NATIONAL LOW INCOME HOUSING COALITION

The Rental Housing Affordability Gap: Comparison of 2001 and 2003 American Housing Surveys

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NATIONAL LOW INCOME HOUSING COALITION

Established in 1974 by Cushing N. Dolbeare, the National Low Income Housing Coalition is dedicated solely to ending America's affordable housing crisis. NLIHC educates, organizes and advocates to ensure decent, affordable housing within healthy neighborhoods for everyone. NLIHC provides up-to-date information, formulates policy, and educates the public on housing needs and the strategies for solutions.

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This revised version corrects errors that appeared in Tables A3 through A10 of the report as originally published. These errors were limited to the tables in the printed document and did not affect the written analysis, which remains unchanged.

Introduction

Analysis of data from the 2003 American Housing Survey (AHS) shows there were 7.7 million Extremely Low Income (ELI)[1] renter households and just over 6.0 million rental units affordable at or below the ELI threshold. The result was an *absolute deficit* of affordable rental housing for these households of just fewer than 1.7 million units.[2]

Only 2.7 million ELI households, however, actually occupied units affordable at or below the ELI income threshold. Nearly 2.8 million of these units were occupied by households with higher incomes. As a result, including vacant units,[3] there were only 3.3 million units that were "affordable and available" to ELI households in 2003, leaving at least 4.5 million households nationally with little choice but to spend more than they could afford for their homes. Regionally, the shortages were greatest in the Northeast and West.

An analysis of changes between the 2001 and 2003 American Housing Surveys suggests that the supply and demand conditions faced by ELI households looking for rental housing did not improve and likely worsened as the number of ELI renter households grew and the stock of units affordable to them declined. For every 100 ELI renter households, the number of affordable units either currently occupied by an ELI household or vacant slipped from 44 to 42. Regionally, conditions appear to have worsened in the South and Midwest while they remained fairly stable in the Northeast and may have improved in the West.

At the same time, an increase in the total stock of rental units affordable to households with higher incomes was met with a decline in the number of households with moderate or above-moderate-income levels. These trends indicate a continued shift to homeownership among higher-income households in these years, even as a generally strong real estate market encouraged further multifamily construction. As a result, while market conditions tightened for the lowest income renters, the rental market overall became softer in this period, reflected in a climb in national rental vacancy rates from 9% in 2001 to 11% in 2003.

A Question of Supply and Demand

The generally accepted standard of housing affordability is that housing should cost no more than 30% of a family's income.[4] (If a unit is occupied, housing cost is the monthly rent or

[1]Federal statute defines ELI households as those earning less than 30% of the median income for the metropolitan area or rural county where they live, the so-called Area Median Income (AMI). In addition to ELI, the income ranges used to categorize both tenant households and units are Very Low Income (VLI) over 30% to 50% of AMI, Low Income (over 50% to 80% of AMI), Moderate Income (over 80% to 120% of AMI) and Above Moderate Income (over 120% of AMI).

[2]As described in Appendix 1, assumptions of the analysis and adjustments to the data made here likely make this estimate conservative. See also Hardiman, et al., 2005.

[3]563,000 units affordable to ELI households were vacant in 2003. This can be attributed primarily to normal turnover in the market, but unobserved quality or location problems or a similarly unobserved transition in the unit's status from renovation, conversion to ownership, or loss through neglect all contribute (Joint Center for Housing Studies, 2005).

[4] The use of a housing cost to income ratio (HCIR) as a "rule of thumb" for housing affordability is rooted in 19th century empirical studies and has a long history. While for much of its history federal housing policy used an HCIR at between 15% and 25% (Feins & Lane, 1981), the Housing and Urban-Rural Recovery Act of 1983 made a 30%

mortgage paid plus utilities, less any portion that may be covered by government subsidies. For vacant units this is simply the expected or imputed rent.) Paying more than 30% of income is an indicator, albeit imperfect, of significant hardship affecting the ability of a household to meet both its housing and other needs. Clearly, as a fixed percentage of income, this standard is most relevant to those with the lowest incomes (Feins & Lane, 1981; Goodman, Belsky, & Drew, 2005).

In 2003, there are over 30 million households in the United States who lived in unaffordable housing, 14 million of which were renter households. Nearly six million of these renter households were ELI, the majority of whom paid over 50% of their income for housing. These data indicate that housing, and particularly rental housing, is unaffordable for a significant number of people in the U.S.

But these numbers require some context. Choice of housing is not formally constrained by the 30% of income standard and households may choose to pay more than 30% of income on housing even when more affordable options exist. On their own, high or rising housing cost burdens do not necessarily inform us about the market conditions under which families are making their housing choices. Providing this context requires a definition of what is meant by a shortage of safe affordable units.

Defining a Housing Shortage

A shortage of affordable housing can take two forms. If a market has more families at or below a specific income threshold than units considered affordable at or below that threshold, there is an absolute shortage of affordable units for those households in that market. In other words, at current rent levels, even if only the lowest income households filled the most affordable units, there would still be a shortage of affordable units.

This leads to the second type of shortage. Even when there is not an absolute shortage, the supply of affordable housing can still be constrained because many renters pay less than 30% of their income on housing costs. While paying less than 30% is a choice households are free, indeed are encouraged, to make, the result is that units nominally affordable to households of a particular income level are occupied by higher-income households and the supply of affordable units available to lower income households is further limited.

Thus, a better measure of the current *availability* of affordable housing relative to the demand may be to add the number of affordable units occupied by households at or below a threshold income to the number of vacant units for rent affordable to these households and compare this to the total number of households at or below the threshold. If there are fewer units than households in this calculation a shortage of "affordable and available" housing exists.[5]

HCIR applicable to all current rental housing assistance programs, making this the federal government's official affordability standard.

[5]The concept of "affordable and available" housing is associated with Kathryn P. Nelson, the principle author of the "worst case needs" reports to Congress prior to her retirement from HUD in 2003. It was also used in an earlier NLIHC assessment of changes in rental housing stock between the 1990 and 2000 Censuses (Nelson, Treskon, & Pelletiere, 2004). NLIHC's analysis of the rental affordability "occupancy gap" in the AHS has its roots in the work of Cushing N. Dolbeare (NLIHC, 2001, 2002).

Clearly, if there is an absolute shortage of affordable housing, there is also a shortage of affordable and available housing. However, a shortage of affordable and available housing does not necessarily mean an absolute shortage of affordable housing. From the perspective of creating policy, the nature of the shortage may be significant; from the perspective of a tenant looking for a unit, a shortage is a shortage.

Gap Analysis

An affordability gap or mismatch analysis is the method used to assess the affordability and availability of the housing stock. Affordability gap analysis compares broad categories of households by income to broad categories of units by cost. (A detailed discussion of methodology is found in Appendix 1.) The advantage of this approach is that it explicitly looks at the current demand for housing separately from the current supply. The disadvantage is that, as with any categorical analysis, a trade-off must be made between how fine the categories are made and therefore how well they can represent the underlying population, and the summary value of the statistics. A related concern is that the size and design of the AHS, which is particularly suited to housing affordability analysis, only allow analysis of broad national and regional markets and not the more local markets in which most housing choices are made. Even with these limitations, however, the analysis here conveys the broad outlines of the problems of rental affordability and provides a useful and comprehensive summary of national and regional patterns and trends.[6]

The National Picture in 2003

While renter households are somewhat evenly distributed across the income categories, the bulk of the units in the U.S. rental housing market become affordable only with an income between 30% and 80% of Area Median Income (AMI), resulting in a surplus of units affordable to households in these Very Low Income (VLI) and low income categories. (See Figure 1.) Data that support Figures 1, 2, and 3 are found in Appendix 2, Table A1.

