retail and wholesale trade, health services, and public administration[5] -- has been experiencing difficulties, with relatively high-paying manufacturing jobs declining over time;[6]

- Its median household income, at $24,045 in 1990, was well below that of the larger metropolitan area: the average income of surrounding Baltimore County residents, for example, was $38,837;[7]

- It has a high concentration of poverty: in 1990, 21 percent of all households lived below the poverty line; and, while 31 percent of the residents of its larger Metropolitan Statistical Area (MSA) resided in Baltimore, 67 percent of the region's poverty households lived in the City;[8]

- Its long-term population trends have been downward: Baltimore had a population of 736,040 in 1990 (and, today, may have less than 700,000 persons), compared to a peak of almost 950,000 in 1950; the most dramatic decennial population decline occurred between 1970 and 1980, when it went from about 900,000 to about three-quarters of a million people; and,

- It is divided into a very large number of often ethnically distinct neighborhoods -- 264, according to the City Planning Commission.

The housing stock. The configuration of Baltimore's housing stock is unlike that found in many similar places in that more than one-half of it consists of row-houses -- i.e., single-family attached buildings. Large apartment complexes, with 50 or more units, constitute 19 percent of the total stock.[9]

The City of Baltimore has almost 304,000 owner-occupied and rental housing units. The median unit was built in 1942,[10] and 80 percent of all units were built before 1960.[11] Despite the City's loss of population over the last four decades, its housing stock today is larger than it was in 1950 (when the City had almost 278,000 units), and it is only slightly smaller than it was in 1970 (when the City had 305,500 units). One explanation is

that household sizes are generally smaller (and households are generally older) than in previous years, and one of the consequences is that there is a housing abandonment problem in some areas.

Slightly more than one-half of all housing units were renter occupied in 1990. The median contract rent was $355 (and the median gross rent was $420),[12] with the average two-bedroom unit renting for $374 ($440 gross) and four-bedroom unit renting for $342 ($449 gross).[13] About seven percent of the rental stock had severe physical problems (such as lacking water or electricity), while another 16 percent had moderate problems.[14] The rental vacancy rate in Baltimore was, in 1990, and currently is, estimated to be between 7.5 and 8 percent.[15] Lower-rent units had a higher vacancy rate than higher-rent units, in part due to their older age and poorer physical condition.

Notwithstanding relatively low rents and a relatively soft housing market, a large proportion of very low-income households in Baltimore is rent burdened: in 1990, two-thirds of those earning less than $10,000 per year paid 35 percent or more of their income for rent, as did 43 percent of those earning between $10,000 and $19,999.[16] And, 71 percent of very low-income renter households[17] had housing problems -- defined in terms of cost burden or overcrowding -- compared to 30 percent of other low-income renter households and 10 percent of moderate-income renter households.[18]

Finally, although Baltimore has about 22 percent of the total housing stock of the MSA, almost 72 percent of all of the area's public and assisted (subsidized) housing units are located within the City limits. Ninety percent of the area's public housing is located in Baltimore City.[19]

The Housing Authority. The Housing Authority of Baltimore City (HABC) is a large organization, employing more than 1,600 people. Although independently chartered by the State of Maryland, unlike most other HAs in the Nation its Executive Director is also the City government's Commissioner of Housing and Community Development. This places the agency in position to be involved in the City's larger policy-making with respect to neighborhood-oriented plans and activities. On occasion, it is able to take advantage of some resources not ordinarily available to other Housing Agencies.[20]

HABC's inventory. HABC owns and manages 17,656 housing units[21] in 45 conventional developments and in its scattered site program. Its inventory comprises six percent of the City's total housing stock, 13 percent of the for-rent stock, and 20 percent of all renter units in Baltimore that are affordable to households earning 50 percent or less of area median income.[22]

HABC's conventional developments consist of 1,095 separate buildings, 36 of which are high rise. The latter contain 5,846 units. Slightly more than 15 percent of the total stock (2,849 units) are scattered site units -- primarily rowhouses, townhouses, and four converted school buildings.

In mid-1995, 2,046 units in HABC's inventory were unoccupied for various reasons; this was about 12 percent of the total stock, exclusive of two developments that were being or likely to be demolished under the HOPE VI program. Most unoccupied

units were slated for repairs, modernization, or other activities.

Baltimore's oldest public housing developments -- Brooklyn, Douglas, Gilmor, Latrobe, McCulloh, Perkins, Poe, and Westport -- were first occupied between 1940 and 1942, and almost 60 percent of its conventional developments were built prior to 1960.[23] As such, the City's public housing portfolio is aging, and many of the properties are in need of repairs, upgrading, and capital improvements.

In a number of important respects HABC's inventory is distinctive in comparison to the metropolitan area's private rental housing stock. This is understandable in that it was not developed to have to compete with that stock. The most dramatic difference has to do with location. Large numbers of developments and scattered-site units are concentrated in several areas adjacent to the downtown business district (see Exhibits 1 and 2). These are areas with a high incidence of crime, vandalism, and neighborhood decay. Another difference has to do with construction features: much of HABC's housing stock is architecturally undistinguished, and is readily identified as "the projects."

A third difference has to do with apartment sizes. HABC's inventory contains a larger proportion of both small and large bedroom sizes than that found throughout the metropolitan area: 12 percent of all units have zero bedrooms, compared to only two percent of the area's rental stock; while 10 percent of the units have four or more bedrooms, compared to five percent of the area's stock.[24] HABC's conventional units are generally smaller in terms of square footage than the private-market standard, and multi-bedroom apartments typically have only one bathroom.

A final difference has to do with development features. Like most public housing in the United States, HABC's units tend to lack certain amenities such as central air conditioning, carpeting, or garbage disposals.[25] Some developments even lack the type of electrical systems and window frames that could support the installation of window air conditioning units by residents. For heat, many of the agency's developments rely on a district, underground steam heating system without individual utility metering. The system is considered expensive, outdated, and in need of substantial modernization.[26]

To upgrade their stock, HABC officials estimate that somewhere in the area of $500 million of modernization work is needed to bring all of their developments up to the standards required by HUD's modernization program.[27] Equally revealing is an evaluation of present property condition done for this study by a real estate advisory firm -- using a scale ranging from "1" (very good) to "5" (very poor).[28] Twenty-eight of 45 developments were rated "3" or worse, with 11 of these rated no better than "4". Most of the developments rated worst were first occupied in the 1940's and 1950's, and serve families -- the typical family development is approximately 20 years older than the typical elderly development. All five developments rated best are elderly properties, first occupied in the late 1970's or thereafter.

HABC's residents. HABC houses almost 37,000 persons,[29] and about one-fourth of the approximately 72,000 households in Baltimore who are income-eligible for public

Exhibit 1
Locations Of The Housing Authority Of Baltimore City's Conventional Public Housing Developments

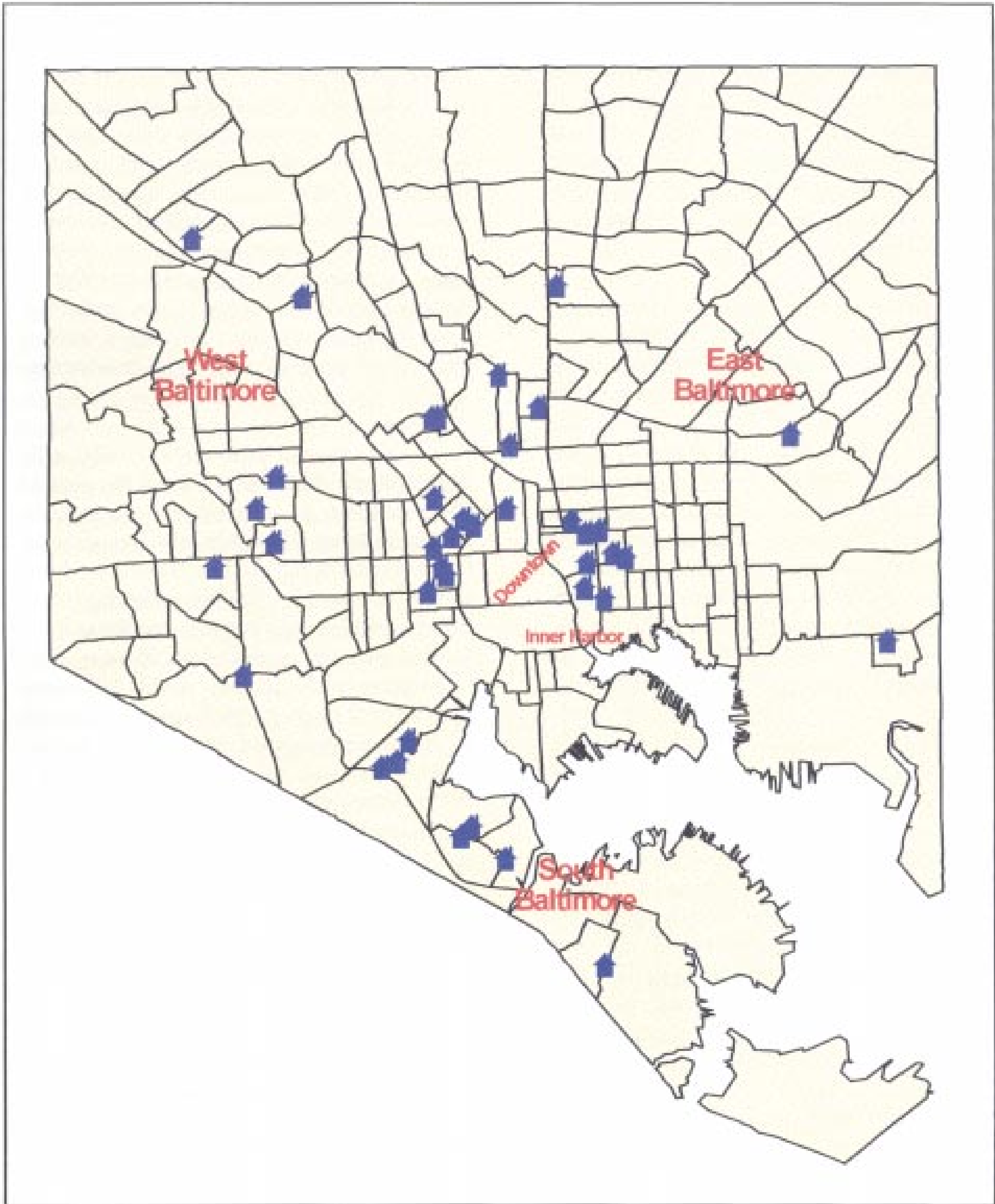
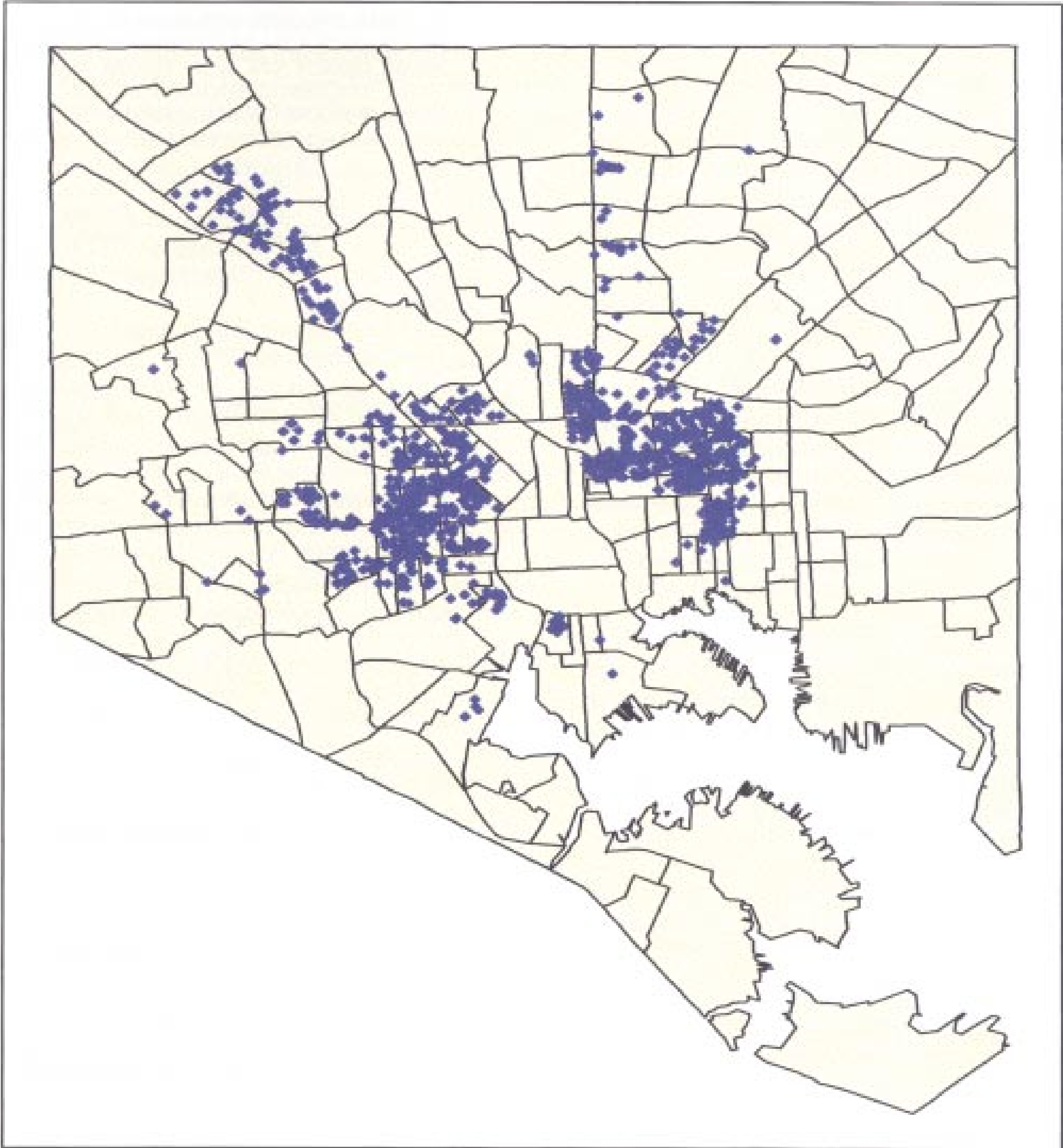


