



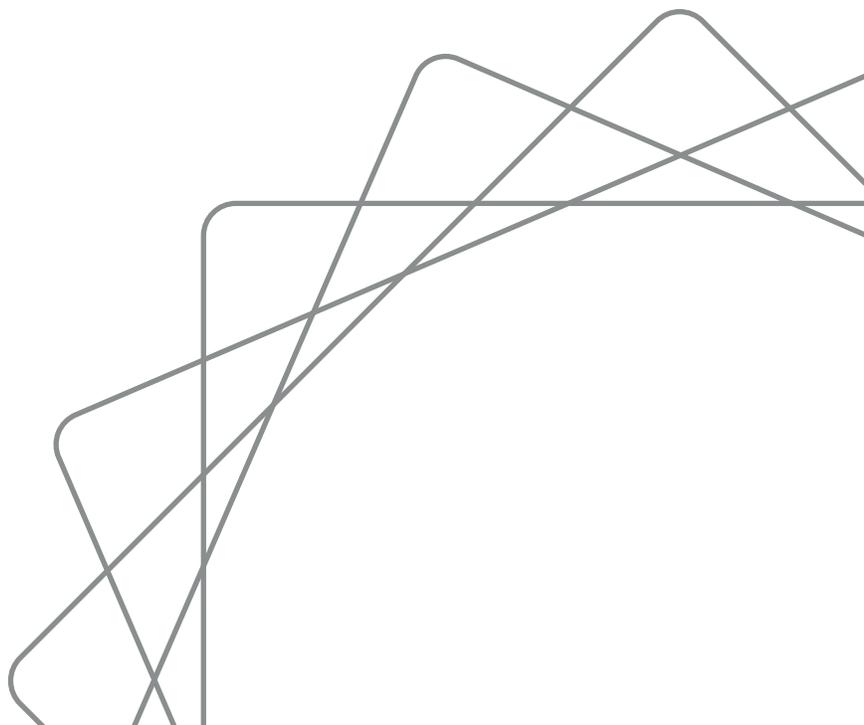
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ABT THOUGHT LEADERSHIP PAPER

How Much Money Should Be Set Aside for Accruals in HUD's Rental Assistance Demonstration?

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The physical condition of public housing and other publically-assisted low-income housing in the United States has had a checkered and storied past. Where and when it has been designed, constructed, and maintained well, it is a vital local housing asset. Where it has not been, it is a symbol of modern urban blight, a contributor to precarious living situations for low-income households, and a symptom of bureaucratic inefficiency.

Many reasons exist for the wide variation in perceptions and outcomes. One cause is the amount of funds needed for basic repairs and upkeep and sources of funds available to finance them. A large fraction of the public housing stock has high unmet capital needs, and funds available to address these needs are far lower than the balance of outstanding needs.

Abt Associates recently completed a study estimating public housing's capital needs and found that stock-wide there was a backlog of approximately \$21 billion in outstanding needs (in 2010 dollars). The mean backlog is \$19,000 per unit, and one quarter of units have needs below \$5,250 per unit, and one quarter above \$28,570 per unit. The backlog of capital needs is defined as the costs of repairs and replacements beyond ordinary maintenance required to make the housing decent and economically sustainable. The backlog of needs in the public housing stock was estimated through inspections at a nationally representative sample of 540 public housing developments across the country and applying statistical weights to the property-level estimates to obtain national estimates. At each sampled development inspectors observed the condition of more than 300 mechanical, electrical, and architectural systems with an external costing program that provides repair or replacement costs for each system based on the observed condition.¹

¹ Examples of systems are roof coverings, building exterior walls, boilers, elevator shaftways, refrigerators, bathroom fixtures, landscaping, parking areas, site electrical distribution systems, and building power wiring. For each observed system a trained inspector recorded the action level required to bring the system back to original working order, a take-off measurement or count of the number of times each system is present (for example the number of elevators or windows per building or the square footage of the

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In addition, once the current backlog of needs is met and properties are repaired to a moderate quality standard, they continue to accrue about \$3,100 per unit per year (in 2010 dollars) in repairs and replacement of systems as they age. The 25th percentile is \$2,443 per unit; the 75th percentile is \$3,790.² Accrual needs estimates are usually expressed as annual amounts for each of the next 20 years.