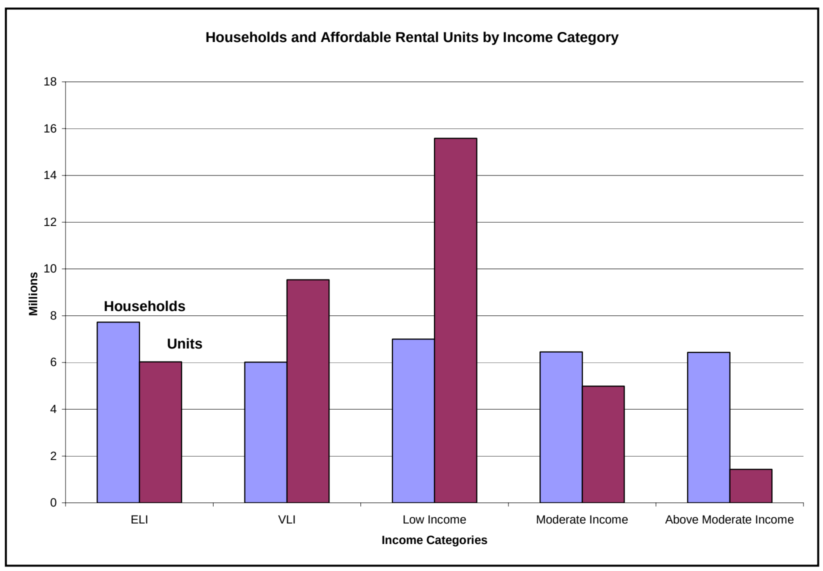

Figure 1. Cost Distribution of Rental Units Does Not Match Incomes of Tenants

[6] Though this analysis favors summary over detailed statistics, readers should note the estimates of the shortage of affordable housing for low income households provided here are necessarily conservative. Recent analyses by HUD (Nelson et al, 2003, Hardiman et al, 2005) have shown that using smaller income categories not only improves the accuracy of the analysis but also increases indications of a shortage of affordable housing. Similarly Nelson, Pelletiere, & Treskon (2004) using 2000 Census data for states found that lowering the level of geography also likely increases these estimates.

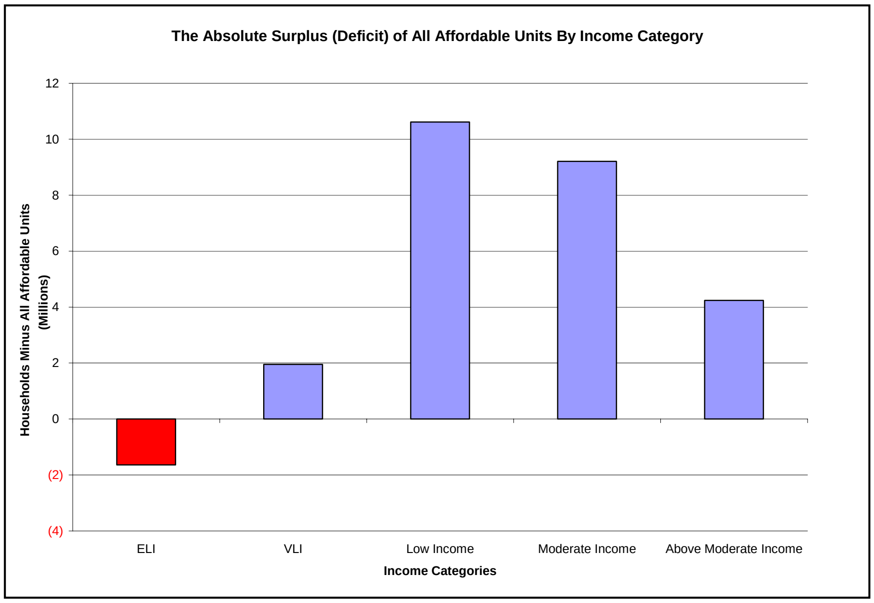

Figure 2. Only ELI Renters Face an Absolute Shortage of Affordable Units Nationwide

By definition, lower income households cannot afford to rent units in a higher affordability category while households in a higher-income category can afford to rent units in a lower affordability category. Thus, while Figure 1 shows there is a "shortage" of units *specifically* affordable to those earning over 80% and below 30% of AMI, Figure 2 shows clearly that the only real shortage of affordable rental housing occurs for renters in the lowest income category. There were 7.7 million ELI renter households in 2003 and just over 6.0 million rental units affordable to these households, resulting in an absolute shortage of just fewer than 1.7 million affordable units for ELI households. There was no similar absolute shortage for any of the other income groups.

As households earn more they are more likely to rent "down market," i.e., spend less than 30% of their income on rent. As a result, many affordable rental units are neither occupied by nor available to lower income households. In 2003, 65% of all ELI renter households were renting units in an affordability category above their own and the proportion of households renting above their affordability threshold fell quickly in each successive income category. See Figure 3.

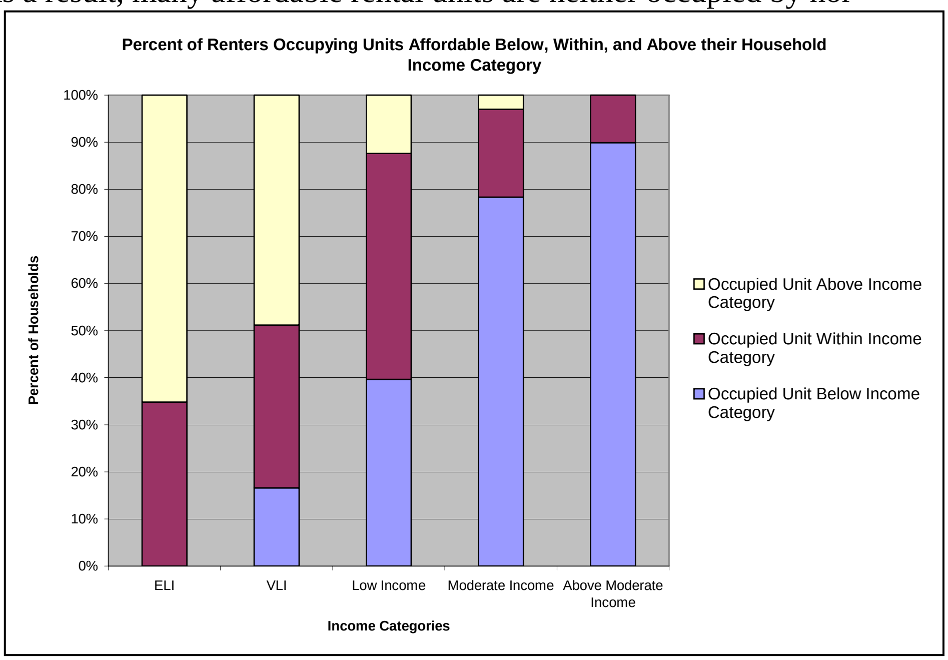

Figure 3. Most Upper Income Households Rent Units Affordable to Lower Income Households

The pattern exhibited in Figure 3 also means that, even though there is no absolute shortage of affordable units for households in the VLI category as is shown in Figure 2, there is a shortage of units that are both affordable and *available* to these households.