Exhibit 2
Locations Of The Housing Authority Of Baltimore City's Scattered Site Housing



housing. In addition, in mid-1995 it had a waiting list of 4,623 households who had applied for its public housing units, and an additional 13,885 households who had applied for either public housing or a Section 8 certificate.[30]

Twenty-seven percent of all households in public housing are headed by persons 62 years and older.[31] Roughly 5,300 elderly persons reside in HABC developments, representing approximately 14 percent of total residents.

The average monthly rent paid by HABC residents is about $154,[32] with mean household incomes for both elderly and family households around $7,000 per year. More than 70 percent of family households receive Aid to Families with Dependent Children (AFDC) or other forms of public assistance (see Exhibit 3). Finally, while most public housing developments are located in generally low-income neighborhoods, public housing residents are, on average, even poorer than their neighbors.[33]

HABC's social services. HABC's developments offer a range of resident services including: day care centers; a family counseling program; youth development programs; and congregate housing for the disabled. In addition, there are family investment centers that provide or assist in the provision of a variety of social services, including job training. In most cases, Comprehensive (Modernization) Grant funds from HUD have paid for, or been used to maintain, the physical facilities housing these services, while the services themselves are paid for by a combination of other Federal, State, and private sources. In some cases, as with day care, the services are self-supporting.

Exhibit 3

THE INCOME AND PUBLIC ASSISTANCE CHARACTERISTICS OF HABC RESIDENTS, AND THOSE OF THE NEIGHBORHOODS, CENSUS TRACTS, AND COMMUNITIES IN WHICH THEY RESIDE*

	Elderly Developments	**Family Developments**
Median income:		
HABC residents	$ 7,029	$ 7,048
Neighborhoods[1]	13,902	9,796
Census tracts[1]	16,373	10,308
Communities[1]	19,162	14,505
Percent receiving public assistance:		
HABC residents	38.6%	70.9%
Neighborhoods[1]	27.2	49.7
Census tracts[1]	23.2	43.4
Communities[1]	22.8	33.4

[1] . . . in which HABC developments are located.

* The Baltimore City Planning Commission has identified neighborhood and community areas into which the City is divided; communities consist of multiple neighborhoods.

In Baltimore, as elsewhere, social services have generally not been physically located in privately owned, low-rent housing developments -- even those that are Federally subsidized. As such, services in HABC's public housing developments are considered a net asset, adding value to those properties in which they are housed.

Part III: Occupancy and Fiscal Projections

This section outlines the projected immediate and near-term post-transition consequences of converting Baltimore's public housing program to a tenant-assisted, market-based system -- in which HABC would compete with private-market rental housing for tenants and revenues. The net occupancy and, then, fiscal consequences of marketing properties in their "as-is" condition are presented, followed by an assessment of the fiscal consequences of marketing properties after completion of all of the modernization work contemplated in the agency's current five-year plan.[34] Even at high rates of occupancy, the data show that HABC operating costs would be likely to exceed the rent revenues that they could command. Not only would this be the case if all properties were rented as-is, but it would also apply if prevailing modernization plans were realized.

Market rent potential. Based on a comparison of HABC's developments with comparable private, unsubsidized rental housing in the City of Baltimore,[35] it is estimated that the average (mean) HABC property would rent for $359 per month (including utilities) as of June, 1995. An average zero-bedroom unit would rent for $304, and an average six-bedroom unit would rent for $607. At the low end of the range there is one development containing units for which there is no rent potential whatsoever and, at the high end, there are other developments containing units that would rent for as much as $754.

Exhibit 4 indicates how projected HABC rents compare, on average, with the entire rental stock in the City of Baltimore. Although there are considerable property-by-property and apartment-size variations, many of HABC's units are below the Baltimore market average.

The immediate occupancy consequences of marketing properties in as-is condition. Dramatic as the policy change would be if the public housing program were transformed to a tenant-assisted, market-based system, it is not anticipated that in Baltimore there would be a massive tenant movement out of, or into public housing developments in the period immediate following such a transition. This conclusion is based on a development-by-development analysis of a variety of relevant quantitative data on Baltimore's housing dynamics and public housing experience, consultations with numerous housing market specialists and housing practitioners who are familiar with the Baltimore housing market, and discussions with resident leaders and HABC site managers.[36]

To project the short-term occupancy rates of HABC developments, several assumptions about a deregulated program were made. In addition to the assumption that portable Section 8 certificates would be provided to households currently residing in public housing, it was also assumed that:

- A shopping incentive would be part of the Section 8 program, reducing rents

Exhibit 4

COMPARISON OF PROJECTED HABC MARKET RENTS WITH AVERAGE RENTS FOR BALTIMORE CITY AND METROPOLITAN-AREA FAIR MARKET RENTS

	Projected Market Rents for HABC Properties, 1995 Including Utilities,[1]			Baltimore City 1990 Average Rents Adjusted to 1995[2]		Metropolitan Area Fair Market Rents, 1995
Number of Bedrooms	Average Rent	Lowest Rent	Highest Rent	Contract Rent	Gross Rent with Utilities	
0	$304	$ 81	$494	$305	$308	$414
1	292	0	548	376	399	506
2	342	0	562	438	517	617
3	416	0	645	446	553	815
4	518	125	754	432	566	933
5	584	185	690	463	695	--
6	607	255	700	--	--	--

[1] Source: Robert Charles Lesser & Co., 1995.

[2] Source: *American Housing Survey for the Baltimore Metropolitan Area* (U.S. Department of Commerce and U.S. Department of Housing and Urban Development, 1991). Rents for 1990 were inflated to 1995 levels using a Fair Market Rent inflator for the five-year period, and 1990 ratios of contract-to-gross rents were used to estimate 1995 gross rents.

NOTE: Please note the following: *1*. The fact that there is no substantial difference between the contract and gross rents in 0-bedroom units in the City may indicate that utilities are included in rents for most efficiency units. *2*. HABC's public housing units are included in the City averages, at the 30-percent-of-adjusted income rents paid by residents; this would tend to depress City rent averages. *3*. The fact that the differentials between HABC projected market rents and City average rents in the 0-bedroom and larger-bedroom categories are not as great as they are in units of intermediate bedroom sizes may indicate that HABC units are a larger proportion of the total City housing stock at these bedroom-size levels. *4*. The rent differential between HABC's 0-bedroom and other smaller sized units is less than might be expected because their 0-bedroom elderly units are among their most desirable. *5*. Some of HABC's projected market rents exceed the FMR. *6*. Many of the larger sized bedroom units in the HABC inventory are scattered site, rowhouse/townhouse units, which are more similar to private-market units than many of HABC's conventional public housing units.

for those tenants who shop around and find housing at rents that are below the Fair Market Rent ceiling;[37]

- All HABC units, other than vacated units being prepared for occupancy at any time, are available for rent;

- Those who would move into public housing are unsubsidized[38]; and,

- Those considering moving out of public housing would tend to confine their search to one of three sub-markets within the City, not the entire metropolitan area, while those likely to move in would come from neighborhoods proximate to public housing developments (see sidebar: "Move-In and Move-Out Markets"). (See Exhibit 5.)

Were HABC to rent its units at going market rates -- and (as a first analytical stage in projecting occupancy) were there no market barriers preventing people from moving out of public housing, no shopping incentive, and no new move-ins from outside of public housing -- it is estimated that HABC's occupancy rate at the end of the year in which deregulation occurred would fall by almost 11 percentage points to about 83 percent.[39] In reality, however, occupancy would likely be higher than that as each of the factors in the following analytical stages are taken into account:

- Market barriers (including such things as an inadequate supply of affordable housing units at a given level of demand, or an inappropriate match between household sizes and unit sizes in particular housing submarkets) would prevent some households from

MOVE-IN AND MOVE-OUT SUB-MARKETS

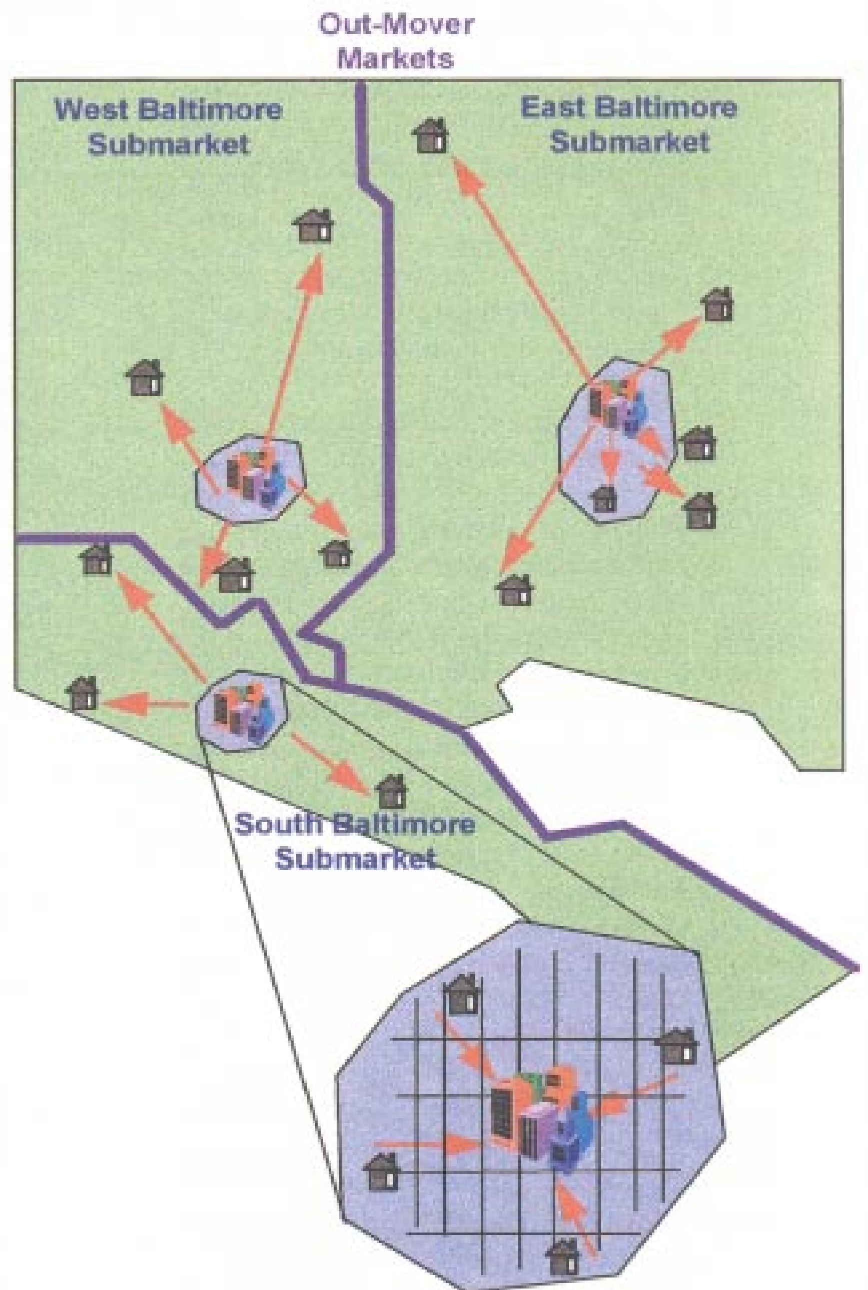
Data from Baltimore's Moving to Opportunity program (which is evaluating the effects of locational deconcentration), the Section 8 program, and other sources, along with informed opinion, point to the existence of two distinct housing sub-market areas for each HABC development or cluster of closely located developments.