Repairs of backlog needs and newly accruing needs in public housing are generally paid for out of The Department of Housing and Urban Development's (HUD) Public Housing Capital Fund, which received federal appropriations of about \$2.5 billion per year in recent years³. In addition, since 2000 PHAs have been able to access the Capital Fund Finance Program (CFFP) to seek private loans to finance capital needs backlogs and ongoing capital improvements.⁴ A total of \$3.8 billion has been approved through the CFFP.

The latest source of funds for these ongoing needs is HUD's newly implemented Rental Assistance Demonstration (RAD). With an eye on private-sector funding strategies as well as sources, RAD is designed to allow up to 60,000 public housing units to be converted to one of two types

landscaped and parking areas), and the system's expected remaining useful life.

² Meryl Finkel et. al. "Capital Needs in the Public and Indian Housing Program". Abt Associates Inc. 2011

³ http://portal.hud.gov/hudportal/documents/huddoc?id=PH_Capital_Fund_2012.pdf. An additional one-time infusion of \$4 billion was provided through the American Recovery and Reinvestment Act (ARRA) of 2009.

⁴ For more details on the CFFP see HUD's website at http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/capfund/cffp

of Section 8 Housing Assistance: either project-based vouchers (PBVs) or project-based rental assistance (PBRA).⁵

One of the main purposes of RAD is to demonstrate how the conversion of current assistance to long-term, project-based Section 8 rental assistance contracts can generate access to private debt and equity to address immediate and long-term capital needs through rehabilitation. These funds will be subject to a RAD Use Agreement that will be recorded in first position. Unlike the CFFP, RAD permits debt to be secured by the covered projects. (Under CFFP the debt is secured by future capital funds, which are considered less sure by lenders). The Section 8 assistance received over time can be used to repay the loans. Contract rents will be equal to the project's current funding and will be adjusted annually by an operating cost adjustment factor, subject to the availability of appropriations for each year of the contract term. The initial contract will be for a period of 15 or 20 years depending on the type of conversion.

Developers and owners of all housing, whether assisted or unassisted, need to set aside funds to ensure that resources are available to address ongoing capital needs that accrue as a normal function of properties' aging. Equipment wears out and sometimes needs to be upgraded. Funds set aside for this purpose are commonly referred to as replacement reserves. As indicated in HUD's guidance on replacement reserve requirements for RAD properties, the replacement reserve is designed to address accruing capital needs, so we would expect public housing authorities (PHAs) to set aside reserves either at the time of development or each year in amounts sufficient to ensure that properties remain in good condition. HUD guidance states that:

The annual replacement reserve deposit should be equal to that amount which, if deposited annually, will be sufficient to fund all capital needs, as identified in the PCA physical condition assessment), arising during the first 20 years and otherwise not addressed upfront in either the rehabilitation or an initial deposit to the replacement reserve account, and sufficient to

maintain a minimum balance at the end of each year during that 20-year period that is at least 5 percent of the total, aggregate projected capital needs for that period.⁶

This document provides some information on the range of funds that PHAs and other multifamily property owners currently set aside in their reserves for accrual of capital needs, describes why deposits to public housing replacement reserves typically are substantially lower than in other comparable properties, and explains why PHAs properties should be setting aside more funds up front.

ACCRUALS OF CAPITAL NEEDS

Abt Associates' most recent study of capital needs in the public housing stock found that in 2010 dollars, on average, public housing units accrued \$3,155 per unit in new capital needs each year. This estimate is considerably higher than the typical replacement reserve requirement for privately-owned multifamily properties that receive other forms of assistance, including properties subsidized by the Low Income Housing Tax Credit. These reserves tend to be on the order of \$250–\$400 per unit per year.