This is confirmed by the ratio of affordable and available units to households in each income category. In 2003, for every 100 ELI renter households, there were only 42 units of housing affordable to them that were either vacant or currently occupied by an ELI household. This affordable and available ratio improves to 72 units for every 100 households when the threshold is raised to include all households earning the VLI threshold or less. When the threshold is raised further to 80% of AMI, however, there are 108 units of affordable rental housing available for every 100 renters, indicating a surplus once the low income threshold is reached.

The shortage of affordable and available units for the lowest income renters is evidence that the current rental market is not meeting the current demand for housing. Indeed, even as the only housing available to many low income households was unaffordable, the vacancy rate for the highest-cost apartments stood at 15%. The rental vacancy rate for all units was 11%, while that for units affordable at or below the ELI threshold was 9%. The absolute shortage of units affordable to ELI households suggests, however, that even if units were made available strictly based on ability to pay, current costs and irrespective of location, there would still be a nationwide shortage of affordable rental units for the very lowest income renters.

National Trends 2001 to 2003

The shortage of rental units affordable to ELI households did not improve from 2001 to 2003 and appears to have worsened. A comparison of 2001 and 2003 AHS data shows the absolute deficit of rental units affordable to ELI renter households grew by nearly 206,000 units due to a national increase in the population of lowest income renters and a decline in the number of units affordable to them. (Tables A1 and A2 in Appendix 2 provide affordability gap snapshots for 2003 and 2001 respectively.)

The number of rental units affordable to those earning *over* 30% of AMI, however, appears to have grown faster than the number of renter households over this period. For those earning 31% to 50%, the growth in affordable rental units outpaced the growth in renter households, but the increase was not enough to offset the losses of units affordable to ELI households. As a result, the supply of all units affordable to VLI renter households, including rental units affordable to ELI households, grew slightly over this period.

There were also similar increases in the cumulative number of units affordable to low, moderate, and above moderate-income renter households. At the same time there was both an outflow of moderate and above moderate-income households from renting, primarily to homeownership[7] (thereby decreasing the total number of upper-income renter households), and a downturn in the economy, which dampened incomes overall and curtailed employment related moves. Both of these trends likely decreased the demand for relatively higher-priced rental units. In this period,

[7]According to the Housing Vacancy Survey, while above median income families saw their rate of homeownership increase fairly consistently from 82% at the beginning of 2001 to nearly 85% at the beginning of 2005, the rate for those earning less than the median income remained anchored around 52% over this period (U.S. Census, 2005).

the rental vacancy rate for units affordable within the above moderate-income category rose from 13% to 15%, while that for units affordable at or below the ELI threshold fell from 10% to 9%.

The general conclusion that can be drawn from an analysis of the national data is that, while between 2001 and 2003 the pattern of rental affordability remained stable, all available indications suggest that the change that occurred concentrated problems of affordability even more among the poorest people in the U.S. as greater demand was met with a more limited supply of affordable units.

Regional Variation

While the design and sample size of the AHS data limits this analysis to broad national and regional comparisons, looking at the trends and patterns of rental affordability within census regions reveals some important variations in rental markets. (Tables A3, A5, A7, and A9 in Appendix 3 provide the data for 2003 on the Northeast, Midwest, South, and West respectively.)

In 2003, the mismatch between rental housing demand and supply is greatest in the West, where there was an absolute gap of affordable rental housing for ELI renters of nearly 557,000 units. This deficit was slightly more than the gap of 463,000 units in the Northeast and the roughly 311,000 units in the Midwest and 364,000 in the South. In all regions except the West the absolute gap becomes an absolute surplus of units when the income threshold is raised to 50% of AMI. In the West, however, a deficit of nearly 21,000 units specifically affordable to VLI renters means the absolute shortage of affordable units extends even to those earning 50% of AMI or less.

In all regions, significant proportions of ELI and VLI renters live in housing that is unaffordable, and the proportion of renters living in unaffordable housing declines rapidly with income. Still, in the West, the rate of ELI renter households living in housing that is affordable only at higher-income levels is significantly higher, 72%, compared with 65% in the Midwest, 64% in the South, and 60% in the Northeast (Figure 4). Moreover, in the West, as the income thresholds are increased the first significant drop-off in the incidence of unaffordable housing of 42 points

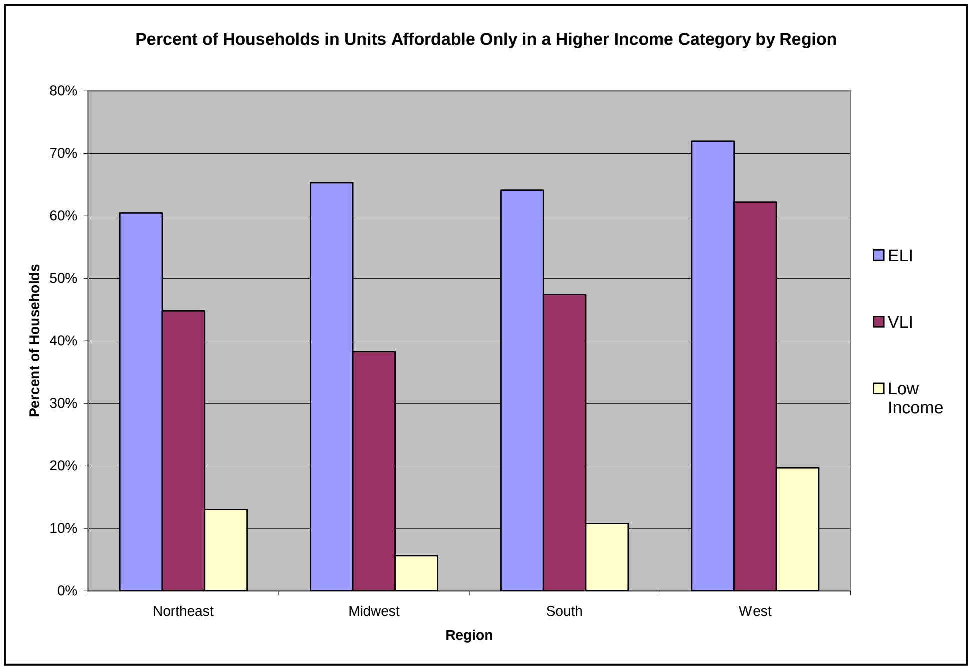

Figure 4. In the West, the Incidence of Unaffordable Housing Extends Further Up the Income Distribution.

occurs when the threshold is raised from 50% to 80% of AMI. Between the 30% threshold and the 50% threshold the drop is only 10 points, compared to 15 points in the Northeast, 17 in the South, and 27 in the Midwest.

This regional pattern is also reflected in the fact that there were only 31 units of affordable housing available for every 100 ELI renters in the West in 2003. In the Northeast and Midwest there were 44 units, and in the South there were 46 units affordable and available for every 100 ELI renter households. Though the West stands out, even in the South fewer than 50% of such renter households had an affordable unit available to them.

Regional Trends

Returning to a comparison of 2001 AHS data to 2003 AHS data, regional trends are examined. (Tables A2, A4, A6, and A8 in Appendix 3 provide gap statistics for the four regions from the 2001 AHS.)