One such sub-market is the area to which most HABC out-movers (with the buying power of a Section 8 certificate) would likely gravitate. Although there are housing units within the entire metropolitan area that could be afforded by such households, the evidence suggests that most HABC residents looking to move out of public housing would stay in the City, close to friends, churches, and other support systems, and where there is a large number of landlords interested in renting to certificate holders -- unless, perhaps, they were specially counselled and encouraged to move elsewhere. (MTO is beginning to shed light on how counseling affects locational patterns.) In most cases, it is likely that they would not only restrict their housing search to the City, but to particular regions of the City -- choosing to remain east, west, or south of the downtown area, depending in what area they had previously resided. These three areas, then, constitute discrete out-mover sub-markets.

A second sub-market is the area from which unsubsidized households would probably be drawn or recruited to public housing. This is thought to be a smaller area than the out-mover sub-market -- one that is in relative close proximity to public housing developments. Potential in-movers are likely to be nearby residents whose housing options are financially limited and who are looking for opportunities to reduce their rent burden while meeting their bedroom size or other amenity needs.

Exhibit 5
Baltimore In-Mover And Out-Mover Submarkets

Absent counseling, households considering moving out of a public housing development are likely to confine their search to one of three "out-mover" submarkets, depending on where their public housing development is situated. These submarkets are designated as East, West, and South Baltimore. Those considering moving into a public housing development are likely to be from the vicinity of that development, depicted as an "in-mover" submarket. (See sidebar: "Move-In and Move-Out Submarkets.")



KEY

= Public Housing Development

= Private Housing

leaving public housing who might otherwise wish to do so, increasing occupancy slightly.

- A shopping incentive, prompting some would-be movers to decide not to leave public housing for higher-rent apartments, would increase the occupancy rate by a few percentage points.

- Move-ins to public housing by neighborhood residents seeking to reduce their rent burden would increase the occupancy rate by a few percentage points.

If occupancy rates are capped for each development at 95 percent,[40] for analytic purposes, the effects of all of the above would result in an estimated overall HABC occupancy rate of 93 percent by year's-end.

Apart from these inventory-wide mobility dynamics, the impact of moving to a tenant-assisted, market-based system of public housing can also be assessed for different types of developments. Three such types are: geographically isolated developments; those that have very low market rents; and those that have relatively high rents.

First, there are seven HABC developments in which at least one-third of current residents, who might prefer to move out, would probably be unable to find housing within the local sub-markets most relevant to those developments. These are all family developments sited in areas where affordable housing units are in short supply. Such developments account for over 2,400 units. If these households received special counseling encouraging them to expand their search beyond traditional areas of Section 8 concentration or regional lines of demarcation, it is possible that the extent of their inability to find housing could diminish.

Second, there are nine developments for which a Section 8 shopping incentive would be expected to be a crucial factor in encouraging residents to stay, who might otherwise move out because of undesirable neighborhood or development characteristics. All of these are family developments with estimated monthly rents no higher than $246 -- a market rent well below the projected HABC inventory average of $359. Accounting for over 4,000 units, these are the least desirable developments in HABC's inventory; thus, the shopping incentive would have the effect of making poorer quality units economically attractive to low-income renters.

Finally, there are nine developments anticipated to have a 10 percent or greater vacancy rate as residents with Section 8 certificates leave and are not replaced because of an insufficient local in-mover sub-market. Accounting for over 3,000 units in both family and elderly developments, their estimated rents are well above the HABC inventory average. Despite their superior condition, these developments are not likely to be viewed as affordable by unsubsidized low- and moderate-income households looking to reduce their rent burdens. They might, however, be attractive to non-public housing households holding Section 8 certificates.

The near-term fiscal consequences of marketing properties in "as-is" condition. If HABC were to be deregulated by the Federal gov ernment and if it were to compete in the private market, it is estimated that, in a stabilized year,[41] in as-is condition,[42] its 45

conventional developments plus its scattered-site units would generate annual rent revenues totaling approximately $71.1 million,[43] but that the agency would incur annual costs of $90.4 million (see Exhibit 6).[44] Hence, HABC would be operating at a net loss of approximately $19.3 million, which is about $91 per unit month.[45] The latter compares with the current Federal operating subsidy of about $263 per unit month.

Exhibit 6

PROJECTED NET LOSS LIKELY TO RESULT FROM MARKETING HABC'S PROPERTIES IN AS-IS CONDITION, BY TYPE OF DEVELOPMENT (in millions)

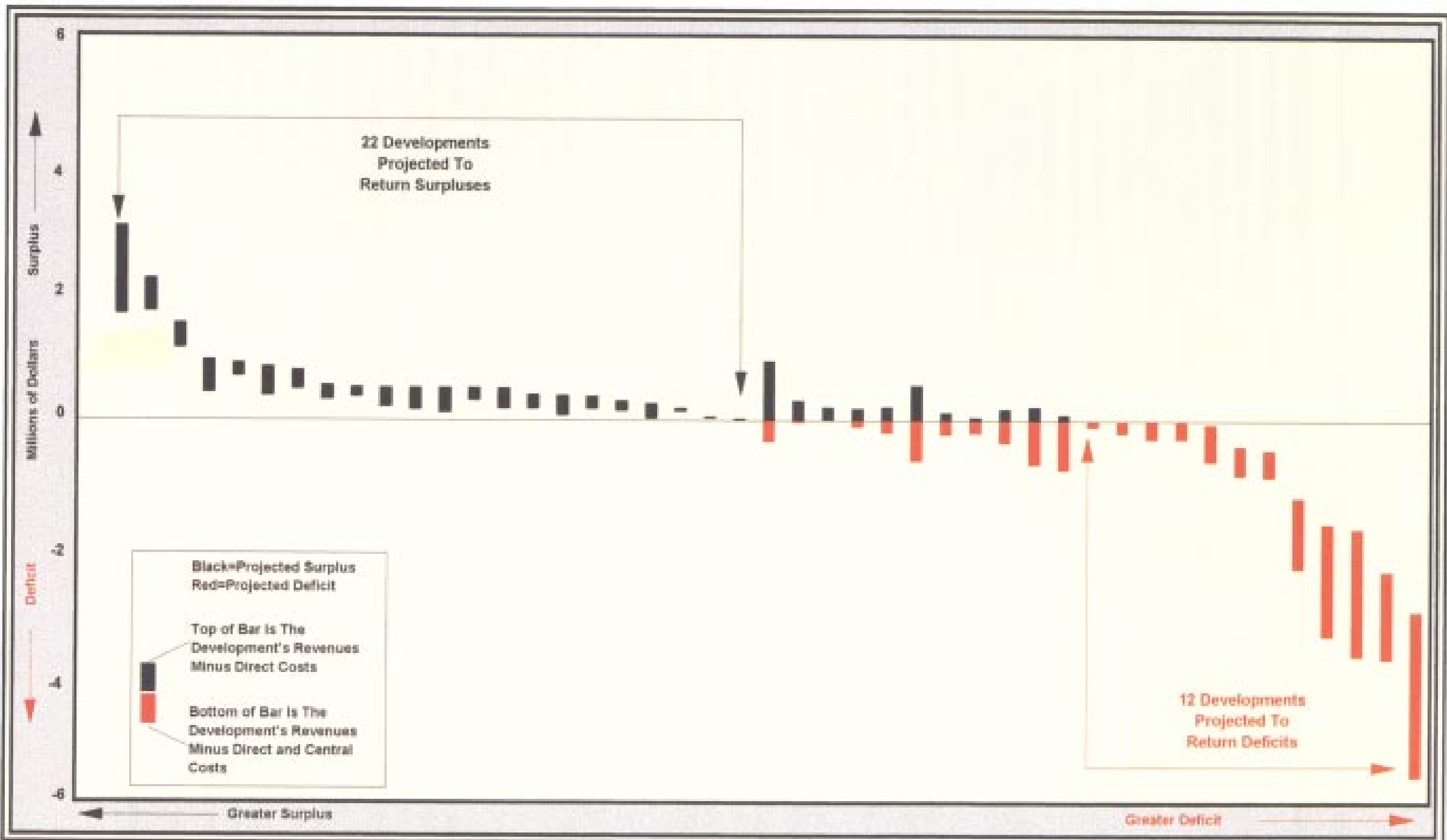
	Type of Development			
	Elderly	**Family**	**Scattered Site**	**Total HABC Inventory**
Outlays	$22.0	$47.7	$20.7	$90.4
Revenues	17.6	35.2	18.3	71.1
Balance	-$4.4	-$12.6	-$2.4	-$19.3
Per unit month deficit (in $'s)	-$74	-$106	-$71	-$91

Of HABC's 46 developments (including scattered site units as one development), 22, representing about 32 percent of all units, would operate at a net surplus if they were marketed in as-is condition, as shown in Exhibits 7 and 8. Together, these developments would take in rental revenues of almost $9 million more than their operating costs. Over half of all elderly-designated properties would return a surplus, while another 20 percent might do so depending on how central overhead costs are treated (see sidebar: "Analyzing Agency Costs").[46] A little over 40 percent of family developments would yield surpluses, while another 27 percent might do so depending on the treatment of central costs. However, just three family high-rise developments account for at least 55 percent of the total deficit, and as much as 67 percent if central costs are allocated to properties using the proportion-of-direct-costs method.

Considering only those properties likely to operate at a net deficit, developments serving primarily families contribute an amount (65 percent) to the deficit that is only somewhat larger than their proportion of all HABC units.[47] Scattered-site units represent an anomaly in that they appear to contribute heavily to the deficit when their proportionate share of central costs are included. However, if their direct costs alone are considered, scattered-site properties show a substantial net surplus (see sidebar: "Scattered-Site Public Housing").

The fiscal consequences of marketing properties following completion of HABC's five-year modernization plan. To compete better in the marketplace, it is necessary for HABC to improve the quality of its product

Exhibit 7
Range of Expected Surpluses or Deficits For 45 HABC Conventional Developments, Marketed In As-Is Condition (Scattered Sites Excluded)



Each bar represents one HABC property and gives a range of the potential surplus or deficit, depending upon whether a proportionate share of central overhead costs are included.