To assess the reasonableness of our accrual estimates, we examined other estimates of long-term capital needs in the public housing and HUD-insured multi-family stocks. Exhibit 1 summarizes the accruals estimates from all of these sources. One source is a sample of past physical needs assessments (PNAs) that PHAs now conduct for their properties, as required by HUD. As part of the data collection for the 2010 capital needs study, Abt collected PNAs for 32 properties that provided estimates of future capital needs over the next 20 years, including accruals.⁷ These averaged \$2,053 dollars per unit per year. Among the 32 PNAs provided by the sampled PHAs for the 2010 study, only three developments had average accrual needs below \$1,000 per unit; the lowest was \$887. The average

⁶ PIH-2012-32 (HA) Rental Assistance Demonstration—Final Implementation. P. 69

⁷ The inspection companies included Yeager and Boyd, LLC, EMG, BC Stewart & Associates, WBRC Architects-Engineers, U.S. Housing Consultants

⁵ For further details on the Rental Assistance Demonstration see HUD's website: <http://portal.hud.gov/hudportal/HUD?src=/RAD>

EXHIBIT 1

ESTIMATES OF AVERAGE ANNUAL ACCRUALS OF CAPITAL NEEDS IN PUBLIC AND ASSISTED HOUSING

	Sample	Average Annual Accrual per Unit Estimate (in 2010)
Abt Estimates 2010 Capital Needs Study	550 public housing developments in 2010, results weighted to national number	\$3,155
PHA Provided PNA Estimates for the Capital Needs Study Sample	Non-random subset of 32 the 550 developments	\$2,053
Abt/Onsite-Insight Estimates for Chicago Public Housing 2006	23 public housing developments in Chicago	\$1,700
Abt/ DLR Evaluation of Portfolio Re-engineering Demonstration 1999	15 privately-owned assisted properties going through portfolio re-engineering	\$1,300
Portfolio Re-engineering Demonstration 1999—contractor provided	15 privately-owned assisted properties going through portfolio re-engineering	\$800

accrual across the 32 developments was \$2,053 (in 2010 dollars), including five developments with estimates over \$3,000.

Abt Associates and On-Site Insight also estimated the capital needs and accrual needs in the Chicago public housing stock in 2006. For that study, a total 23 public housing developments owned and managed by the Chicago PHA were inspected. Accrual needs were estimated at \$1,700 per unit per year—lower than the accrual estimates in the capital needs study. Six out of the 23 developments had annual accruals above \$2,000 per unit. The rest were in the \$1,000 to \$2,000 range.⁸

⁸ Only two of the Chicago developments had accrual estimates below \$1,000, with the lowest at \$878. While OSI was the inspector for both that study and the most recent Capital Needs study, the methodologies used to estimate accruals were different. For the Chicago study, OSI used accounting methods that they would typically use for their work for individual clients. In particular, they assumed a “phase in” approach for replacement of systems that have reached their useful life, while the recent capital needs study assumed that all replacements occur when the system reaches the end of its useful life. For example, if all refrigerators in a property need replacing, we assumed they would all be replaced simultaneously. Using the “phase in” approach, the Chicago estimates spread costs over a longer period of time. In addition, the properties in the Chicago study included primarily units designed for and occupied by the elderly, which are smaller and require less frequent system replacements and thus have lower accrual needs.

In contrast to the range of accruals estimates for public housing found in these studies, studies of publically-assisted properties that were not public housing provide a lower range of accruals estimates. For example, contractors hired by the private owners of HUD-assisted properties that entered HUD’s 1999 Portfolio Reengineering Demonstration provided annual accruals that ranged from \$200 to \$2,100 per unit averaging \$800. Estimates from Abt and the DLR Groups’ evaluation of that demonstration’s properties were higher, averaging \$1,300 per unit.⁹

REPLACEMENT RESERVES

The estimates of accruals represent the *total amount* of capital expenses required to cover all expected ongoing repairs and replacements beyond ordinary maintenance, assuming all immediate needs are met. In comparison, resources set aside in replacement reserves accounts are just one, among many, of the funding resources available to address future capital needs that can be employed by property owners. Property operators typically do not expect replacement reserves alone to be sufficient to cover all the ongoing capital expenses.