Overall, the Northeast appears to have experienced a decline in renters (163,000) while the total stock of rental housing remained fairly stable. The number of ELI renter households declined by 39,000 from 2001 to 2003, while the number of units affordable to ELI renter households increased by 30,000. Both of these changes are statistically insignificant; the supply and demand conditions at the bottom of the market remained fairly constant. The numbers of VLI renters increased by roughly 42,000 and there was a corresponding increase of 36,000 units specifically affordable to them. More striking is that there was a loss of nearly 272,000 units specifically affordable to low income renters even as the number of renters in this category grew by 19,000.

At the upper end of the market in the Northeast conditions loosened considerably, as 185,000 moderate and above moderate-income renter households left the market and the stock of units affordable above 80% of AMI increased by 219,000 units. Over this period the vacancy rate increased by nearly 2% to 7%, but the affordable and available ratio for ELI renter households was essentially unchanged at 44 units per 100 households. Thus, market conditions in the Northeast appear to have been stable with some shifting of the surplus away from the center of the market.

The data for the West suggests that at the lower end of the market there was an insignificant amount of change, with an increase of 35,000 ELI renter households and a corresponding increase of 52,000 units affordable to them. As a result, the absolute gap in affordable rental units declined by 17,000 units. While the number of VLI renter households increased by an insignificant 38,000, there was a much larger decrease of 133,000 units specifically affordable to them. Low income renter households grew by 18,000 households but saw an increase of 103,000 units specifically affordable to them. The number of moderate and above moderate-income renters declined by 130,000 while the number of units specifically affordable to them increased insignificantly.

In the West, the number of affordable *and available* units per 100 ELI renter households actually increased from 31 to 32. Thus, the drop in demand and the increase in supply appear to have eased some of the pressure at the bottom of the market. The affordable and available ratio decreased for households below the VLI threshold, reflecting the sharp drop in units specifically affordable to VLI households, but increased for all higher-income thresholds. There is some indication that the Western rental market may have become more slack over this period, with vacancy rates rising slightly for all but the lowest cost units. Despite this, the West remained the tightest rental market in 2003.

In the Midwest, the market loosened between 2001 and 2003, but the market conditions for ELI renter households appear to have deteriorated dramatically. The number of ELI renter households increased by some 59,000 in this period, while the number of affordable units declined by 145,000 units. As a result, the number of units affordable and available to every 100 ELI renter households appears to have fallen sharply and significantly from 50 to 44, the greatest decline among the regions.

For VLI renters, the number of units specifically affordable to them increased by 81,000 but the number of households increased by 76,000, indicating little change. Thus, the affordable and available ratio for households below the VLI threshold also fell, from 89 to 87 units per 100 households. In general, the availability of affordable rental units increased for renters in all other income categories as the number of renters in each category declined and the number of affordable units increased. While the lower end of the market grew tighter in the Midwest, with vacancy rates falling for units affordable below the ELI threshold, the market as a whole gained vacant units with vacancy rates climbing one point to 13%.

In the South, though the number of affordable units increased by 14,000, the number of households in the ELI renter category also increased by 75,000. As a result, the affordable and available ratio showed a decline from 48 to 46 units per 100 households. The ratio for all other income thresholds improved as relatively small increases in the number of households were met by large increases in affordable and available housing. The vacancy rate for the entire rental market increased from 11% to 13%, with increases in all categories except ELI where vacancies declined slightly.

Implications

The analyses presented here provide strong indications that as of 2003 there remained a significant mismatch between the demand and the supply of affordable rental housing nationwide. In other words, despite rising homeownership and rental vacancy rates over this period, the market conditions for the lowest income renter households did not improve and the available evidence suggests they may have even deteriorated. Indeed, other research (Nelson et al, 2003; Nelson, Pelletiere, & Treskon, 2004; Hardiman et al. 2005) has found that this gap has been persistent for the past few decades.

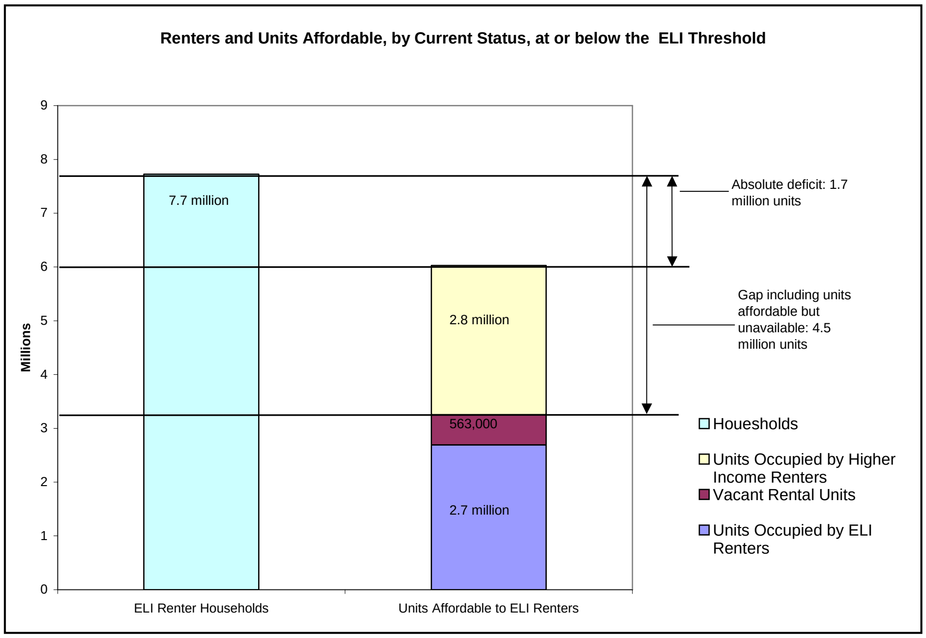

Figure 5. A Lack of Units and "Renting Down" Brings the Effective Shortage of Affordable Rentals for ELI households to 4.5 million

There is an absolute shortage nationwide of the very lowest cost rental units. Moreover, even units that are nominally affordable are not always serving those who need them most. See Figure 5.

Standard economic theory suggests that in the presence of either type of shortage, the market should adjust to meet demand. If there is a deficit of low-cost units and a surplus of high-cost units across the entire market, theoretically units should "filter down" as prices drop for the lower-quality, high-cost units. Not only should prices drop for vacant units, but some tenants would be expected to "filter up" as higher-quality vacant units drop in price, in the process freeing up their current units for lower income renter households. If there is a shortage of units throughout the market, however, production should occur where it is most profitable with the previously existing units filtering up or down depending on where production occurs and where remaining market demand remains.

What explains the persistent mismatch? A number of things are at work to limit the extent to which these market processes may operate. Most fundamentally, there is some cost below which a unit cannot be built and the current housing stock cannot be profitably operated. If, for a variety of policy reasons, housing cannot be built and operated below a threshold that meets prevailing incomes, then the mismatch will persist. Most directly, some localities discourage the production of rental housing generally and, more specifically, rental housing likely to serve lower income households. Policies that subsidize homeownership or otherwise encourage development for upper-income households may also limit private interest in developing the needed lower income rental units. Other policies such as federal and local tax policies or building codes may reduce the pressure to lease up units and owners' interest in making vacant units habitable for low income tenants.

Furthermore, a home is not a commodity. One home is not interchangeable with the next. Not only is a home unique in terms of location and amenities, but once they have taken up residence, people tend to not only shape their homes to their lives, but to also shape their lives to their homes. Better off renters may choose not to vacate a home even if they can "afford more" and renters who see their incomes decline (or not increase as expected) or who see their housing costs increase may be willing to pay unaffordable rents to the detriment of other needs, to avoid moving. This attachment to place, as well as things like the cost associated with moving, limit mobility in the market, hinder market adjustments, and skew perceptions of demand. Finally, many rental units are in multifamily units, limiting the ability of landlords to set vastly different rents for similar units and further limiting the opportunities to meet demand.