Exhibit 8

DEVELOPMENTS CATEGORIZED BY LIKELY SURPLUSES OR DEFICITS WHEN MARKETED IN AS-IS CONDITION (in millions)

Category	**Net Surplus/ Deficit [1]**	**# of Dev' ments**
Developments returning surpluses	$ 8.8	22
Developments whose surplus or deficit position depends on method of allocating central costs [2]	-$ 3.6	11
Scattered-site units [2,3]	-$ 2.5	1
Developments returning deficits	-$22.0	12
Total	-$19.3	46

[1] Based on the proportion-of-direct-cost method of allocating central overhead costs.

[2] These developments would return a deficit if central costs were allocated using the proportion-of-direct-cost method, but a surplus if only direct costs were considered and overhead costs ignored. In the extreme, for example, if scattered-site units did not share *any* central costs, they would yield almost a $5 million surplus.

[3] Because the scattered site inventory is so large, when it is considered a single "development" for analytical purposes it consumes a very large share of central overhead costs -- contributing to its deficit position. However, as indicated in the sidebar "Scattered-Site Public Housing," the application of this accounting convention may not be fully justified for the scattered-site inventory.

product beyond current, as-is conditions. This means modernizing many of the developments to assure their very rentability, to increase their rental income or lower their operating and overhead costs, or even to contribute to the revitalization of their surrounding neighborhoods so as to protect and secure the agency's investment. From a strictly business perspective, it is important to determine when it makes good financial sense to engage in such a program. Assessing the bottom-line effects of HABC's current five-year comprehensive modernization plan, which involves several properties in an integrated set of proposed actions, affords an opportunity to make such a determination: return on investment can be used as a standard against which to evaluate the value of undertaking specific modernization expenditures.

HABC's five-year comprehensive modernization plan calls for expenditures of over $47 million per year, for a five-year total of $236 million -- a projection made by HABC at a time when Federal levels of modernization funding for public housing were at an all-time high.[48] Approximately 30 percent of this amount is for management and administrative improvements, consultant and equipment costs, and relocation expenses that are likely to benefit the inventory generally, while the remainder is targeted for modernization work at 18 specific developments.[49]

Assuming that all of the modernization work targeted to specific projects were completed, the increase in rental revenues likely to result would be about $2.3 million per year[50] -- an amount that would reduce HABC's projected $19.3 million deficit from operating properties in as-is condition to about $17.0 million. It is not known what operating cost savings might result from completion of the

ANALYZING AGENCY COSTS

Analyzing the relative contribution of each of HABC's developments to its overall financial picture requires looking at two separate types of budget accounts. A large portion (about one-third) of HABC's budget is designated central overhead costs, including staff, facilities, and some share of central crews. The remainder involves direct costs incurred at individual properties: utilities; ordinary maintenance; operations; administration; etc. Since a complete estimate of the costs of operating each property requires adding some portion of central costs to a property's direct costs, the method used to allocate central costs can have a substantial impact on the outcome. For this study, central costs are apportioned based on the percentage contribution of each property to the total of all direct costs. Therefore, if a property's direct costs are 10 percent of the entire inventory's direct costs, it is apportioned 10 percent of all central costs.

Although the apportioning of central costs gives a more complete picture of the total cost of operating each property, it is not clear that all overhead costs can, in fact, be sub-allocated to properties such that those costs would be reduced or eliminated if some portion of the inventory were to be removed. For example, the costs of managing a data system are likely to remain unchanged if an Agency eliminated one of its developments; therefore, pro-rating the cost of that system to each development would give an inappropriate indication of the *savings* associated with that development's removal. To deal with uncertainty about the relative contribution of central costs to each development, this report projects development-by-development net surpluses and deficits as a range: one bound excludes all central overhead costs, and the other includes that portion of central costs allocated to each development using the proportion-of-direct-cost method.

five-year modernization plan, but it is anticipated that a $3.1 million cost savings would result from completion of a proposed HOPE VI project. This, then, would reduce the net deficit to $13.9 million (see Exhibit 9).

Exhibit 9

PROJECTED NET LOSS LIKELY TO RESULT FROM MARKETING HABC'S PROPERTIES AFTER COMPLETION OF MODERNIZATION PLANS, BY TYPE OF DEVELOPMENT (in millions)

	Type of Development			
	Elderly	**Family**	**Scattered Site**	**Total HABC Inventory**
Outlays	$22.4	$43.7	$21.2	$87.4
Revenues	18.4	36.7	18.3	73.5
Balance	-$4.0	-$7.0	-$2.9	-$13.9
Per unit month deficit (in $'s)	-$68	-$59	-$84	-$66

SCATTERED-SITE PUBLIC HOUSING

According to HA officials, scattered site public housing can be less intrusive, have less stigma, be more acceptable to the community, and provide for larger family sizes than many conventional public housing developments. And, where scattered-site units are seen by residents as being more desirable than larger, multi-family complexes, this inventory could be used to help and reward those households who are model residents, or who show special promise in achieving self-sufficiency and upward mobility. Yet, scattered-site units can be a management burden: monitoring of conditions and general maintenance may be more demanding than for multi-family complexes because of the lack of on-site personnel and the travel time necessitated by the spatial separation of units; and acquired units (rather than those built by the HA) may lack a standardization and parts availability that would generally contribute to maintenance inefficiency.

The cost and revenue analysis done of H-ABC's scattered-site units is somewhat equivocal. On the one hand, estimated market rents for HABC's scattered-site units are relatively high; they are generally in line with or even above rents achieved for similar private sector units in Baltimore. Among other things, kitchen appliances are provided in HABC's scattered-site units, but typically not included in private developments of this type. On the other hand, because of higher-than-HABC-average maintenance costs in scattered site units, and an allocation of central costs in this study based on the proportion-of-direct-cost method, overall costs are also very high. It may be that this method of allocating central costs is not fully justified for the scattered-site inventory and, hence, there is uncertainty as to whether scattered-site units, as a whole, are a net financial drain or benefit to the HA.

Exhibit 10 shows the number of developments likely to generate surpluses and deficits if marketed following completion of the five-year plan. Just three properties account for at least one-half of the net deficit. Elderly developments contribute slightly under 30 percent, family developments contribute 50 percent, and scattered site properties contribute the remainder.[51] A little more than one-half of all of HABC's elderly properties would show a surplus, and a similar percentage of family properties would do the same.

In examining the different types of modernization proposed to be undertaken, it is clear that some capital improvements contribute to revenue enhancement while others do not. For example, a roof replacement may be necessary to maintain a property in the inventory; without that work, the property's very rentability could be jeopar dized. However, such replacement is unlikely to lead to higher rents. It appears as if much of the proposed modernization under HABC's five-year plan falls into this category, since there is potential for increased revenues for some of the work at only 12 of the 18 properties proposed formodernization. And, overall, that work is expected to generate relatively limited revenue gains: no more than about one-quarter of the modernization investment could be expected to be "recovered" within a reasonable period of time in the form of increased market rents.[52] This, of course, begs the question of the efficacy of investing in modernization that is not somehow recovered in the form of either decreased costs or increased revenues (see sidebar: "Modernization Yields Widely Different Revenue Returns," and Exhibit 11, which accompanies it).[53]

Exhibit 10

DEVELOPMENTS CATEGORIZED BY LIKELY SURPLUSES OR DEFICITS WHEN MARKETED FOLLOWING COMPLETION OF FIVE-YEAR MODERNIZATION PLAN (in millions)

Category	**Net Surplus/ Deficit [1]**	**# of Dev'ments**
Developments returning surpluses	$10.0	24
Developments whose surplus or deficit position depends on method of allocating central costs [2]	-$ 2.9	12
Scattered-site units [2,3]	3.5	1
Developments returning deficits	-$17.5	9
Total	-$13.9	46

[1] Based on the proportion-of-direct-cost method of allocating central overhead costs.

[2] These developments are projected to return a deficit when central overhead costs are allocated using the proportion-of-direct-cost method, but are projected to return a surplus if only direct costs are considered and overhead costs ignored.

[3] Because the scattered site inventory is so large, when it is considered a single "development" for analytical purposes it consumes a very large share of central overhead costs -- contributing to its deficit position. However, as indicated in the sidebar "Scattered-Site Public Housing," the application of this accounting convention may not be fully justified for the scattered-site inventory.

Part IV: A Stock and Management Strategy to Reduce the Deficit and Achieve Break Even

When provided with information concerning the projected fiscal consequences of competing in the private market, HABC officials were not surprised to learn that their agency would likely be operating at a net loss; after all, the public housing program was not originally conceived or designed to operate in a competitive market.[54] The key question, then, is what would need to be done in order to bring the HA to at least a break-even position.

A three-step process was used to answer this question. The first step involved HABC in a simulated strategic planning exercise in which agency officials used the data summarized above, as well as their own sense of mission and understanding of local conditions and circumstances, to devise a stock and management strategy aimed at achieving break-even. Step two involved a *post-hoc* evaluation of HABC's strategy to consider its fiscal and stock consequences as well as its reliance on external capital funds from the Federal government. As described below, while the strategy is projected to result in a surplus or profit, it is premised on a considerable infusion of external capital funds. In recognition of the likely difficulty HABC would have in obtaining all such funds from the Federal government, the final step involved a reconsideration of HABC's strategy with an eye to reducing the need for external Federal funds while maintaining at least a break-even fiscal position.

MODERNIZATION YIELDS WIDELY DIFFERENT REVENUE RETURNS

Exhibit 11 helps to examine the efficacy of different types of modernization efforts. It displays the net bottom-line (surplus or deficit) effects for 12 developments proposed to undergo modernization that market rent projections show are likely to yield higher rental revenues.

One of the 12 developments (J on the Exhibit) is slated for renovation of bathrooms and kitchens in 240 units. At a total cost of $2.8 million (and an average of $11,700 per unit), this is expected to increase annual revenues by $1,600 per unit if the property were rented at market rates. The investment has the potential to be recovered in a little more than seven years, which is many fewer than the remaining useful life of the renovation.[1]

An additional five developments (A, E, G, H and I on Exhibit 11) with a little over 2,000 units, will have their electrical systems upgraded to allow residents to install window air conditioners. Typically, this upgrade is in conjunction with window replacement. At a total cost of almost $10 million (averaging about $4,730 per unit), this upgrade is likely to result in an increase in annual rental income of about $210 per unit, if the property were rented at market rates. It appears, however, that although the work would contribute to the quality of the housing, the investment would not be recovered within the 20-year expected useful life of the rehabilitated property (even at nominal rates).

Four developments (B, C, D and F on Exhibit 11), with 1,100 units, are proposed to undergo substantial rehabilitation at a capital cost of $78 million, and with average costs per unit of $70,000. This is estimated to increase the properties' annual rental revenues by $1,335 per unit. While the rehabilitation of three of these developments is consistent with HABC's commitment to the revitalization of the larger neighborhoods in which they are located, such investment has little chance of being recovered, through increased revenues, in less than 50 years, far beyond the useful life of either the rehabilitated components or the developments themselves.

Finally, the most dramatic bottom-line effects of rehabilitation are likely for an almost 700-unit family high-rise development (L on Exhibit 11). Proposed modernization involves: demolition of the existing buildings and redevelopment at lower scale, including townhome units for families; cooperative apartments for low-income elderly households; and the provision of additional housing units, services, and other activities. The total cost is $86 million, using HOPE VI funds, reprogrammed Federal funds, and other funds. Not counting a proposed business center, units not rented to lower-income households, off-site units, and for-sale units, the estimated cost would be $44.7 million.[2] Lower operating costs resulting from replacing old units with new units and a reduction of over 400 units on-site, plus increased rents possible from new townhouse-unit replacements, combine to change the development's on-site balance from a deficit to a surplus, with an overall net improvement of some three to four million dollars.[3] In this case, the investment would be recovered in 15 years or less.[4]

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[1] The seven year payback is at nominal rates. If the expected income stream were discounted for net present value, as would be appropriate, the payback period would be longer than seven years.