⁹ James Wallace et al. *Evaluation of HUD’s Portfolio Reengineering Demonstrations*. Final Report to HIUD (Abt Associates December 1999).

This is evidenced both by HUD’s guidance in its Multifamily Handbook and by the findings from Abt’s recent study of LIHTC properties. HUD’s Multifamily Asset Management and Project Servicing Handbook makes it clear that there is no expectation for replacement reserve funds to cover all accrual needs:

Many projects with HUD-insured or HUD-held mortgages were underwritten with forty-year mortgages and with estimated economic lives of fifty-five years. The Reserve Fund for Replacements was established to help ensure that the physical life of the buildings and structures would extend to the assumed 55-year economic lives. It was not the original purpose of this Reserve Fund to provide for a complete, dollar for dollar, capability of replacing all the building structural components and equipment as these wear out but rather to provide a readily available source of capital that will help defray these costs in the latter years of amortization of the mortgage note.¹⁰

Abt’s recent study of Low Income Housing Tax Credit (LIHTC) properties at year 15 found that the annual reserve contribution for that housing typically runs between \$250 and \$400 per unit per year, but occasionally is higher. The general consensus of those interviewed for the study report was that these reserves were insufficient after 15 years to cover current needs for renovation and upgrading. For example, one large investor said that most LIHTC properties—with a few large-scale properties as possible exceptions—run out of reserves between the fifth and eighth years and, after that, spend reserves almost as soon as they are funded.¹¹ Reportedly, the expectation is that property operators will obtain new infusions of capital to conduct major repairs—either through the sale of the property or through refinancing.

¹⁰ HUD Multifamily Asset Management and Project Servicing Handbook (4350.1, REV-1) P. 4-4, http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_35335.pdf

¹¹ Jill Khadduri et al. “*What Happens to Low-Income Housing Tax Credit Properties at Year 15 and Beyond?*” Abt Associates Inc. May 2012, p. 45. Ernst and Young’s study of the tax credit properties corroborated that finding, noting that on average owners are depositing about \$250 per unit per year in the reserve for replacement account: “*Understanding the Dynamics V Housing Tax Credit Investment Performance,*” Ernst and Young 2010

In both of these categories of privately-owned multifamily properties (LIHTC and HUD multi-family insured) it is recognized that replacement reserves are not meant to be the sole source of funding for ongoing repair needs. In public housing, however, the primary source of funding for repair needs is the annual Capital Fund, through which HUD provides grants to PHAs based on an allocation formula that distributes available funds. These funds cover development, financing, modernization, and management improvements. The Capital Fund is funded well below the level needed to address existing needs, let alone newly accruing needs despite the larger accrual needs in this stock.

HOW MUCH SHOULD PHAS SET ASIDE FOR ONGOING ACCRUAL NEEDS FOR RAD PROPERTIES?

Based on the analysis provided above, we recommend that when PHAs prepare their budgets for renovating properties under the RAD demonstration, they set aside amounts closer to our estimates of accrual rather than the traditional replacement reserve amounts. As shown above, public housing properties accrue somewhere on the order of \$3,000 per unit per year in new capital needs once properties are repaired and renovated to moderate standards. Since, even under RAD, former public housing properties generally will not have options for infusions of new funds that are above the subsidized contract rents, developers should set aside necessary funds to ensure they can pay for ongoing accruals as part of the initial funding. For a 100 unit property, this would mean approximately an additional \$4.5 million in funds to fund accruals for 20 years.¹²

This estimate contributes to the growing body of evidence that public housing properties have larger capital needs compared to other housing. Every additional opportunity for accessing funds to cover the costs of filling those needs—like RAD—should be explored.

¹² Assumes 3% annual return on investments and 0% inflation.

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