This raises another issue. Even in the absence of regulations, the costs of destroying and replacing a unit of housing in any specific location are not trivial. Yet, the value of housing is in part the value of a bundle of location-dependent services that include neighborhood amenities, transportation, schools and economic opportunities. So, even where it appears possible to build additional affordable housing without subsidy in areas without pre-existing housing or development, the remote location itself is likely to limit market demand from low income households for such units. These households are less independent of publicly provided services such as transportation and schools and more dependent on local employment opportunities than are higher-income households. They stand to gain more from the agglomeration of jobs and services provided by a central location.

These are among the factors that lead to a persistent affordability gap for the lowest income renters. Yet, even in the absence of significant regulatory barriers and in fairly active rental markets, many households simply earn less than what is required to build and operate decent, safe housing whether due to age, disability, personal circumstances, or economic conditions. This population requires a subsidy of some kind to meet its most basic shelter needs.

As a result, if the national goal of safe and decent housing for all is to be realized, public policy must directly subsidize the production and operation of units and thereby indirectly reduce what tenants must pay, or directly supplement tenants' incomes to make market rate units affordable. In the short term, however, in many markets a lack of well-situated, affordable units and various barriers to development will mean that income subsidies alone will only result in more money chasing the same units and ultimately lead to price inflation and increasingly costly housing. For this reason, in most markets some combination of income subsidies and subsidized production will be required to meet the housing need. Without such an approach, the affordability gap will persist.

Conclusion

In 2003, there was a clear gap between what households could afford and what the current market was providing. The analysis here and elsewhere (Nelson, Vandenbroucke., Lubell, Shroder, & Rieger, 2003, 2005; Nelson, Treskon, & Pelletiere, 2004) indicates this gap is a persistent. A significant problem appears to be the failure of policy, particularly federal housing policy, to provide or encourage the production of rental units targeted at the lowest income households to complement tenant-based income subsidies. Instead, since the early 1980s, the production of such units has ground to a halt and newer housing production programs such as the Low Income Housing Tax Credit, HOME and even the remaining Public Housing have seen their income targeting raised. This has left an increasing number of tenant-based subsidies to chase a more costly and deteriorating low income housing stock, with the foreseeable result of higher program costs.

The solution is to use government to address what the data show is the greatest priority by building, directly or indirectly, more housing for the lowest income Americans. As these and other data show, however, just as some people have greater need than others, some places have greater need than others. Moreover, these data show clearly that the nation is losing its affordable housing stock even as the need grows. The existing stock must be preserved and the losses staunched if new production is to have an impact.

Using the best available data, these investments in production must be targeted at the locations where there is the most need and greatest economic opportunity. Only with such a balanced approach to housing policy, that uses targeted housing production strategies as well as tenant-based income supplements, can the nation's affordable housing gap be bridged.

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Appendix 1: Data and Methods

The data used in this report are those in the 2003 American Housing Survey Public Use File dataset. The data have been modified in a number of ways by NLIHC. As a result, historically, NLIHC estimates of ELI renter households and units in its gap analyses have been lower than HUD estimates (see for example NLIHC, 2001 p. 11, 2002; Hardiman, Martin, Schroder, Steffan, Susin, Vandenbroucke, Yao, 2005), and this paper is no exception. Though there are likely numerous small differences in methodology that may contribute to this difference, this year two differences in particular are of note.

First, the Fair Market Rent (FMR), Area Median Income (AMI), and income limit values used in preparing the AHS public use files for this report were estimated using methods used by HUD prior to the 2003 AHS and are based on a matrix of 1995 values, adjusted for inflation. These variables are used, for example, to adjust values for households with zero and negative incomes, which the AHS has been prone to over-represent. Since 2003, HUD has used the actual income limits for its analyses. Since 2002, HUD has changed the way it calculates income limits and has implemented a hold harmless policy that has had the effect of ratcheting up median incomes and official thresholds for VLI and ELI households (NLIHC, 2006). The likely effect of this is that the income cut-offs for HUD analyses for median income, and the VLI and ELI thresholds are higher, expanding the number and the incomes of the households included.

Second, upon review HUD and NLIHC appear to handle income limits for units (as opposed to households) and vacant unit costs slightly differently leading to further differentiation on the unit side of the gap equation.

One further adjustment of note is that there were roughly 300,000 renter households that the AHS reports have no income or negative income and who also are reported as living in physically adequate, uncrowded units, for which they pay housing costs above the local FMR. For the purposes of this analysis, these households are assumed to be under-reporting their income and are considered “Moderate Income.” If these households were considered ELI, they would raise the number of ELI households to roughly eight million and the absolute gap in affordable housing to over two million units.

The data in 2001 and 2003 were weighted using HUD weights from the 2000 Census (WGT00_90, and WEIGHT_N respectively). The file used for the 2003 data was a revised weight released by HUD, February 16, 2006. The fact that the wgt00_90 weight is based on 1990 metropolitan definitions and WEIGHT_N is based on 1980 definitions is not a reason for concern. According to HUD, “both weights should give the same results when you do regional or national tabulations. Their differences matter only when you are concerned with metropolitan areas.” (Vandenbroucke, 2006).

The method used in this analysis is an affordability gap or mismatch approach. The first step is to categorize current renter households according to their income. Second, occupied and vacant for-rent units are categorized according to the income needed to afford their current rent and utilities, i.e., by spending no more than 30% of income on them. The categorization of units is done without regard to the incomes of the current tenants.

Since income and cost levels vary across the U.S., in keeping with the practice of federal housing policy, income thresholds are given as percent of the local AMI. In addition to ELI, the income ranges used to categorize both tenant households and units are Very Low Income (VLI, over 30% to 50% of AMI), Low Income (over 50% to 80% of AMI), Moderate Income (over 80% to 120% of AMI) and Above Moderate Income (over 120% of AMI).

After tenants and units have been categorized, units are “matched” to tenants. There is a match if the unit cost category for a household matches its household income category. For example, tenants in the ELI category are matched to their units if they are renting apartments affordable at or below the ELI threshold. A household is “mismatched” if it is renting a unit affordable to a household in a lower income category or a household in a higher income category. For example, a household in the moderate-income category renting a unit categorized as affordable at the ELI threshold is mismatched just as an ELI household renting a unit only affordable at the VLI threshold is. Vacant units are treated as unmatched units, available to those who can afford them.

Because mismatch analysis assumes any household within an income category can afford a unit at that category’s top cost threshold, which clearly is not true, and because the affordability categories employed here are fairly broad, this should be considered a conservative estimate of the actual market.

The tables in Appendix 1 and 2 use a single cross tabulations of these categories to generate a wide variety of statistics on the match of affordable units and households in the U.S.

Further Reading

Recent publications discuss and provide additional insight into the method and the data used here. Goodman, Belsky and Drew (2005) discusses in more detail the pros and cons of mismatch analysis as well as other common measures of affordability. Chapter 4 of the latest “Worst Case Needs” report (Hardiman, et al, 2005) includes further discussion of the method and data, and also provides a fuller gap analysis using HUD data, weights, and methods. Nelson, Treskon, and Pelletiere (2004) applied this methodology to 2000 Census data.