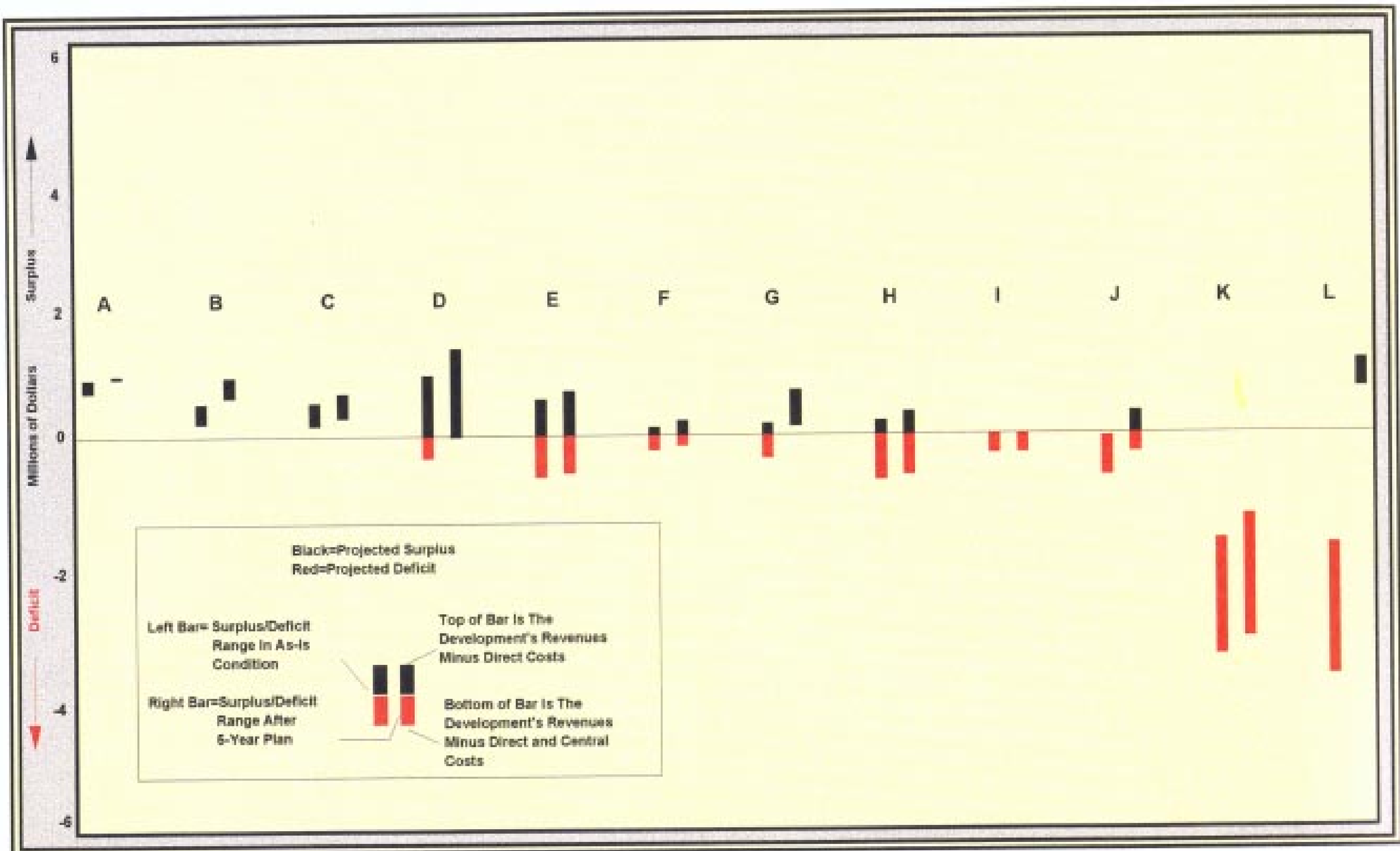
[2] HABC's proposed plan, as of September, 1995, involves replacing 203 of the present public housing units with two- and three-bedroom townhomes for families, and providing 188 rental units off-site. Other plans include 100 cooperative elderly apartments, of which 35 will be for lower-income households, market-rate apartments, a community center, a business center, numerous services, and townhomes for sale both on- and off-site. The estimated $86.2 million total cost includes $22.7 million from HOPE VI, $27.4 million in reprogrammed Federal funds (these are Major Reconstruction of Obsolete Projects (MROP) funds and funds that were to be used for replacement units as a result of deprogramming one development), and $36.1 million in leveraged private financing.

[3] The 188 off-site units, which cost $12.2 million, have not been evaluated in terms of a potential surplus or deficit.

[4] In addition to the 11 developments discussed here, there is one other development proposed for modernization that would be expected to yield higher rent revenues: K on Exhibit 11 is proposed to have both electrical upgrades and substantial rehabilitation at a portion of its units.

Exhibit 11

Range Of Expected Surpluses or Deficits For The 12 Conventional Developments, Scheduled For Modernization In HABC's 5-Year Plan, Likely To Experience Revenue Changes



Each pair of bars represents one HABC property

Step one: devising a stock and management strategy. Realizing that some type of public housing program deregulation and other major changes were probable in the near future, HABC officials agreed to start with the fiscal projections generated for their agency and engage in an abbreviated, simulated strategic planning exercise -- during which they would review their portfolio and operations and arrive at some preliminary directions designed to reduce their projected deficit and move to at least a break-even financial position.[55] In so doing, they identified several possible stock actions and management practices that they believed would improve operating efficiency and, most importantly, cut costs, including:

- Demolishing two family high-rise developments, replacing them with mid- and low-rise buildings at a lower density on-site, and providing for off-site replacement units in one case;

- Selling 30 percent of all scattered site properties, demolishing 10 percent of them, and contracting for private management of the remaining 60 percent;

- Reconfiguring one property -- reducing the number of units by about 300, changing the unit mix to create larger units, adding amenities like laundry facilities, and altering management practices in areas such as marketing;

- Completing ongoing renovations of low-rise units at another development, and targeting a different market for its occupancy;

- Changing tenant outreach and selection practices to attract more working tenants with somewhat higher incomes, in order to reduce operating costs;[56]

- Contracting out certain business functions that are more financially feasible or practical for others to perform, contracting for private management of four or five additional developments, decentralizing certain HABC management and administrative functions, and streamlining other central management functions; and,

- Recognizing the need to further examine several other developments for savings through tenant screening, private management, or possible divestment -- demolition, sales, etc.

Step two: considering the impacts of HABC's suggested strategy. Analysis of the plan HABC devised suggests that the agency would be likely to achieve the objective of improving its financial position -- although at a cost in terms of inventory loss and a need for modernization funds.

If the *stock-specific* changes proposed in HABC's strategy were implemented,[57] the agency would move from a post five-year plan deficit of $13.9 million to somewhere in the range between a $4 million deficit and a $3 million profit. This results from a decrease in revenues of about $2 million, but a much greater reduction in total operating costs of between $12 and $19 million (depending on how central costs are allocated among the developments).

The *management-specific* aspects of HABC's strategy also would have fiscal impacts beyond the above stock impacts, al-

though these are especially difficult to estimate. According to HABC officials, they include the possibility of saving:

- About $3.8 million resulting from some reductions in central office functions (e.g., applicant intake office, management information systems, fiscal operations, housing management function, engineering services, fair housing and equal opportunity function, ombudsman office);

- About $4.2 million resulting from reductions in HABC police services due to the elimination of family high-rise developments; and,

- About $8.2 million resulting from other changes, such as a decrease of $7 million in operating costs due to recruitment of households between 50 and 80 percent of income, and a decrease of $1.2 million in utility costs.

If a major portion of the above management and efficiency savings, totalling about $16 million, could be realized, HABC's fiscal picture would clearly be improved, from a possible deficit to a probable surplus position.

HABC's fiscal improvement is achieved at some expense in terms of units lost and capital funds required. Again, as best can be determined, the stock-specific changes outlined above could result in a reduction of HABC's inventory by about 11 percent, and require capital costs of about $185 million above and beyond its $236 million five-year plan estimate.[58] HABC officials identified several possible sources for the needed additional capital funds:[59]

- $20 million from the State of Maryland;

- $70 million from combined State, City and private sources; and,

- $95 million from the Federal government.[60]

Step three: considering alternative possibilities. Given recent rescissions and proposed reduced Congressional appropriations levels for the public housing program,[61] it is important to ask whether financial solvency can be accomplished at a lower price tag than that derived above. While HABC's suggested strategy appears to yield a net profit, this result comes at a high cost in outside funds: of the $185 million of capital funds required, the Federal government would be the likely source for over half of it. As will be shown below, however, there are certain actions in HABC's strategy that, if *not* undertaken, would greatly reduce the need for capital funds from the Federal government and still have the possibility of achieving solvency for the agency.

To reduce the level of Federal capital funds needed, while both retaining a fiscal position close to break-even and minimizing the loss of affordable housing units, HABC's strategy could be modified by:[62]

- *Not reconfiguring one development, as suggested.* To have done so would have reduced the agency's inventory by about 300 units (2 percent), and required using Federal capital funds of $30 million. The benefit of having done the reconfiguration would have been an increase in potential annual net profits of about $2 million, and

recovery of the investment through increased revenues in less than 20 years, which may be about the useful life of the reconfigured property.

- *Not renovating low-rise units in one development, as suggested.* To have done so at a Federal capital fund cost of $35 million would have potentially increased annual net profits only $0.6 million, and this level of investment could not have been recovered through increased revenues in less than 50 years.

- *Not demolishing a high-rise development and replacing some of the units off-site and others on-site at lower density, as suggested.* To have done so would have required capital funds of $50 million (of which $30 million would likely have been sought from the Federal government). The benefit of having done the demolition would have been to increase potential net profits $5 million,[63] with the investment likely to be repaid through increased revenues in a dozen years or so.

Not carrying out any of the above suggested actions would retain 300 units of HABC's inventory that otherwise would have been removed, eliminate the need for Federal capital funds beyond five-year plan levels,[64] and lessen HABC's projected annual net profits by about $7 million. This would leave the agency with anywhere from an estimated net deficit of between $6 million and $11 million when considering only the effects of stock-specific changes. However, HABC's fiscal situation would be improved to the extent that potential management and efficiency savings of up to $16 million, as outlined above, could be realized -- underscoring the importance of management adaptations in achieving solvency. Thus, overall, from a strictly fiscal perspective, a small net profit together with substantial reductions in the need for external capital funds may be possible without undertaking any of these three stock actions.

Part V: Assessing Federal Cost and Policy Impacts

Given the probable outcomes for HABC of having to compete in the private market without Federal operating subsidies, the question remains as to whether Federal interests are best served by moving to a tenant-assisted, market-based system of public housing. Among the relevant questions are:

- What implications are there for Federal costs? and,

- What are some of the policy consequences of using one subsidy mechanism or system as opposed to another?

This section speaks to these questions.

Federal costs. To determine which approach to delivering affordable housing to a community is most cost effective to the Federal government -- one that is project-based where operating subsidies and modernization subsidies are funded by the Federal government, or one that is tenant-based where the Federal government funds rent certificates or vouchers that are used in the private market -- various cost comparisons are possible. The most basic comparison assumes that *either*

one of these approaches *or* the other would be used exclusively; more complex comparisons involve various hybrids of the two, with many combinations possible.

For this initial analysis, the costs to the Federal government of the current public housing program in Baltimore are compared to the Federal costs of assisting present public housing residents through Baltimore's Section 8 Existing Housing program -- the latter under three hypothetical rent schedule assumptions:

- The first is that all certificate holders are living in units with rents equivalent to the 1995 Fair Market Rent (FMR) ceilings set for the Baltimore metropolitan area;

- The second is that all certificate holders are living in units with rents that are equivalent to those paid by current Section 8 program participants in Baltimore -- rents that, on average, are 78 percent of the 40th percentile FMR; and,

- The third is that all certificate holders are living in units with rents equivalent to 50 percent of the FMR -- which approximates the market rents for HABC properties, as estimated for this study.