Appendix 2: National Tables

Table A1. 2003 National Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	6,027,628	9,537,820	15,587,478	4,989,846	1,432,989	37,575,761
2. All Units Affordable at Threshold Income	6,027,628	15,565,448	31,152,926	36,142,772	37,575,761	37,575,761
2a Additional Vacant Units within Income Category	563,193	1,231,006	1,492,827	457,592	215,670	3,960,288
2b. All Vacant Units Affordable at Theshold Income	563,193	1,794,199	3,287,026	3,744,618	3,960,288	3,960,288
3. Households within AMI Category	7,723,592	6,009,160	6,998,415	6,448,469	6,435,837	33,615,473
4. All Households at or below Theshold Income	7,723,592	13,732,752	20,731,167	27,179,636	33,615,473	33,615,473
5. Surplus (Deficit) of Affordable Units within Income Category	(1,695,964)	3,528,660	8,589,063	(1,458,623)	(5,002,848)	3,960,288
6. Absolute Surplus (Deficit)	(1,695,964)	1,832,696	10,421,759	8,963,136	3,960,288	3,960,288
7. Affordable units per 100 tenants at or below Threshold	78	113	150	133	112	112
8. Occupy Unit Affordable to Lower Income Category	0	997,527	2,776,467	5,051,604	5,784,929	14,610,527
9. Occupy Unit Affordable Within Income Category	2,691,085	2,077,034	3,354,000	1,202,645	650,908	9,975,672
10. Occupy Unit Affordable Above Income Category	5,032,507	2,934,599	867,948	194,220	0	9,029,274
11. Percent of Units Occupied Below 30% of Income Range	0%	17%	40%	78%	90%	43%
12. Percent of Units Occupied in 30% of Income Range	35%	35%	48%	19%	10%	30%
13. Percent of Units Occupied Above 30% of Income Range	65%	49%	12%	3%	0%	27%
14. Units "Affordable and Available" at Threshold	3,254,278	9,846,854	22,074,867	30,357,843	37,575,761	37,575,761
15 Affordable and Available units per 100 tenants below Threshold	42	72	106	112	112	112
16. Vacancy Rate within Income Category	9%	13%	10%	9%	15%	11%
17. Vacancy Rate for All Units Affordable at Income Threshold	9%	12%	11%	10%	11%	11%

Notes:
Lines 1-4 NLIHC Tabulations of AHS
Line 5 = Line 1 - Line 3
Line 6 is the cumulative sum of Line 5
Line 7 = 100 x Line 2/Line 4
Line 8-10 NLIHC Tabulations of AHS
Line 11 - 13 percentages based on Lines 8-10
Line 14 NLIHC Tabulations of AHS
Line 15 100 x Line 14/Line 4
Line 16 100 x Line 2a/Line 1
Line 17 100 x Line 2a /Line 2

Table A2. 2001 National Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	6,104,330	9,325,291	15,160,974	4,823,188	1,546,362	36,960,145
2. All Units Affordable at Threshold Income	6,104,330	15,429,621	30,590,595	35,413,783	36,960,145	36,960,145
2a Additional Vacant Units within Income Category	607,237	957,190	1,099,965	378,545	193,958	3,236,895
2b. All Vacant Units Affordable at Theshold Income	607,237	1,564,427	2,664,392	3,042,937	3,236,895	3,236,895
3. Households within AMI Category	7,593,708	5,787,259	6,838,887	6,759,894	6,743,502	33,723,250
4. All Households at or below Theshold Income	7,593,708	13,380,967	20,219,854	26,979,748	33,723,250	33,723,250
5. Surplus (Deficit) of Affordable Units within Income Category	(1,489,378)	3,538,032	8,322,087	(1,936,706)	(5,197,140)	3,236,895
6. Absolute Surplus (Deficit)	(1,489,378)	2,048,654	10,370,741	8,434,035	3,236,895	3,236,895
7. Affordable units per 100 tenants at or below Threshold	80	115	151	131	110	110
8. Occupy Unit Affordable to Lower Income Category	0	1,076,057	2,682,721	5,262,966	6,065,137	15,086,881
9. Occupy Unit Affordable Within Income Category	2,714,622	1,973,027	3,314,249	1,223,865	678,365	9,904,128
10. Occupy Unit Affordable Above Income Category	4,879,086	2,738,175	841,917	273,063	0	8,732,241
11. Percent of Units Occupied Below 30% of Income Range	0%	19%	39%	78%	90%	45%
12. Percent of Units Occupied in 30% of Income Range	36%	34%	48%	18%	10%	29%
13. Percent of Units Occupied Above 30% of Income Range	64%	47%	12%	4%	0%	26%
14. Units "Affordable and Available" at Threshold	3,321,859	9,574,601	20,972,175	29,348,646	36,960,145	36,960,145
15 Affordable and Available units per 100 tenants below Threshold	44	72	104	109	110	110
16. Vacancy Rate within Income Category	10%	10%	7%	8%	13%	9%
17. Vacancy Rate for All Units Affordable at Income Threshold	10%	10%	9%	9%	9%	9%

Appendix 3: Regional Tables

Table A3. 2003 Northeast Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	1,458,521	2,017,594	2,783,247	1,026,503	464,833	7,750,698
2. All Units Affordable at Threshold Income	1,458,521	3,476,115	6,259,362	7,285,865	7,750,698	7,750,698
2a Additional Vacant Units within Income Category	78,144	151,019	193,190	87,753	58,337	568,443
2b. All Vacant Units Affordable at Theshold Income	78,144	229,163	422,353	510,106	568,443	568,443
3. Households within AMI Category	1,921,235	1,231,184	1,294,526	1,250,337	1,484,973	7,182,255
4. All Households at or below Theshold Income	1,921,235	3,152,419	4,446,945	5,697,282	7,182,255	7,182,255
5. Surplus (Deficit) of Affordable Units within Income Category	(462,714)	786,410	1,488,721	(223,834)	(1,020,140)	568,443
6. Absolute Surplus (Deficit)	(462,714)	323,696	1,812,417	1,588,583	568,443	568,443
7. Affordable units per 100 tenants at or below Threshold	76	110	141	128	108	108
8. Occupy Unit Affordable to Lower Income Category	0	252,723	588,883	958,980	1,243,637	3,044,223
9. Occupy Unit Affordable Within Income Category	759,605	426,700	537,163	240,329	241,336	2,205,133
10. Occupy Unit Affordable Above Income Category	1,161,630	551,761	168,480	51,028	0	1,932,899
11. Percent of Units Occupied Below 30% of Income Range	0%	21%	45%	77%	84%	42%
12. Percent of Units Occupied in 30% of Income Range	40%	35%	41%	19%	16%	31%
13. Percent of Units Occupied Above 30% of Income Range	60%	45%	13%	4%	0%	27%
14. Units "Affordable and Available" at Threshold	837,749	2,226,200	4,422,378	6,042,228	7,750,698	7,750,698
15 Aff. and Avail. units per 100 tenants at or below Threshold	44	71	99	106	108	108
16. Vacancy Rate within Income Category	5%	7%	7%	9%	13%	7%
17. Vacancy Rate for All Units Affordable at Income Threshold	5%	7%	7%	7%	7%	7%