Section 8 costs include Federal payments toward rent, utility allowances, and a program administration fee of eight percent. Federal public housing costs in 1995 included operating subsidies, Comprehensive Grant funds for modernization, and Drug Elimination Grant funds.[65] To account for the fact that no single year, including 1995, can capture certain fluctuations in spending from year to year, a special infusion of modernization funding is included in the 1995 cost calculations. The special infusion is assumed to be $10 million, an amount that is close to the Federal outlay for current HOPE VI projects in Baltimore if spread over more than just the years in which the funds were awarded.[66]

Using FY 1995 as the base year for the cost comparison allows for incorporation of the most recent funding and program changes that affect Federal outlays. On the Section 8 side, 40th percentile FMR rents, which came into effect in mid-1995, were used; and, on the public housing side, there was a rescission reducing modernization monies to HABC by $8.8 million.

To calculate the highest possible costs that could be incurred under the Section 8 program, assume that 16,773 households, representing 95 percent of HABC's units, are using Section 8 certificates and living in units with rents equivalent to the metropolitan-area FMR ceiling. The total Federal cost in this case would be about $104 million (see Exhibit 12).[67] Alternatively, if it is assumed that all 16,773 households are living in units with rents equivalent to those of current Section 8 certificate holders in Baltimore, total Federal Section 8 costs would be approximately $71 million; and, if it is assumed that all such households are living in units renting at 50 percent of FMR levels, total Federal Section 8 costs would be approximately $41 million.

The Federal cost of subsidizing Baltimore's public housing program, including a special infusion of modernization monies, amounts to about $108 million. Therefore, public housing costs would be somewhat more than Section 8 costs if every household were to live in units renting at the FMR limits; they

Exhibit 12

THE ANNUAL COST TO THE FEDERAL GOVERNMENT OF SUBSIDIZING HABC RESIDENTS THROUGH THE PUBLIC HOUSING PROGRAM AND THREE HYPOTHETICAL VARIANTS OF THE SECTION 8 PROGRAM [1]
(in millions)

Program	Costs [2]
Public Housing	$108
Section 8, if all HABC residents rented at:	
The FMR ceiling	104
Rent levels of current Section 8 households	71
50% of the FMR	41

1. See text for a description of cost components, and for a discussion of other considerations appropriate for making program comparisons.

2. Calculated for FY 1995.

would be approximately $37 million more than Section 8 costs if every household were to rent at current Section 8 rent levels in Baltimore; and they would be more than two-and-one-half times the Section 8 costs if every household were to live in units renting at 50 percent of the FMR. The respective per-unit-month costs to the Federal government are $537 for public housing, $517 for Section 8 at the FMR ceiling levels, $353 at the actual Section 8 rent levels, and $204 at 50 percent of the FMR ceilings. These costs, however, assume a total substitution of one program for another and, therefore, do not account for a program that would combine some amount of Section 8 with some amount of public housing (see sidebar: "Future Research Possibilities"). It should also be noted that there may be costs other than the above, as well as policy consequences, that need to be considered in assessing the cost effectiveness of the public housing and Section 8 programs, some of which may, in fact, alter the relative standings.

Policy consequences. Comparisons among and within programs ultimately involve policy choices and trade-offs, and these also need to be taken into consideration. To highlight one example, consider the policy goal of enhancing the freedom of choice of low-income households, with counseling as a means. When the cost of counseling is factored into the above analysis, the questions of cost effectiveness and policy goals are joined. Counseling to facilitate residents' ability to find housing opportunities outside of areas of low-income concentration carries a cost itself and, often, a cost in higher rents in non-concentrated areas; such costs would be sufficient, under some circumstances, to result in equivalent or higher costs for Section 8 than for public housing, at least in the case of Baltimore. On the other hand, these add-on costs to the Section 8 program may be offset by any additional costs and social consequences of maintaining low-income concentrations through public housing.

FUTURE RESEARCH POSSIBILITIES

To advance the analysis of the cost effectiveness of various program possibilities for Baltimore, it would be possible to examine other options if they become relevant to ongoing policy discussion, such as:

- the costs associated with providing Section 8 to just those who would be displaced if HABC carried through with certain demolition and disposition plans, while retaining all other developments as public housing;
- the costs associated with providing Section 8 to just households occupying distressed developments, while retaining viable developments as public housing;
- the costs associated with providing Section 8 certificates to just family households, as envisaged in HUD's *Reinvention Blueprint*, while retaining elderly developments as public housing;
- the net costs of providing a shopping incentive; or,
- the net costs of providing counseling to some fraction of, or all Section 8 certificate holders.

Then there is the trade-off between the objective of ensuring the fiscal solvency of a local HA competing in the market and the objective of providing low-cost housing to vulnerable segments of the population. Such deregulatory measures as the elimination of Federal admissions preferences highlight the tension between the two. HABC's position is that it is to their financial advantage to be unencumbered by Federal preferences restricting selection of households from the waiting list. Without such preferences, the agency can reach out to those who are currently working or work-ready instead of having to house primarily homeless persons, with their special needs. This, they believe, will lower operating costs. Yet, serving higher-income households means that fewer desperately poor persons get housed, potentially increasing the ranks of the homeless. If the dropping of Federal preferences causes the homeless to fall back upon the emergency shelter care system, the casualty might be the Federal government's continuum-of-care philosophy of fostering independent living among the homeless. Furthermore, Federal costs could escalate to the extent that the cost of providing shelter through Federal programs is greater than the cost of providing operating subsidies to assist formerly homeless families in public housing.

Part VI: Conclusion: Public Housing in a Competitive Market

Charting the likely course of public housing into an increasingly market-disciplined future brings into sharper focus the tension between its current obligation to provide basic housing of last resort to residents who cannot afford otherwise, and of adopting business practices appropriate to the marketplace. On balance, what has been learned about how public housing would fare if it were operating in a competitive market without Federal operating subsidies?

Conditions for agency survival. It seems clear that, even in the relatively soft housing market in which it operates, and where all residents receive a portable Section

8 certificate, the Housing Authority of Baltimore City could survive as a housing agency in the absence of direct Federal operating subsidies, and could continue to provide a significant amount of affordable housing for low-income residents of Baltimore. There are conditions for this survival, however. The analysis suggests that HABC could perform at a break-even or better position under the following circumstances.

First, HABC would need to develop a business plan, of the sort described above. In all likelihood, the plan would call for HABC to be more streamlined, both with respect to the size of its organization and operations as well as the number of properties and units it would own and manage. Given the combination of constraints imposed by market forces and the predilections of HABC's current executive officials, there would also likely be increased use of strategic planning as a basis for making operating and management decisions, including the possibilities of greater administrative decentralization or more privately contracted management than exists today.

Second the agency would need to apply more market discipline to its asset management function. Future modernization decisions, for example, would presumably be increasingly based on anticipated pay-back in terms of the cost reductions or rent revenues that would result. This only makes sense given the requirement for a housing agency to survive financially in a market context. Where modernization would not generate sufficient net revenues to justify it, the agency could still decide to go ahead; in doing so, however, it would be consciously choosing to subsidize such an effort out of surpluses derived from other properties, for reasons that it believed were valued in the community.[68] At this point, the extent to which such cross-subsidization would work as a long-range business strategy is unclear.

Third, based on both financial incentives and, in the case of HABC, agency preference, HABC would need to change somewhat its customer population -- the households it serves. With time, appropriate investment strategy, and changes in rules, HABC officials believe they would have to gradually decrease the proportion of residents earning below 50 percent of area-median income, and move to serving a more mixed-income clientele. While integral to their strategy for survival, how successful such an effort would be is somewhat uncertain, for several reasons. For one thing, a shopping incentive applied to the Section 8 program is likely to cause many very low-income residents to remain in place, undermining the goal of income mixing and, consequently, having a negative effect on operating costs. For another, the expected low rent levels of some of HABC's developments -- a reflection of current market supply and demand conditions -- are doubtless more attractive to very low-income, rent-burdened households than to working households with a little more rent-paying capacity. Because private market rents in Baltimore are on the low side, households at even 80 percent of median may have more options than they would in cities with tighter rental markets.

Finally, HABC would need a source of capital funds for modernization beyond what its rental revenues can support. HABC has major modernization and reconfiguration needs, especially for its older properties, and these must be dealt with in order to attract higher-income tenants and improve the quality of life for existing residents. This will come

at a high cost, either to HABC or the City, State or Federal governments. It is unclear whether HABC, on its own, would be able to garner the necessary financial resources; and, while the Federal government is a logical source of such funds, to compensate for the history of the public housing program which intentionally was not tied to market forces, there is reasonable question as to whether such resources will be forthcoming. What is clear, however, is that, without modernization, HABC will continue to manage numerous older, high-maintenance properties, placing its longer-term financial solvency in jeopardy.

Some cost and policy considerations. From the perspective of the Federal government, Section 8 certificates could be a more cost-effective way of providing affordable housing in Baltimore, especially if many current public housing residents, when given certificates, opt to remain in the City and, beyond that, in public housing or in private units with comparable rents. This is because private housing rents in Baltimore are relatively modest in comparison to area-wide FMRs, and estimated public housing market rents are often even more modest.

It is ironic that achieving the lowest possible Federal subsidy costs under the Section 8 program rests, to some extent, on the availability of the public housing stock, which, over the long run, is likely to depend on the provision of additional Federal subsidy dollars to fund its modernization. Providing the latter subsidy as a means of minimizing the former, of course, reduces substantially the cost differential between the two programs. Further, the lowest Section 8 subsidy costs come at the expense of continuing to maintain concentrations of low-income households, for which there are both other financial as well as policy consequences.

Finally, some recently proposed program features intended to provide a link between public and business orientations may have unintended cost consequences. Permanent repeal of Federal preferences, for example, may simply cause a handing off from one public budget to another of the obligation to house, say, homeless persons. In fact, when the budgetary implications of HABC's suggested strategy for adapting to market forces is considered, some of the savings from HABC's point of view could well become additional costs to the Federal government.

ENDNOTES

1. The study was done by Martin Abravanel, Terrence Connell, Deborah Devine, Debra Gross, Lester Rubin, and Special Research Affiliates Rachel Lebowitz, Stephanie Marandas Simons, Regina Taylor, and Valerie Walters of the Division of Policy Studies in the U.S. Department of Housing and Urban Development's Office of Policy Development and Research, with the assistance of Stephen Dietz, Mark Matulef and Nancy Kay of Westat, Inc., Rockville, Maryland, and Leonard Bogorad and Charles Hewlett of Robert Charles Lesser & Co., Chevy Chase, Maryland. Special appreciation is due: the Housing Authority of Baltimore City, Daniel Henson III, Commissioner, and Eric Brown, Deputy Executive Director; the many HABC department heads, staff, and resident leaders who assisted in this study; staff of HUD's Maryland State Office; and numerous other housing specialists in the Baltimore metropolitan area who provided guidance and information throughout the study.

2. Deregulation would likely include the elimination of the one-for-one replacement, now required when public housing is demolished, and Federal preferences for admission to public housing, among other things.

3. Although larger HAs are required to keep project-level accounts, an informal inquiry made in conjunction with this study indicated that many of them do not have true project-level accounting in place.

4. The study involved: gathering an extensive amount of data from HABC; conducting in-depth discussions with key HABC officials; consulting with outside experts on public housing, market dynamics, and the provision of housing in the private sector; doing thorough inspections, evaluations, and ratings of all conventional public housing sites and a sample of scattered site housing maintained by HABC; developing rent comparable data for each HABC development and unit type, using all market-relevant characteristics associated with comparables (such as neighborhoods, amenities, and other characteristics); developing complete HABC cost data on per-unit-month, development-wide, and Authority-wide bases; analyzing Baltimore's housing sub-markets/neighborhoods as they affect the locations of public housing; and having several working sessions with HABC senior officials in order to discuss findings and consider stock and management options.

5. Together, these four sectors of the Baltimore economy account for almost 53 percent of total employment.

6. Although Baltimore gained in overall jobs between 1980 and 1990, manufacturing jobs declined by 36 percent, amounting to 25,216 lost jobs. Most of the overall gain was concentrated in the service sector, which pays substantially lower wages than the manufacturing sector. See *The City of Baltimore: Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), page 36.

7. Median family income (MFI) in Baltimore, which differs from median household income, is $28,217 (according to the 1990 Census). Thirty-eight percent of households have incomes that are between 0 and 50 percent of MFI; 20 percent of households have incomes that are 51 to 80 percent of MFI; 9 percent of households have incomes that are 81 to 95 percent of MFI; and 33 percent of households have incomes that are above 95 percent of MFI. *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), page 10.

8. *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), page 2.

9. The dominant structural form for homeownership units is the row house, followed by single-family detached houses, duplexes, and condominiums. The dominant structural form for rental units is the row house (typically having one to three units, although some conversions from single-family dwellings have six or more units). Row houses account for over 62,000 (40 percent) of all rental units. Large apartment complexes, 50 or more units, are the other dominant structural form for rental properties, accounting for over 57,000 (37 percent) of all rental units. Rental units average 4.4

rooms, with over 60 percent of all units housing two or fewer persons. See *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), pages 15 and 17.

10. The median owner-occupied unit was built in 1941, and the median renter-occupied unit was built in 1943.

11. *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), page 7.

12. Contract rent may or may not include some or all utilities in the payment to the landlord; gross rent is the sum of rent paid to a landlord and any utility payments, such as water, electricity, and gas, but not telephone.

13. These data, from the American Housing Survey for the Baltimore Metropolitan Area, were collected in 1991 and calculated for the Baltimore City portion of the metropolitan area. Quality differences may account for the fact that four-bedroom units have a lower average contract rent than two-bedroom units. According to *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), based on the 1990 Census, the median monthly contract rent for all rental housing was $321 (page 18) and the median gross rent was $413 (page 5); the former excludes utility costs such as electricity. According to the *Strategy*, only 10.5 percent of all rental housing rented for more than $500 per month, while 42.4 percent rented for less than $300 per month. Average rents over the last decade have risen more rapidly than the growth of household income: the average advertised monthly rent for a one-bedroom apartment in 1990 increased over the decade 135 percent, and a three-bedroom apartment increased 105 percent; household income rose at an average rate of 78 percent during the decade.

14. Over 32 percent (50,030) of all rental units are estimated to be substandard (compared to 10 percent of homeowner units) with 40,053 of those being feasible to rehabilitate. The majority of the substandard units, including almost all of those not feasible to rehabilitate (9,977 units) are found in row houses. *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), page 17.

15. Based on data supplied by HUD's Maryland State Office. According to *The City of Baltimore's Comprehensive Housing Affordability Strategy, 1994-1998* (December 30, 1993), the vacancy rate in 1990 was 7.5 percent, compared with 5.4 percent in 1980 (page 17). Three-bedroom units had a slightly lower vacancy rate, and two-bedroom units had a slightly higher one.

16. Source: *American Housing Survey for the Baltimore Metropolitan Area in 1991*, U.S. Department of Commerce and U.S. Department of Housing and Urban Development (August, 1993). In 1989, 41 percent of all renter households in Baltimore paid more than 30 percent of their income for rent; this represented about one-half of the total rent burdened households in the MSA. Of Baltimore's renter households whose incomes were between zero and 50 percent of City median family income, 67.5 percent paid more than 30 percent of their income for rent, and 40.9 percent paid more than 50 percent of their income for rent. See *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), pages 3-5 and 43.

17. Very low-income households are defined by HUD as those having incomes at or below 50 percent of area median income.

18. *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), pages 37-40.

19. *The City of Baltimore Comprehensive Housing Affordability Strategy: 1994-1998* (December 30, 1993), page 6.

20. For example, HABC has used city security services and maintenance personnel when conducting unannounced sweeps of its high-rise developments, and has used block grant resources at its developments in conjunction with

Comprehensive (Modernization) Grant funds, when such work furthered City plans for neighborhoods or for community revitalization.

21. This assumes completion of the HOPE VI development at Lafayette Courts.

22. The assumption here is that households in the zero to 50 percent of area median income range are at the margin (i.e., they are all at 50 percent of income). Data, from the *Comprehensive Housing Assistance Strategy (CHAS) Data Book for Maryland* (U.S. Department of Housing and Urban Development), are from the 1990 Census.

23. Nine percent of HABC developments were first occupied between 1960 and 1970, and the remainder first occupied during the 1970s and 1980s.

24. Since the metropolitan-area data include the HABC inventory, the differences between the HABC stock and non-HABC metropolitan-area stock are even greater than shown here.

25. In addition, it is claimed that some public housing acquired through the Turnkey program was built to lower standards; for example, one development was built without lightning rods.

26. Utility costs represent 39 percent of all HABC property specific operating costs.

27. This estimate was based on an HABC needs assessment of all HABC developments. It does not include the needed modernization of roads, external sewage lines, and other major infrastructure deficiencies. Although the assessment had as its criterion bringing developments up to HUD's modernization standards, it was not refined enough to determine whether minimum property standards were met.

28. The ratings were made by appraisal and consulting staff of Robert Charles Lesser & Co., one of the largest independently owned real estate advisory firms in the Nation. Each of HABC's conventional developments and the converted school sites, part of the scattered site program, was assigned four separate qualitative ratings. The first was a neighborhood rating, which considered factors such as adjacent land uses, relationship of the HABC development to its surrounding neighborhood, level of street activity, reported and apparent crime and vandalism in the neighborhood, access to public transportation, retail and services, employment opportunities and places of worship. The second, a property rating, focused on the quality and condition of the HABC development itself. It considered factors such as building maintenance and upkeep, grounds maintenance and upkeep, architectural appeal, reported and apparent crime and vandalism at the property, general curb appeal and attractiveness of the development, level of security at the property, and the quality, diversity and upkeep of community amenities (eg., playground areas, basketball court(s), day care center, common areas and community recreation facilities, social service programs, etc.) and condition of common areas and interior hallways (where applicable). The third rating was a typical-unit rating, based on an inspection of a sample of units in each development that were in "turnover condition" (renovated condition in which a unit is turned over to a new tenant). This rating considered factors relative to unit design, adequacy of bedroom and living space, condition and upkeep of bathroom fixtures, tile and flooring, adequacy of kitchen size and condition, adequacy and condition of kitchen cabinet and countertop space, adequacy of closet space, number, size and condition of windows, unit security, etc. The final score was an overall rating, which represents a blended or average score for the development based on neighborhood, property and typical-unit ratings.

29. As of June 30, 1992, HABC served 36,889 persons; of these, 92 percent were African American and 44 percent were minors (under 18 years of age) *Semi-Annual Statistical Bulletin* (Housing Authority of Baltimore City, Research and Analysis Section, June, 1992).

30. In addition, HABC has a waiting list of 8,143 households only interested in the Section 8 program. At this point, a very small percentage of the 26,651 households on these three lists have been formally verified as to their eligibility for admission, since this procedure is done when a household comes to the top of a list.

31. These are in developments designated exclusively for the elderly and in some units in family developments that are occupied by elderly households.

32. HUD's Multifamily Tenant Characteristics System (MTCS) for 1994. As of June 30, 1992, the tenant rent contribution averaged $150 (see *Semi-Annual Statistical Bulletin*, Housing Authority of Baltimore City, Research and Analysis Section, June, 1992).

33. With respect to income, this is the case when comparing all public housing residents with the residents of all combined tracts, neighborhoods, and communities in which public housing developments are located; and it is also true in two-thirds of the cases when individual developments are compared with their surrounding census tracts and neighborhoods, and in 84 percent of the cases when individual developments are compared with their surrounding communities. With respect to public assistance, this is the case when comparing all public housing residents with the residents of all combined tracts, neighborhoods, and communities in which public housing developments are located; and it is also true in almost all of the individual cases.

34. Here and elsewhere, reference to HABC's five- year plan includes the modernization to be done at Lexington Terrace through the HOPE VI program; in reality, however, HOPE VI funds are in addition to Comprehensive Grant funds used to undertake five-year plan modernization work and management improvements.

35. Rent comparables data were developed, under contract to HUD, by Westat, Inc. (Rockville, Maryland) and its sub-contractor, Robert Charles Lesser & Co. (RCLCo). RCLCo's appraisal and consulting staff identified relevant non-subsidized comparable private sector developments in the marketplace for HABC's conventional developments, and comparable townhomes, rowhouses, and single-family homes for HABC's scattered site units. Property characteristics, conditions, and ratings were obtained for each of the private-sector properties, including: the apparent condition of the structure; neighborhood conditions; locational desirability; appearance of the structure; appearance and condition of representative units; appearance and condition of the grounds or common areas; unit features; community amenities; occupancy rates; rents paid by non-Section 8 tenants; unit sizes; rent concessions; any differences in rents between those paid by new tenants and existing tenants; and utility information.

RCLCo selected the most comparable developments for each HABC development, based on the following priorities: (1) rental housing of similar structure type to the public housing development, located in the immediate neighborhood of the development (project-based subsidized developments such as Section 236 or Section 8 and/or developments that accepted and had a majority of the units occupied by residents with tenant-based subsidies such as Section 8 certificates were excluded from consideration); (2) assuming that there were not enough comparables meeting the first criterion, unsubsidized rental housing of dissimilar structure type in the immediate neighborhood was selected; (3) assuming that there were not enough comparables meeting the first two criteria, unsubsidized housing (of similar structure type, where possible) in as to close and/or as comparable a neighborhood as possible was selected.

RCLCo prepared adjustment tables to estimate achievable rents for each of the unit types at each of the conventional HABC developments (and the four converted school sites in the scattered site inventory); adjustments were made to reflect differences between the HABC developments and private sector developments, accounting for such factors as structure type, unit size, number of bedrooms and bathrooms, utilities, unit features and development amenities, location, community/neighborhood condition, and property appearance and condition. Scattered site units were evaluated with respect to how similar, or dissimilar, they were to other private sector units in their respective neighborhoods with regard to structure type, number of bedrooms, and condition. Adjustments were also made to reflect differences in which utilities are included in the rent.

The resulting adjusted market rents represent the rents at which "rational" renters in the open market would be indifferent between an HABC development and its comparable privately owned rental housing options. It was assumed, therefore, that at these rents the HABC developments would achieve occupancy rates consistent with those in the general market. The general market occupancy rate was based upon the average occupancy rates at the most relevant comparable private developments for each HABC development. In cases where the adjusted market rents were significantly below those at the comparables, these occupancy rates were adjusted to reflect evidence from the 1991 American Housing Survey that occupancy rates in Baltimore tend to be lower for lower-rent units.

36. Indices of resident moving *preferences* -- for remaining in or moving out of public housing developments, considering the likelihood that residents would be offered a Section 8 certificate -- were provided by HABC on-site property managers, HABC Housing Management supervisory staff, and resident leaders. Indicators of likely moving *behavior* were based on the experiences of: the Moving To Opportunity (MTO) program -- which replicates some key features of deregulation proposals that would enhance resident choice; past turnover in each development; participation and success rates in the Section 8 Existing program; and moving patterns associated with relocation resulting from the previous modernization of HABC properties.

The past experience is that many more residents indicate an interest in moving than actually move. Even with a Section 8 certificate, there are various constraints on moving including, among others: an inability to find affordable housing that meets housing quality standards; a failure to pass landlord credit checks; the disinclination to move to neighborhoods where friendship and family networks are absent; the disinclination to move from what is perceived to be a more secure to a less secure form of housing assistance; and a fear of discrimination. In Baltimore under MTO, no more than 25 percent of households in any development where residents were offered Section 8 made it to the housing search stage, even though a much larger number indicated an initial preference to move. Moves out of public housing facilitated through the Uniform Relocation Act were even fewer. Therefore, it is assumed in the current study that no more than 25 percent of residents will move from any HABC development in the period immediately following deregulation.

37. It is assumed that even among those highly motivated to move, the final choice to remain or move out of public housing would be influenced by the shopping incentive. To estimate the point at which residents with a shopping incentive would find it worthwhile to remain in their unit, the conservative assumption was made that rent differentials of at least $200 per month would trigger this decision. At this rent differential, the shopping incentive can reasonably be expected to reduce a household's yearly rental expenses by close to $1,000 per year, and possibly more, given the formula used to determine the savings to the certificate holder.