Table A4. 2001 Northeast Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	1,428,417	1,981,131	3,055,138	856,234	415,733	7,736,653
2. All Units Affordable at Threshold Income	1,428,417	3,409,548	6,464,686	7,320,920	7,736,653	7,736,653
2a Additional Vacant Units within Income Category	78,062	121,333	134,921	33,245	23,686	391,247
2b. All Vacant Units Affordable at Theshold Income	78,062	199,395	334,316	367,561	391,247	391,247
3. Households within AMI Category	1,960,753	1,188,680	1,275,697	1,320,279	1,599,997	7,345,406
4. All Households at or below Theshold Income	1,960,753	3,149,433	4,425,130	5,745,409	7,345,406	7,345,406
5. Surplus (Deficit) of Affordable Units within Income Category	(532,336)	792,451	1,779,441	(464,045)	(1,184,264)	391,247
6. Absolute Surplus (Deficit)	(532,336)	260,115	2,039,556	1,575,511	391,247	391,247
7. Affordable units per 100 tenants at or below Threshold	73	108	146	127	105	105
8. Occupy Unit Affordable to Lower Income Category	0	232,112	509,492	1,037,666	1,360,415	3,139,685
9. Occupy Unit Affordable Within Income Category	783,025	435,387	588,647	231,674	239,582	2,278,315
10. Occupy Unit Affordable Above Income Category	1,177,728	521,181	177,558	50,939	0	1,927,406
11. Percent of Units Occupied Below 30% of Income Range	0%	20%	40%	79%	85%	43%
12. Percent of Units Occupied in 30% of Income Range	40%	37%	46%	18%	15%	31%
13. Percent of Units Occupied Above 30% of Income Range	60%	44%	14%	4%	0%	26%
14. Units "Affordable and Available" at Threshold	861,087	2,210,687	4,376,279	5,960,505	7,736,653	7,736,653
15 Aff. and Avail. units per 100 tenants at or below Threshold	44	70	99	104	105	105
16. Vacancy Rate within Income Category	5%	6%	4%	4%	6%	5%
17. Vacancy Rate for All Units Affordable at Income Threshold	5%	6%	5%	5%	5%	5%

Table A5. 2003 Midwest Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	1,267,234	2,652,090	3,031,648	502,230	99,230	7,552,432
2. All Units Affordable at Threshold Income	1,267,234	3,919,324	6,950,972	7,453,202	7,552,432	7,552,432
2a Additional Vacant Units within Income Category	148,071	408,336	315,127	55,093	26,158	952,785
2b. All Vacant Units Affordable at Theshold Income	148,071	556,407	871,534	926,627	952,785	952,785
3. Households within AMI Category	1,578,692	1,254,195	1,476,114	1,270,896	1,019,750	6,599,647
4. All Households at or below Theshold Income	1,578,692	2,832,887	4,309,001	5,579,897	6,599,647	6,599,647
5. Surplus (Deficit) of Affordable Units within Income Category	(311,458)	1,397,895	1,555,534	(768,666)	(920,520)	952,785
6. Absolute Surplus (Deficit)	(311,458)	1,086,437	2,641,971	1,873,305	952,785	952,785
7. Affordable units per 100 tenants at or below Threshold	80	138	161	134	114	114
8. Occupy Unit Affordable to Lower Income Category	0	223,196	708,958	1,159,974	989,321	3,081,449
9. Occupy Unit Affordable Within Income Category	547,970	550,748	684,342	101,423	30,429	1,914,912
10. Occupy Unit Affordable Above Income Category	1,030,722	480,251	82,814	9,499	0	1,603,286
11. Percent of Units Occupied Below 30% of Income Range	0%	18%	48%	91%	97%	47%
12. Percent of Units Occupied in 30% of Income Range	35%	44%	46%	8%	3%	29%
13. Percent of Units Occupied Above 30% of Income Range	65%	38%	6%	1%	0%	24%
14. Units "Affordable and Available" at Threshold	696,041	2,453,572	4,961,716	6,463,881	7,552,432	7,552,432
15 Aff. and Avail. units per 100 tenants at or below Threshold	44	87	115	116	114	114
16. Vacancy Rate within Income Category	12%	15%	10%	11%	26%	13%
17. Vacancy Rate for All Units Affordable at Income Threshold	12%	14%	13%	12%	13%	13%

Table A6. 2001 Midwest Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	1,412,406	2,571,068	2,860,501	478,584	163,086	7,485,645
2. All Units Affordable at Threshold Income	1,412,406	3,983,474	6,843,975	7,322,559	7,485,645	7,485,645
2a Additional Vacant Units within Income Category	177,194	338,198	281,642	44,457	19,433	860,924
2b. All Vacant Units Affordable at Theshold Income	177,194	515,392	797,034	841,491	860,924	860,924
3. Households within AMI Category	1,520,131	1,178,393	1,495,790	1,398,313	1,032,094	6,624,721
4. All Households at or below Theshold Income	1,520,131	2,698,524	4,194,314	5,592,627	6,624,721	6,624,721
5. Surplus (Deficit) of Affordable Units within Income Category	(107,725)	1,392,675	1,364,711	(919,729)	(869,008)	860,924
6. Absolute Surplus (Deficit)	(107,725)	1,284,950	2,649,661	1,729,932	860,924	860,924
7. Affordable units per 100 tenants at or below Threshold	93	148	163	131	113	113
8. Occupy Unit Affordable to Lower Income Category	0	285,521	739,319	1,249,492	970,585	3,244,917
9. Occupy Unit Affordable Within Income Category	576,372	475,919	674,712	117,125	61,509	1,905,637
10. Occupy Unit Affordable Above Income Category	943,759	416,953	81,759	31,696	0	1,474,167
11. Percent of Units Occupied Below 30% of Income Range	0%	24%	49%	89%	94%	49%
12. Percent of Units Occupied in 30% of Income Range	38%	40%	45%	8%	6%	29%
13. Percent of Units Occupied Above 30% of Income Range	62%	35%	5%	2%	0%	22%
14. Units "Affordable and Available" at Threshold	753,566	2,394,940	4,782,540	6,351,974	7,485,645	7,485,645
15 Aff. and Avail. units per 100 tenants at or below Threshold	50	89	114	114	113	113
16. Vacancy Rate within Income Category	13%	13%	10%	9%	12%	12%
17. Vacancy Rate for All Units Affordable at Income Threshold	13%	13%	12%	11%	12%	12%

Table A7. 2003 South Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	2,183,501	3,324,195	5,684,209	1,565,112	387,415	13,144,432
2. All Units Affordable at Threshold Income	2,183,501	5,507,696	11,191,905	12,757,017	13,144,432	13,144,432
2a Additional Vacant Units within Income Category	265,205	525,016	649,936	179,661	79,083	1,698,901
2b. All Vacant Units Affordable at Theshold Income	265,205	790,221	1,440,157	1,619,818	1,698,901	1,698,901
3. Households within AMI Category	2,547,668	1,959,151	2,417,947	2,310,628	2,210,137	11,445,531
4. All Households at or below Theshold Income	2,547,668	4,506,819	6,924,766	9,235,394	11,445,531	11,445,531
5. Surplus (Deficit) of Affordable Units within Income Category	(364,167)	1,365,044	3,266,262	(745,516)	(1,822,722)	1,698,901
6. Absolute Surplus (Deficit)	(364,167)	1,000,877	4,267,139	3,521,623	1,698,901	1,698,901
7. Affordable units per 100 tenants at or below Threshold	86	122	162	138	115	115
8. Occupy Unit Affordable to Lower Income Category	0	337,398	1,011,061	1,857,641	2,063,841	5,269,941
9. Occupy Unit Affordable Within Income Category	913,903	692,656	1,146,327	397,195	146,296	3,296,377
10. Occupy Unit Affordable Above Income Category	1,633,765	929,097	260,559	55,792	0	2,879,213
11. Percent of Units Occupied Below 30% of Income Range	0%	17%	42%	80%	93%	46%
12. Percent of Units Occupied in 30% of Income Range	36%	35%	47%	17%	7%	29%
13. Percent of Units Occupied Above 30% of Income Range	64%	47%	11%	2%	0%	25%
14. Units "Affordable and Available" at Threshold	1,179,108	3,499,377	7,848,772	10,693,176	13,144,432	13,144,432
15 Aff. and Avail. units per 100 tenants at or below Threshold	46	78	113	116	115	115
16. Vacancy Rate within Income Category	12%	16%	11%	11%	20%	13%
17. Vacancy Rate for All Units Affordable at Income Threshold	12%	14%	13%	13%	13%	13%