38. Another possibility is that non-public housing households possessing Section 8 certificates would move into public housing. Although it is assumed that this will occur to some degree, its extent is not known and, therefore, not tested in the present analysis.

39. At present, 12 percent of HABC's units are unoccupied for various reasons, including both natural turnover and repairs, modernization, or other activities. This amounts to an 88 percent occupancy rate. However, for purposes of this analysis, it is assumed that, at the time of deregulation, the only vacant units are those involved in natural turnover, and that all other currently vacant units would be available for occupancy. This would peg the pre-deregulation occupancy rate at 94 percent. The estimated post-deregulation occupancy rate of 83 percent incorporates natural turnover, and reflects the initial responses of public housing residents to the availability of certificates. It is derived from what is known about the relationship between initial preferences for moving and actual housing searches at developments where this information is available -- those where households were targeted for MTO. Extrapolations were made from this relationship to developments where only information on preferences was available. At some MTO developments, as few as three percent of the households ended up searching for housing while, at others, the search rate was 25 percent. The estimated occupancy rate of 83 percent does not reflect market barriers that those with certificates might encounter as they begin their housing search, nor does it reflect the impact of the shopping incentive in changing the minds of households otherwise inclined to move.

40. The 95 percent level is the industry benchmark for "full" occupancy.

41. A "stabilized year" refers to the time when the effects of all changes that would occur as a result of deregulation have already occurred, and when just the process of change itself could be expected to no longer influence the behavior of a Housing Agency or renters.

42. "As-is" condition refers to HABC properties marketed as they existed in June, 1995, assuming normal maintenance to bring units to "turnover" condition, but without benefit of modernization or other physical improvements that could upgrade their condition to make them more attractive or marketable. The exception in this study is the modernization program that was being undertaken at Oswego Mall and Lafayette Courts under the HOPE VI program, for which funds had already been appropriated. That on-going work was assumed to have been completed for purposes of this study.

43. Expected rents at each HABC property were multiplied by the projected number of occupied units likely to generate those rents. Where projected occupancy would have been higher than the industry standard of "full" occupancy -- 95 percent -- they were lowered to that level. Contributions to a replacement reserve fund were also calculated, as the greater of three percent of revenues or $9 per unit month.

44. HABC uses a "cost center" method of accounting, for both its developments and its central overhead, for expenses incurred in the course of doing business. Twenty three of the Agency's 45 developments (accounting for 23 percent of the total budget) are in single-development cost centers, which means that, for these properties, cost center accounting and project-based accounting are synonymous. The remaining 22 properties (accounting for 26 percent of the budget), however, are combined into 10, two- or three-property cost centers -- i.e., expenses for these developments are grouped and cannot be separated. (For informational purposes, 15 percent of the Agency's budget is accounted for by scattered site units, and 35 percent of the budget is for central costs).

It was necessary to devise an allocation method so as to be able to calculate development-by-development costs, revenues, and net deficits or surpluses. Since multi-property cost centers contain a mix of building types, building sizes, and household types, the allocation method developed for this purpose uses those characteristics (as they appear in single-property costs centers). The weighted averages of costs at single-property cost centers were arrayed along the three dimensions just described, and those averages were used to apportion cost center expenses to the individual developments comprising them. This method was employed for both direct costs incurred at the properties as well as for allocated central overhead costs.

45. Since full occupancy was assumed in this analysis, the deficit would be even larger given the fact that about 2,500 units are currently not occupied for a variety of reasons.

46. An alternative to the proportion-of-direct-cost method for distributing central overhead costs, used by one HA contacted in conjunction with this study, divides costs into two groups: the first contains direct service items (such as rent collection and grant accounting), which are allocated on a per-unit basis; the second contains items that cannot be tied directly to developments (such as the work done from the Executive Director's office), which are allocated on a "salary-dollar" basis -- i.e., each development receives the same percentage of such costs as its salaries comprise of agency-wide salaries.

47. Developments designated for the elderly contribute less than 25 percent of the net loss. It should be noted that most family developments contain some units occupied by the elderly. In these cases, however, the predominance of households are non-elderly families.

48. Rescissions during FY 1995 and proposed appropriations for the program augur poorly for such continued high levels of capital support.

49. It is assumed, for purposes of this study, that the costs of the work for the first year of the five-year plan, plus proposed HOPE VI work for one development, are paid for by the Comprehensive Grant and HOPE VI programs. The work proposed for years two through five of the plan are assumed completed. These capital costs, however, are not factored into the analysis of net deficit or surplus presented here, although the potential revenue producing capacity of the work has been estimated and included.

50. Properties assumed to be in their post-modernization, improved condition were assessed to determine their likely revenue generating capacity, using the rent comparables approach.

51. Elderly units comprise about the same percentage of total units in inventory (about 27 percent) as they contribute to net deficit (a little under 30 percent). The data indicate that elderly developments are represented in all groups, i.e., those developments that would show a surplus, those that might have a either a deficit or surplus depending on allocation of central costs, and those that would show a deficit.

52. Discounting the income stream lowers the payback percentage even more.

53. This is regardless of who -- the Federal government or HABC -- pays for the modernization.

54. At a planning meeting, the study team gave HABC the development-by-development results. Subsequently, HABC convened a series of internal meetings and task forces to review and evaluate the public housing rent and market information provided by the study team. Then, in a meeting with the study team, a panel of HABC executives and senior staff spent considerable time discussing the market rent analysis, and shared with the study team the assumptions, constraints, and business operating decisions that guided their simulated strategic planning on a property-by-property basis. HABC's principal assumptions included elimination of the "one-for-one" replacement policy; elimination of Federal preferences and primary reliance on a local waiting list; and the continuation of HABC programs and operations funded by Federal agencies other than HUD.

55. In all, HABC officials considered what actions to take with respect to 58 separate development components, plus the scattered site inventory. (Although the Agency owns and manages 45 conventional developments, several of them contain components that serve elderly or family households in separate buildings, and others contain a mix of low- and high-rise buildings. For purposes of analyzing its portfolio, HABC considered each of the 58 components as separate entities.) In addition to assumptions and constraints, HABC also developed a set of business operating decisions, including: selling properties with the greatest losses; implementing strategies to attract the working poor; streamlining central office management; contracting out business functions; and, establishing minimum and ceiling rents. HABC officials considered the financial and policy implications of each of these options.

56. HABC officials believe that having larger numbers of working households with higher incomes than most present residents would reduce the costs of maintenance ("wear and tear"), utilities, and turnover.

57. This assumes that proposed, additional HABC stock-specific changes will result in revenues and costs similar to those projected to result from stock-specific changes outlined in the five-year plan, as evaluated in Part III.

58. HABC officials indicated that the current CGP level for Baltimore -- $47 million per year, based on HABC's expected share of the total Federal CGP appropriation level -- is needed just to keep up with ongoing modernization needs, and that there is no apparent end to that need. (The five-year time frame only reflects the CGP planning period, not the extent of need.) HABC officials also cite a massive backlog of modernization, estimated to be in the area of $500 million. About half of the annual CGP funding allocation would cover items included in the $500 million estimate.

It is unclear what the bottom-line effect on profitability would be if all $500 million worth of work were completed and paid for. It is reasonable, however, to assume that some properties would become profitable and others would still show net losses. The extent to which such work would attract tenants willing to pay market rents is also uncertain.

59. For analytical purposes, HABC officials were also asked to consider having to finance future modernization entirely through the Agency's own resources -- by borrowing the money, floating bonds, etc., and to regard the payback of such funds as an additional cost of doing business. This, of course, further added to the Agency's projected deficit position, and would require a much larger reduction in the size of its inventory to arrive at a break-even position.

60. Capital fund requirements could be reduced, in some cases considerably, as a result of the sale of 824 scattered site properties, as specified in HABC's strategy. For example, if $20,000 could be realized from the sale of each unit, capital fund needs could be reduced by more than $16 million. In considering various other alternatives, however, sales of land after demolishing developments was not seen as a means to yield revenues. In many situations, the problems with infrastructure, current code deviations, environmental hazards needing cleanup, etc. could be about as expensive to cure as any potential sales price for prepared land.

61. This is as of the time of this analysis, during the fourth quarter of 1995.

62. The point of departure for this analysis is the range of a $4 million deficit to a $5 million surplus, reported in the previous section.

63. This assumes that about 290 units proposed to be replaced off-site using $20 million in State funds would have costs and revenues similar to those on-site.

64. Under these circumstances, HABC's remaining external capital fund requirements would be $70 million for demolishing and redeveloping a high-rise development; according to HABC, such funds would be sought from a combination of State, City and private sources.

65. Annual Contributions Contract (ACC) obligations for debt service are not included in this analysis because they are considered sunk costs, and are to be paid by the Federal government regardless of any program changes that may be made.

66. To date, Baltimore has been awarded two HOPE VI implementation grants: a $50 million grant for Lafayette Courts and a $23 million grant for Lexington Terrace. For purposes of this analysis, it is assumed that such grants are not likely to be awarded on a yearly basis in the future, but that occasional special infusions of funds would occur from time to time. If the timeframe for awarding an amount equivalent to these two special grants, combined, were in the range of five to 15 years, the average grant funding available each year would range from almost as large as $15 million to as little as $5 million. For analytical purposes, it was reasonable, therefore, to assume that about $10 million would be available per year.

It should be noted that, in Baltimore, such special infusions of funds -- either in the form of multiple smaller grants like Lead-Based Paint Reduction, or one or two large grants like HOPE VI -- are expected to contribute to a reduction in the number of units that are out of the stock (unavailable for occupancy), and will support an occupancy level of about 95 percent. Currently, 15,890 units, or 90 percent of Baltimore's public housing inventory, is ready for occupancy. When modernization activities currently underway, and funded through a series of grants (including HOPE VI), are completed, 95 percent of the inventory will be ready for occupancy. Residents filling these units are expected to come from the pool of those who have been temporarily relocated during this modernization, as well as from the approximately 18,500 households on the waiting list.

67. Since most Section 8 certificate holders have, in the past, tended to gravitate to lower-rent areas within the City, for HABC households to be paying rents at the FMR limits would either mean that they had received special counseling designed to encourage them to move beyond traditional areas of Section 8 concentration, or that there were other rules or incentives in place to further that outcome. If counseling is the means by which certificate holders find housing at levels close or equal to the FMR limits, then counseling costs would have to be added in to the cost equation, and overall program costs would be greater. Although it is not known what such counseling costs would be, in the case of the Baltimore MTO program the total cost of counseling is $3,800 per household, with funds coming from HUD, HABC, and several other sources. Over a two-year period, the total amount of funding has been $546,000, to provide extensive counseling to, and advocacy on behalf of 143 households. In another program providing counseling to Section 8 certificate holders in Baltimore, funded by the Abell Foundation, the counseling cost is approximately $400 per household. Differences in content, duration, degree of individuation, administrative costs, and characteristics of those counseled, among others, are factors that could determine such costs.

68. HABC officials noted several circumstances in which it might be appropriate to continue to try to operate properties having net operating losses. For example: (1) there are instances where there have been substantial previous investments in properties that HABC officials would want to further support; (2) there are properties located in neighborhoods targeted for major redevelopment efforts, where HABC officials might want to continue operation and, in some instances, future modernization work to reinforce those efforts; (3) there are circumstances where the cost of selling, demolishing, or replacing properties would be too high, such as for those where lead-based paint abatement, asbestos removal, or land clearance would cost more than any revenues to be generated from selling the properties; (4) there are active resident or neighborhood organizations in some places whose views would need to be considered; (5) there are sites where HABC would want to continue to support previous socially beneficial activities -- such as where there have been “clean sweep” drug elimination efforts, “Step Up” modernization or maintenance projects, or recent additions or renovations to day care, senior, or community centers; and (6) there are personal factors that HABC officials or others would like to consider, such as where there is special familiarity or attachment to certain properties or neighborhoods.