Table A8. 2001 South Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	2,197,595	3,096,032	5,252,751	1,781,162	360,672	12,688,212
2. All Units Affordable at Threshold Income	2,197,595	5,293,627	10,546,378	12,327,540	12,688,212	12,688,212
2a Additional Vacant Units within Income Category	276,679	388,473	436,392	198,739	62,773	1,363,056
2b. All Vacant Units Affordable at Theshold Income	276,679	665,152	1,101,544	1,300,283	1,363,056	1,363,056
3. Households within AMI Category	2,472,086	1,893,904	2,272,773	2,300,640	2,385,753	11,325,156
4. All Households at or below Theshold Income	2,472,086	4,365,990	6,638,763	8,939,403	11,325,156	11,325,156
5. Surplus (Deficit) of Affordable Units within Income Category	(274,491)	1,202,128	2,979,978	(519,478)	(2,025,081)	1,363,056
6. Absolute Surplus (Deficit)	(274,491)	927,637	3,907,615	3,388,137	1,363,056	1,363,056
7. Affordable units per 100 tenants at or below Threshold	89	121	159	138	112	112
8. Occupy Unit Affordable to Lower Income Category	0	342,310	911,962	1,821,336	2,257,398	5,333,006
9. Occupy Unit Affordable Within Income Category	915,781	626,227	1,098,018	409,359	128,355	3,177,740
10. Occupy Unit Affordable Above Income Category	1,556,305	925,367	262,793	69,945	0	2,814,410
11. Percent of Units Occupied Below 30% of Income Range	0%	18%	40%	79%	95%	47%
12. Percent of Units Occupied in 30% of Income Range	37%	33%	48%	18%	5%	28%
13. Percent of Units Occupied Above 30% of Income Range	63%	49%	12%	3%	0%	25%
14. Units "Affordable and Available" at Threshold	1,192,460	3,276,095	7,126,525	10,070,142	12,688,212	12,688,212
15 Aff. and Avail. units per 100 tenants at or below Threshold	48	75	107	113	112	112
16. Vacancy Rate within Income Category	13%	13%	8%	11%	17%	11%
17. Vacancy Rate for All Units Affordable at Income Threshold	13%	13%	10%	11%	11%	11%

Table A9. 2003 West Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	1,118,375	1,543,941	4,088,373	1,895,999	481,513	9,128,201
2. All Units Affordable at Threshold Income	1,118,375	2,662,316	6,750,689	8,646,688	9,128,201	9,128,201
2a Additional Vacant Units within Income Category	71,774	146,634	334,575	135,084	52,092	740,159
2b. All Vacant Units Affordable at Theshold Income	71,774	218,408	552,983	688,067	740,159	740,159
3. Households within AMI Category	1,675,996	1,564,629	1,809,831	1,616,608	1,720,978	8,388,042
4. All Households at or below Theshold Income	1,675,996	3,240,625	5,050,456	6,667,064	8,388,042	8,388,042
5. Surplus (Deficit) of Affordable Units within Income Category	(557,621)	(20,688)	2,278,542	279,391	(1,239,465)	740,159
6. Absolute Surplus (Deficit)	(557,621)	(578,309)	1,700,233	1,979,624	740,159	740,159
7. Affordable units per 100 tenants at or below Threshold	67	82	134	130	109	109
8. Occupy Unit Affordable to Lower Income Category	0	184,210	467,567	1,075,008	1,488,131	3,214,916
9. Occupy Unit Affordable Within Income Category	469,607	406,929	986,168	463,698	232,847	2,559,249
10. Occupy Unit Affordable Above Income Category	1,206,389	973,490	356,096	77,902	0	2,613,877
11. Percent of Units Occupied Below 30% of Income Range	0%	12%	26%	66%	86%	38%
12. Percent of Units Occupied in 30% of Income Range	28%	26%	54%	29%	14%	31%
13. Percent of Units Occupied Above 30% of Income Range	72%	62%	20%	5%	0%	31%
14. Units "Affordable and Available" at Threshold	541,381	1,667,704	4,842,003	7,158,557	9,128,201	9,128,201
15 Aff. and Avail. units per 100 tenants at or below Threshold	32	51	96	107	109	109
16. Vacancy Rate within Income Category	6%	9%	8%	7%	11%	8%
17. Vacancy Rate for All Units Affordable at Income Threshold	6%	8%	8%	8%	8%	8%

Table A10. 2001 West Affordability Gap Analysis

	ELI	VLI	Low Income	Moderate Income	Above Moderate Income	Total
1. Additional Units Affordable within AMI Category	1,065,911	1,677,062	3,992,585	1,707,207	606,871	9,049,636
2. All Units Affordable at Threshold Income	1,065,911	2,742,973	6,735,558	8,442,765	9,049,636	9,049,636
2a Additional Vacant Units within Income Category	75,302	109,186	247,010	102,103	88,066	621,667
2b. All Vacant Units Affordable at Theshold Income	75,302	184,488	431,498	533,601	621,667	621,667
3. Households within AMI Category	1,640,738	1,526,281	1,794,627	1,740,663	1,725,660	8,427,969
4. All Households at or below Theshold Income	1,640,738	3,167,019	4,961,646	6,702,309	8,427,969	8,427,969
5. Surplus (Deficit) of Affordable Units within Income Category	(574,827)	150,781	2,197,958	(33,456)	(1,118,789)	621,667
6. Absolute Surplus (Deficit)	(574,827)	(424,046)	1,773,912	1,740,456	621,667	621,667
7. Affordable units per 100 tenants at or below Threshold	65	87	136	126	107	107
8. Occupy Unit Affordable to Lower Income Category	0	216,112	521,948	1,154,473	1,476,741	3,369,274
9. Occupy Unit Affordable Within Income Category	439,444	435,495	952,873	465,707	248,919	2,542,438
10. Occupy Unit Affordable Above Income Category	1,201,294	874,674	319,806	120,483	0	2,516,257
11. Percent of Units Occupied Below 30% of Income Range	0%	14%	29%	66%	86%	40%
12. Percent of Units Occupied in 30% of Income Range	27%	29%	53%	27%	14%	30%
13. Percent of Units Occupied Above 30% of Income Range	73%	57%	18%	7%	0%	30%
14. Units "Affordable and Available" at Threshold	514,746	1,692,878	4,686,830	6,966,024	9,049,636	9,049,636
15 Aff. and Avail. units per 100 tenants at or below Threshold	31	53	94	104	107	107
16. Vacancy Rate within Income Category	7%	7%	6%	6%	15%	7%
17. Vacancy Rate for All Units Affordable at Income Threshold	7%	7%	6%	6%	7%	7%